Education at a Glance 2013

OECD INDICATORS



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Foreword

Governments are paying increasing attention to international comparisons as they search for effective policies that enhance individuals' social and economic prospects, provide incentives for greater efficiency in schooling, and help to mobilise resources to meet rising demands. As part of its response, the OECD Directorate for Education and Skills devotes a major effort to the development and analysis of the quantitative, internationally comparable indicators that it publishes annually in *Education at a Glance*. These indicators enable educational policy makers and practitioners alike to see their education systems in light of other countries' performance and, together with the OECD country policy reviews, are designed to support and review the efforts that governments are making towards policy reform.

Education at a Glance addresses the needs of a range of users, from governments seeking to learn policy lessons to academics requiring data for further analysis to the general public wanting to monitor how its country's schools are progressing in producing world-class students. The publication examines the quality of learning outcomes, the policy levers and contextual factors that shape these outcomes, and the broader private and social returns that accrue to investments in education.

Education at a Glance is the product of a long-standing, collaborative effort between OECD governments, the experts and institutions working within the framework of the OECD Indicators of Education Systems (INES) programme and the OECD Secretariat. The publication was prepared by the staff of the Innovation and Measuring Progress Division of the OECD Directorate for Education and Skills, under the responsibility of Dirk Van Damme and Corinne Heckmann and in co-operation with Etienne Albiser, Simone Bloem, Rodrigo Castaneda-Valle, Eric Charbonnier, Estelle Herbaut, Karinne Logez, Koji Miyamoto, Joris Ranchin, Cuauhtemoc Rebolledo-Gomez, Gara Rojas González, David Valenciano, and Jean Yip. Administrative support was provided by Rhodia Diallo, editing of the report was undertaken by Marilyn Achiron, and additional advice as well as analytical and editorial support were provided by Gwenaelle Barach, Marika Boiron, Célia Braga-Schich, Elizabeth Del Bourgo, Caroline Israël, Diane Lalancette and Ignacio Marin. The authoring team benefited from the analytical review of Sam Abrams, Francesco Avvisati, Tracey Burns, Sonia Guerriero, Hiroko Ikesako, David Istance, Marco Kools, Katarzyna Kubacka, Pauline Musset, Anna Pons, Miho Taguma, Willam Thorn, Juliana Zapata and Pablo Zoido. Production of the report was co-ordinated by Elisabeth Villoutreix. The development of the publication was steered by member countries through the INES Working Party and facilitated by the INES Networks. The members of the various bodies as well as the individual experts who have contributed to this publication and to OECD INES more generally are listed at the end of the book.

While much progress has been accomplished in recent years, member countries and the OECD continue to strive to strengthen the link between policy needs and the best available internationally comparable data. This presents various challenges and trade-offs. First, the indicators need to respond to educational issues that are high on national policy agendas, and where the international comparative perspective can offer important added value to what can be accomplished through national analysis and evaluation. Second, while the indicators should be as comparable as possible, they also need to be as country-specific as is necessary to allow for historical, systemic and cultural differences between countries. Third, the indicators need to be presented in as straightforward a manner as possible, while remaining sufficiently complex to reflect multi-faceted educational realities. Fourth, there is a general desire to keep the indicator set as small as possible, but it needs to be large enough to be useful to policy makers across countries that face different educational challenges.

The OECD will continue to address these challenges vigorously and to pursue not just the development of indicators in areas where it is feasible and promising to develop data, but also to advance in areas where a considerable investment still needs to be made in conceptual work. The further development of the OECD Programme for International Student Assessment (PISA) and its extension through the OECD Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC), as well as the OECD Teaching and Learning International Survey (TALIS), are major efforts to this end.

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Editorial

Learning their way out: Youth, education and skills in the midst of the crisis

This edition of *Education at a Glance* comes at a time when youth unemployment keeps policy makers awake at night. Between 2008 and 2011 – the years to which most data in this volume refer – unemployment rates climbed steeply in most countries and have remained high ever since. Young people have been particularly hard-hit by un- and underemployment as a result of the global recession. In 2011, the average proportion of 15-29 year-olds neither in employment nor in education or training (NEET) across OECD countries was 16%; among 25-29 year-olds, 20% were NEET. (Among this latter group, 40% were unemployed, more than half of them for more than six months; the rest did not participate in the labour market at all.) In some countries the figures are much higher, with more than one in three people between the ages of 25 and 29 neither in education nor in work. These young people are forced to pay a very high price for a crisis that was not of their making, with long-lasting consequences for their skills, work morale and social integration. The demoralising short-term effects for individuals, families and communities demand urgent policy responses, while the longer-term ramifications, in terms of skills loss, scarring effects and de-motivation, are real and affect countries' potential for sustainable recovery.

The distribution of unemployment within the younger generation sheds light on some of the factors that may increase the risk of joblessness, which, in turn, offers insights for policy responses. Most notably, educational attainment has a huge impact on employability, and the crisis has strengthened this impact even further. On average across OECD countries, 4.8% of individuals with a tertiary degree were unemployed in 2011, while 12.6% of those lacking a secondary education were. Between 2008 and 2011 the unemployment gap between those with low levels of education and those with high levels of education widened: across all age groups, the unemployment rate for low-educated individuals increased by almost 3.8 percentage points, while it increased by only 1.5 percentage points for highly educated individuals. Without the foundation skills provided by a minimum level of education, people find themselves particularly vulnerable in an insecure labour market.

The crisis has also produced ample evidence that a good education provides valuable insurance against a lack of work experience: the impact of educational attainment on unemployment is much greater for younger people than it is for older adults. Across OECD countries, an average of 18.1% of 25-34 year-olds without secondary education were unemployed in 2011, compared with 8.8% of 55-64 year-olds. Among 25-34 year-olds with a tertiary qualification, an average of 6.8% were unemployed, compared with 4.0% of 55-64 year-olds with a similar level of education.

Nevertheless, that fact that these troubling trends are far from universal indicates that they are not inevitable. There are large differences between countries in the way the recession has shaped the social reality for young people. The steep increases in youth unemployment between 2008 and 2011, especially among low-educated young people, in countries such as Estonia (a 17.6 percentage-point increase in unemployment among 25-34 year-olds without a secondary education), Greece (15.0 percentage-point increase), Ireland (21.5 percentage-point increase) and Spain (16.0 percentage-point increase) are well-known. Less known is that, during the same period, some countries saw drops in unemployment among low-skilled youth, including Austria (-3.3 percentage points), Chile (-3.6 percentage points), Germany (-2.1 percentage points), Israel (-0.9 percentage point), Korea (-1.6 percentage points), Luxembourg (-1.0 percentage point) and Turkey (-1.7 percentage points). Several other countries were able to contain the increases within more or less tolerable levels.

Though many factors play a role in a country's capacity to contain the rise in youth unemployment in times of crisis, the way institutional arrangements between education and work facilitate transitions into employment is perhaps one of the most important. This year's *Education at a Glance* provides more detailed data on programme orientation (general versus vocational) in secondary and tertiary education. Countries with relatively high numbers of 25-34 year-old graduates from vocationally oriented programmes succeeded in reducing the risk of unemployment among young people with upper secondary education as their highest level of attainment. Countries that have a higher-than-average (32%) proportion of graduates from vocational programmes, such as Austria, the Czech Republic, Germany and Luxembourg, were all able to keep the increases in unemployment rates among this age group to below 8 percentage points. Conversely, countries such as Greece, Ireland and Spain, where less than 25% of young adults graduate from vocational upper secondary education, saw increases in unemployment rates of 12 percentage points or more among 25-34 year-olds with only secondary education. For young people who do not continue into tertiary education, vocational education clearly offers better prospects for their employability than general, more academically oriented upper secondary education.

Vocational education and training (VET) systems thus play a critical role in strengthening countries' capacity to deal with rapidly changing labour-market conditions. Several OECD countries have developed policies to improve and expand VET programmes at the upper secondary and post-secondary non-tertiary levels in order to equip young people with the skills the labour market demands. These programmes often include intensive workplace training and are based on extensive partnerships between schools and enterprises. Between 2005 and 2011, the number of students graduating from upper secondary vocational programmes increased by an average of 4.3 percentage points across OECD countries. In several countries, notably Austria, Belgium, Finland, Ireland, Portugal and Spain, this increase exceeded 10 percentage points.

We can further improve our understanding of how qualifications are related to labour-market outcomes by delving into the actual content of qualifications, rather than simply classifying them by level. This year's edition explores some data on graduates' field of study. While data from only a limited number of countries are examined, these data show a wide variation in unemployment rates among tertiary graduates in different fields of study. Interestingly, this variation does not fully reflect the segmentation in labour demand and wages found more broadly in the economy and in the labour market. For example, in the United States, the unemployment rate for graduates from the high-paying field of computer and information systems (5.3%) was higher than the unemployment rate for graduates of relatively low-paying secondary teaching programmes (2.4%), which had one of the lowest unemployment figures of any programme. The relationship between students' career choices, skill development in a particular field of study, and actual employability is more complex than often assumed.

Educational attainment not only affects employability, as *Education at a Glance* shows, but also has an impact on income from employment. On average, the relative earnings of tertiary-educated adults is over 1.5 times that of adults with upper secondary education, while individuals without an upper secondary education earn 25% less, on average, than their peers who have attained that level of education. The crisis has widened this wage gap: the average difference between earnings from employment between low-educated and highly educated individuals was 75 percentage points across OECD countries in 2008, increasing to 90 percentage points in 2011.

Individuals lacking the foundation skills provided by a complete secondary education cannot expect their incomes to rise substantially as they grow older. Indeed, the wage gap between those with low and high levels of education tends to increase with age. Without a secondary education, 25-34 year-olds earn 80% of what their colleagues with a secondary education earn, on average, but 55-64 year-olds earn only 72% of what their more-educated peers earn. The wage premium for higher education increases with age. A 25-34 year-old with a tertiary education earns 40% more, on average, than an adult of the same age who has only a secondary education, while a 55-64 year-old earns 73% more. Educational attainment – besides a successful start in employment – thus has long-lasting and mutually reinforcing effects over a lifetime. A higher education degree clearly pays off in the long run.

Given the close relationship between education, employment and earnings, young people develop strategies to improve their life chances by investing in education. In recent years, they literally learned their way out of the crisis. When opportunity costs declined and it seemed better to postpone entry into an insecure labour market, many young adults opted to equip themselves with more competitive skills before trying to enter the world of work. In most countries, increased demand for post-compulsory education more than compensated for the demographic decline in these age groups. In 2011, the OECD average for 15-19 year-olds enrolled in education was 85%; and the proportion of 20-29 year-olds in education climbed from 22% in 2000 to 29% in 2011. As a consequence, the proportion of adults with tertiary-level qualifications rose by more than 10 percentage points between 2000 and 2011, while the share of adults without a secondary education qualification dropped by the same rate. Across OECD countries, 39% of 25-34 year-olds had a tertiary qualification in 2011.

The changes in enrolment rates, employment rates and investment in education observed in the first years of the recession indicate how education and skills determine the way individuals, families and societies as a whole fared during the most challenging economic and social crisis in recent history. Highly educated young people from fields of study in high demand found a job easily, ending up in a "high skills – high wage" equilibrium, and could envisage a prosperous life ahead of them. For others, a tertiary qualification did not bring the expected rewards, either because the labour market was contracting too much – often protecting older generations at the expense of the youngest generation of workers – or because their chosen field of study was already saturated or not aligned with the needs of the labour market. Over-schooling and under-employment then resulted in frustration. Young adults with an upper secondary qualification were able to survive the jobs crisis if they were the beneficiaries of programmes that prepared them well for work. Those who hadn't attained a complete secondary education, and so lacked the foundation skills needed to survive in a complex economy, often found themselves at the wrong end of the skills-based polarisation, stuck in a "low skills – low wage" equilibrium or in long-term unemployment with very little prospects for improvement.

High youth unemployment is not inevitable, even during an economic crisis; it is the product of the interaction between the economic context and particular policies. And, as the data collected during the early years of this crisis show, the amount of public spending on education has little to do with a country's success or failure in containing youth unemployment: nearly all governments maintained more or less their level of investment in education throughout the crisis. What matters more are the choices countries make in how to allocate that spending and the policies they design to improve the efficiency and relevance of the education they provide. Data and policy experiences in countries show which kinds of policies are effective in boosting young people's employability: ensuring that all young people achieve both a good level of foundation skills and "soft" skills, such as teamwork, communication and negotiation, that will give them the resilience they need to succeed in an ever-changing labour market; reducing school dropout rates and making sure that as many young people as possible complete at least an upper secondary education (if necessary, through second-chance education opportunities); making secondary education relevant to the skill needs of the labour market; developing vocational education and training, and bridging education to the world of work by including work-based learning; securing flexible pathways into tertiary education; and providing good study and career guidance services so that young people can make sound, informed career decisions. These are exactly the policies that the OECD Youth Action Plan, adopted at the OECD Ministerial Meeting in May 2013, is advocating to improve the prospects for young people and for societies as a whole.



Angel Gurría
OECD Secretary-General

Introduction: The Indicators and their Framework

The organising framework

Education at a Glance 2013: OECD Indicators offers a rich, comparable and up-to-date array of indicators that reflects a consensus among professionals on how to measure the current state of education internationally. The indicators provide information on the human and financial resources invested in education, how education and learning systems operate and evolve, and the returns to educational investments. The indicators are organised thematically, and each is accompanied by information on the policy context and the interpretation of the data. The education indicators are presented within an organising framework that:

- distinguishes between the actors in education systems: individual learners and teachers, instructional settings and learning environments, educational service providers, and the education system as a whole;
- groups the indicators according to whether they address learning outcomes for individuals or countries, policy levers or circumstances that shape these outcomes, or to antecedents or constraints that set policy choices into context; and
- identifies the policy issues to which the indicators relate, with three major categories distinguishing between the quality of educational outcomes and educational provision, issues of equity in educational outcomes and educational opportunities, and the adequacy and effectiveness of resource management.

The following matrix describes the first two dimensions:

	1. Education and learning outputs and outcomes	**2. Policy levers and contexts shaping educational outcomes**	**3. Antecedents or constraints that contextualise policy**
I. Individual participants in education and learning	**1.I.** The quality and distribution of individual educational outcomes	**2.I.** Individual attitudes, engagement, and behaviour to teaching and learning	**3.I.** Background characteristics of the individual learners and teachers
II. Instructional settings	**1.II.** The quality of instructional delivery	**2.II.** Pedagogy, learning practices and classroom climate	**3.II.** Student learning conditions and teacher working conditions
III. Providers of educational services	**1.III.** The output of educational institutions and institutional performance	**2.III.** School environment and organisation	**3.III.** Characteristics of the service providers and their communities
IV. The education system as a whole	**1.IV.** The overall performance of the education system	**2.IV.** System-wide institutional settings, resource allocations, and policies	**3.IV.** The national educational, social, economic, and demographic contexts

The following sections discuss the matrix dimensions in more detail:

Actors in education systems

The OECD Indicators of Education Systems (INES) programme seeks to gauge the performance of national education systems as a whole, rather than to compare individual institutional or other sub-national entities. However, there is increasing recognition that many important features of the development, functioning and impact of education systems can only be assessed through an understanding of learning outcomes and their relationships to inputs and processes at the level of individuals and institutions. To account for this, the indicator framework distinguishes between a macro level, two meso-levels and a micro-level of education systems. These relate to:

- the education system as a whole;
- the educational institutions and providers of educational services;
- the instructional setting and the learning environment within the institutions; and
- the individual participants in education and learning.

To some extent, these levels correspond to the entities from which data are being collected, but their importance mainly centres on the fact that many features of the education system play out quite differently at different levels of the system, which needs to be taken into account when interpreting the indicators. For example, at the level of students within a classroom, the relationship between student achievement and class size may be negative, if students in small classes benefit from improved contact with teachers. At the class or school level, however, students are often intentionally grouped such that weaker or disadvantaged students are placed in smaller classes so that they receive more individual attention. At the school level, therefore, the observed relationship between class size and student achievement is often positive (suggesting that students in larger classes perform better than students in smaller classes). At higher aggregated levels of education systems, the relationship between student achievement and class size is further confounded, e.g. by the socio-economic intake of schools or by factors relating to the learning culture in different countries. Therefore, past analyses that have relied on macro-level data alone have sometimes led to misleading conclusions.

Outcomes, policy levers and antecedents

The second dimension in the organising framework further groups the indicators at each of the above levels:

- indicators on observed outputs of education systems, as well as indicators related to the impact of knowledge and skills for individuals, societies and economies, are grouped under the sub-heading *output and outcomes of education and learning;*
- the sub-heading *policy levers and contexts* groups activities seeking information on the policy levers or circumstances which shape the outputs and outcomes at each level; and
- these policy levers and contexts typically have *antecedents* – factors that define or constrain policy. These are represented by the sub-heading *antecedents and constraints*. It should be noted that the antecedents or constraints are usually specific for a given level of the education system and that antecedents at a lower level of the system may well be policy levers at a higher level. For teachers and students in a school, for example, teacher qualifications are a given constraint while, at the level of the education system, professional development of teachers is a key policy lever.

Policy issues

Each of the resulting cells in the framework can then be used to address a variety of issues from different policy perspectives. For the purpose of this framework, policy perspectives are grouped into three classes that constitute the third dimension in the organising framework for INES:

- quality of educational outcomes and educational provision;
- equality of educational outcomes and equity in educational opportunities; and
- adequacy, effectiveness and efficiency of resource management.

In addition to the dimensions mentioned above, the time perspective as an additional dimension in the framework allows dynamic aspects in the development of education systems to be modelled as well.

The indicators that are published in *Education at a Glance 2013* fit within this framework, though often they speak to more than one cell.

Most of the indicators in **Chapter A**, *The output of educational institutions and the impact of learning,* relate to the first column of the matrix describing outputs and outcomes of education. Even so, indicators in Chapter A measuring educational attainment for different generations, for instance, not only provide a measure of the output of the education system, but also provide context for current educational policies, helping to shape polices on, for example, lifelong learning.

Chapter B, *Financial and human resources invested in education,* provides indicators that are either policy levers or antecedents to policy, or sometimes both. For example, expenditure per student is a key policy measure that most directly affects the individual learner, as it acts as a constraint on the learning environment in schools and learning conditions in the classroom.

Chapter C, *Access to education, participation and progression,* provides indicators that are a mixture of outcome indicators, policy levers and context indicators. Internationalisation of education and progression rates are, for instance, outcomes measures to the extent that they indicate the results of policies and practices at the classroom, school and system levels. But they can also provide contexts for establishing policy by identifying areas where policy intervention is necessary to, for instance, address issues of inequity.

Chapter D, *The learning environment and organisation of schools,* provides indicators on instruction time, teachers' working time and teachers' salaries that not only represent policy levers which can be manipulated but also provide contexts for the quality of instruction in instructional settings and for the outcomes of individual learners. It also presents data on the profile of teachers, the levels of government at which decisions in education systems are taken, and pathways and gateways to gain access to secondary and tertiary education.

The reader should note that this edition of *Education at a Glance* covers a significant amount of data from non-OECD G20 countries (please refer to the Reader's Guide for details).

Reader's Guide

Coverage of the statistics

Although a lack of data still limits the scope of the indicators in many countries, the coverage extends, in principle, to the entire national education system (within the national territory), regardless of who owns or sponsors the institutions concerned and regardless of how education is delivered. With one exception (described below), all types of students and all age groups are included: children (including students with special needs), adults, nationals, foreigners, and students in open-distance learning, in special education programmes or in educational programmes organised by ministries other than the Ministry of Education, provided that the main aim of the programme is to broaden or deepen an individual's knowledge. However, children below the age of three are only included if they participate in programmes that typically cater to children who are at least three years old. Vocational and technical training in the workplace, with the exception of combined school- and work-based programmes that are explicitly deemed to be part of the education system, is not included in the basic education expenditure and enrolment data.

Educational activities classified as "adult" or "non-regular" are covered, provided that the activities involve the same or similar content as "regular" education studies, or that the programmes of which they are a part lead to qualifications similar to those awarded in regular educational programmes.

Courses for adults that are primarily for general interest, personal enrichment, leisure or recreation are excluded.

Country coverage

This publication features data on education from the 34 OECD member countries, two non-OECD countries that participate in the OECD Indicators of Education Systems programme (INES), namely Brazil and the Russian Federation, and the other G20 countries that do not participate in INES (Argentina, China, India, Indonesia, Saudi Arabia and South Africa). When data for these latter six countries are available, data sources are specified below the tables and charts.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Calculation of international means

For many indicators, an OECD average is presented; for some, an OECD total is shown.

The **OECD average** is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. The OECD average therefore refers to an average of data values at the level of the national systems and can be used to answer the question of how an indicator value for a given country compares with the value for a typical or average country. It does not take into account the absolute size of the education system in each country.

The **OECD total** is calculated as the weighted mean of the data values of all OECD countries for which data are available or can be estimated. It reflects the value for a given indicator when the OECD area is considered as a whole. This approach is taken for the purpose of comparing, for example, expenditure charts for individual countries with those of the entire OECD area for which valid data are available, with this area considered as a single entity.

Both the OECD average and the OECD total can be significantly affected by missing data. Given the relatively small number of countries surveyed, no statistical methods are used to compensate for this. In cases where a category is not applicable (code "a") in a country, or where the data value is negligible (code "n") for the corresponding calculation, the value zero is imputed for the purpose of calculating OECD averages. In cases where both the numerator and the denominator of a ratio are not applicable (code "a") for a certain country, this country is not included in the OECD average.

For financial tables using 1995, 2000 and 2005 data, both the OECD average and OECD total are calculated for countries providing 1995, 2000, 2005 and 2009 data. This allows for a comparison of the OECD average and OECD total over time with no distortion due to the exclusion of certain countries in the different years.

For many indicators, an **EU21 average** is also presented. It is calculated as the unweighted mean of the data values of the 21 countries that are members of both the European Union and the OECD for which data are available or can be estimated. These 21 countries are Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, Slovenia, the Slovak Republic, Spain, Sweden and the United Kingdom.

For some indicators, a **G20 average** is presented. The G20 average is calculated as the unweighted mean of the data values of all G20 countries for which data are available or can be estimated (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, the Russian Federation, Saudi Arabia, South Africa, Turkey, the United Kingdom and the United States; the European Union is the 20th member of the G20 but is not included in the calculation). The G20 average is computed if data for either China or India, or both, are available.

Classification of levels of education

The classification of the levels of education is based on the International Standard Classification of Education (ISCED 1997). ISCED 1997 is an instrument for compiling statistics on education internationally and distinguishes among six levels of education. ISCED 1997 was recently revised, and the new International Standard Classification of Education (ISCED 2011) was formally adopted in November 2011. This new classification will be implemented in the data collection in May 2014.

Term used in this publication	**ISCED classification** (and subcategories)
Pre-primary education The first stage of organised instruction designed to introduce very young children to the school atmosphere. Minimum entry age of 3.	**ISCED 0**
Primary education Designed to provide a sound basic education in reading, writing and mathematics and a basic understanding of some other subjects. Entry age: between 5 and 7. Duration: 6 years.	**ISCED 1**
Lower secondary education Completes provision of basic education, usually in a more subject oriented way with more specialist teachers. Entry follows 6 years of primary education; duration is 3 years. In some countries, the end of this level marks the end of compulsory education.	**ISCED 2** (subcategories: 2A prepares students for continuing academic education, leading to 3A; 2B has stronger vocational focus, leading to 3B; 2C offers preparation of entering workforce)
Upper secondary education Stronger subject specialisation than at lower secondary level, with teachers usually more qualified. Students typically expected to have completed 9 years of education or lower secondary schooling before entry and are generally 15 or 16 years old.	**ISCED 3** ISCED 3 (subcategories: 3A prepares students for university-level education at level 5A; 3B for entry to vocationally oriented tertiary education at level 5B; 3C prepares students for workforce or for post-secondary non-tertiary education at level ISCED 4)

Post-secondary non-tertiary education Internationally, this level straddles the boundary between upper secondary and post-secondary education, even though it might be considered upper secondary or post-secondary in a national context. Programme content may not be significantly more advanced than that in upper secondary, but is not as advanced as that in tertiary programmes. Duration usually the equivalent of between 6 months and 2 years of full-time study. Students tend to be older than those enrolled in upper secondary education.	**ISCED 4** ISCED 4 (subcategories: 4A may prepare students for entry to tertiary education, both university level and vocationally oriented; 4B typically prepares students to enter the workforce)
Tertiary education	**ISCED 5** (subcategories: 5A and 5B; see below)
Tertiary-type A education Largely theory-based programmes designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements, such as medicine, dentistry or architecture. Duration at least 3 years full-time, though usually 4 or more years. These programmes are not exclusively offered at universities; and not all programmes nationally recognised as university programmes fulfil the criteria to be classified as tertiary-type A. Tertiary-type A programmes include second-degree programmes, such as the American master's degree.	**ISCED 5A**
Tertiary-type B education Programmes are typically shorter than those of tertiary-type A and focus on practical, technical or occupational skills for direct entry into the labour market, although some theoretical foundations may be covered in the respective programmes. They have a minimum duration of two years full-time equivalent at the tertiary level.	**ISCED 5B**
Advanced research programmes Programmes that lead directly to the award of an advanced research qualification, e.g. Ph.D. The theoretical duration of these programmes is 3 years, full-time, in most countries (for a cumulative total of at least 7 years full-time equivalent at the tertiary level), although the actual enrolment time is typically longer. Programmes are devoted to advanced study and original research.	**ISCED 6**

The glossary available at *www.oecd.org/edu/eag.htm* also describes these levels of education in detail, and Annex 1 shows the typical age of graduates of the main educational programmes, by ISCED level.

Symbols for missing data and abbreviations

These symbols and abbreviations are used in the tables and charts:

- a Data is not applicable because the category does not apply.
- c There are too few observations to provide reliable estimates (e.g. in PISA, there are fewer than 30 students or fewer than five schools with valid data). However, these statistics were included in the calculation of cross-country averages.
- m Data is not available.
- n Magnitude is either negligible or zero.
- r Values are below a certain reliability threshold and should be interpreted with caution (see Annex 3 for country-specific definitions).
- w Data has been withdrawn at the request of the country concerned.
- x Data included in another category or column of the table (e.g. x(2) means that data are included in column 2 of the table).
- ~ Average is not comparable with other levels of education.

Further resources

The website *www.oecd.org/edu/eag.htm* is a rich source of information on the methods used to calculate the indicators, on the interpretation of the indicators in the respective national contexts, and on the data sources involved. The website also provides access to the data underlying the indicators and to a comprehensive glossary for technical terms used in this publication.

All post-production changes to this publication are listed at *www.oecd.org/edu/eag.htm*.

Education at a Glance uses the OECD StatLinks service. Below each table and chart in *Education at a Glance 2013* is a URL that leads to a corresponding Excel workbook containing the underlying data for the indicator. These URLs are stable and will remain unchanged over time. In addition, readers of the *Education at a Glance* e-book will be able to click directly on these links and the workbook will open in a separate window.

Codes used for territorial entities

These codes are used in certain charts. Country or territorial entity names are used in the text. Note that throughout the publication, the Flemish Community of Belgium and the French Community of Belgium may be referred to as "Belgium (Fl.)" and "Belgium (Fr.)", respectively.

ARG	Argentina
AUS	Australia
AUT	Austria
BEL	Belgium
BFL	Belgium (Flemish Community)
BFR	Belgium (French Community)
BRA	Brazil
CAN	Canada
CHE	Switzerland
CHL	Chile
CHN	China
CZE	Czech Republic
DEU	Germany
DNK	Denmark
ENG	England
ESP	Spain
EST	Estonia
FIN	Finland
FRA	France
GRC	Greece
HUN	Hungary
IDN	Indonesia
IND	India
IRL	Ireland
ISL	Iceland
ISR	Israel
ITA	Italy
JPN	Japan
KOR	Korea
LUX	Luxembourg
MEX	Mexico
NLD	Netherlands
NOR	Norway
NZL	New Zealand
POL	Poland
PRT	Portugal
RUS	Russian Federation
SAU	Saudi Arabia
SCO	Scotland
SVK	Slovak Republic
SVN	Slovenia
SWE	Sweden
TUR	Turkey
UKM	United Kingdom
USA	United States
ZAF	South Africa

Chapter

A

The Output of Educational Institutions and the Impact of Learning



Indicator A1 To what level have adults studied?
StatLink http://dx.doi.org/10.1787/888932847982

Indicator A2 How many students are expected to complete upper secondary education?
StatLink http://dx.doi.org/10.1787/888932848191

Indicator A3 How many students are expected to complete tertiary education?
StatLink http://dx.doi.org/10.1787/888932848343

Indicator A4 How many students complete tertiary education?
StatLink http://dx.doi.org/10.1787/888932848476

Indicator A5 How does educational attainment affect participation in the labour market?
StatLink http://dx.doi.org/10.1787/888932848533

Indicator A6 What are the earnings premiums from education?
StatLink http://dx.doi.org/10.1787/888932848856

Indicator A7 What are the incentives to invest in education?
StatLink http://dx.doi.org/10.1787/888932849084

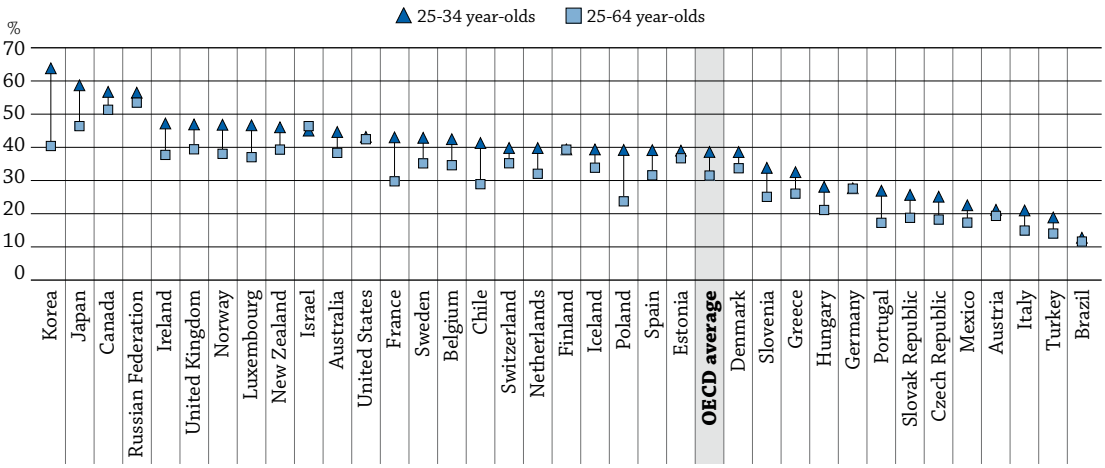
Indicator A8 What are the social outcomes of education?
StatLink http://dx.doi.org/10.1787/888932849255

TO WHAT LEVEL HAVE ADULTS STUDIED?

- The rate of tertiary education attainment among adults in OECD countries has increased by almost 10 percentage points since 2000.
- In most OECD countries, 25-34 year-olds have the highest rate of tertiary attainment among all adults by an average of 7 percentage points.
- Gender gaps in educational attainment are not only narrowing, in some cases, they are reversing.

Chart A1.1. Population that has attained tertiary education (2011)

Percentage, by age group



Countries are ranked in descending order of the percentage of 25-34 year-olds who have attained tertiary education.

Source: OECD. Table A1.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846215

Context

Educational attainment is frequently used as a measure of human capital and the level of an individual's skills, in other words, a measure of the skills available in the population and the labour force. The level of educational attainment is the percentage of a population that has reached a certain level of education. Higher levels of educational attainment are strongly associated with higher employment rates and are perceived as a gateway to better labour opportunities and earnings premiums. Individuals have strong incentives to pursue more education, and governments have incentives to build on the skills of the population through education, particularly as national economies continue to shift from mass production to knowledge economies.

Over the past decades, almost all OECD countries have seen significant increases in the educational attainment of their populations. Tertiary education has expanded markedly, and in most OECD countries, an upper secondary qualification (ISCED 3) has become the most common education level attained by young people. Some countries have introduced policy initiatives to more closely align the development of particular skills with the needs of the labour market through vocational education and training (VET) programmes. These policies seem to have had a major impact on educational attainment in several OECD countries where upper secondary VET qualifications are the most common qualifications held among adults.

Indicators in this volume show that gender differences persist in educational attainment, employment rates and earnings. In OECD countries, younger women have higher attainment

rates than younger men in upper secondary and tertiary education. Nonetheless, overall, adult men have higher attainment rates than adult women in upper secondary education. Despite the fact that a larger proportion of women than men now have a tertiary education, women's employment rates and wages are lower than those of tertiary-educated men (see Indicators A5 and A6).

The relationship between education and demand for skills is explored further in labour-market indicators on employment and unemployment (see Indicator A5), earnings (see Indicator A6), incentives to invest in education (see Indicator A7) and transitions from school to work (see Indicator C5).

Other findings

- **The proportion of adults with no upper secondary education** shrank by about 10 percentage points over the past decade.
- Even if tertiary attainment rates have increased in recent years, **less than 35% of both men and women attain tertiary education**.
- **Among 30-34 year-olds, more than 40% of women have a tertiary education – surpassing the rate of men with that level of education** by about 8 percentage points.

Trends

Since 2000, tertiary attainment rates have been increasing in both OECD and non-OECD G20 countries; upper secondary and post-secondary non-tertiary attainment levels have remained stable; and the proportion of people with below upper secondary education decreased in most OECD countries. Between 2000 and 2011 the proportion of adults with below upper secondary education shrank by almost 10 percentage points while tertiary attainment increased by about the same degree. However, changes in attainment rates vary greatly between age groups. The differences in tertiary attainment rates between 25-34 year-olds and 55-64 year-olds can range from over 50 percentage points in Korea to the inverse (i.e. fewer younger adults than older adults with tertiary attainment) in Israel.

Note

In this publication, different indicators show the level of education among individuals, groups and countries. Indicator A1 shows the level of attainment, i.e. the percentage of a population that has successfully completed a given level of education. Graduation rates in Indicators A2 and A3 measure the estimated percentage of younger adults who are expected to graduate from a particular level of education during their lifetimes. Completion rates from tertiary programmes in Indicator A4 estimate the proportion of students who enter a programme and complete it successfully within a certain period of time.

A1

Analysis

Attainment levels in OECD countries

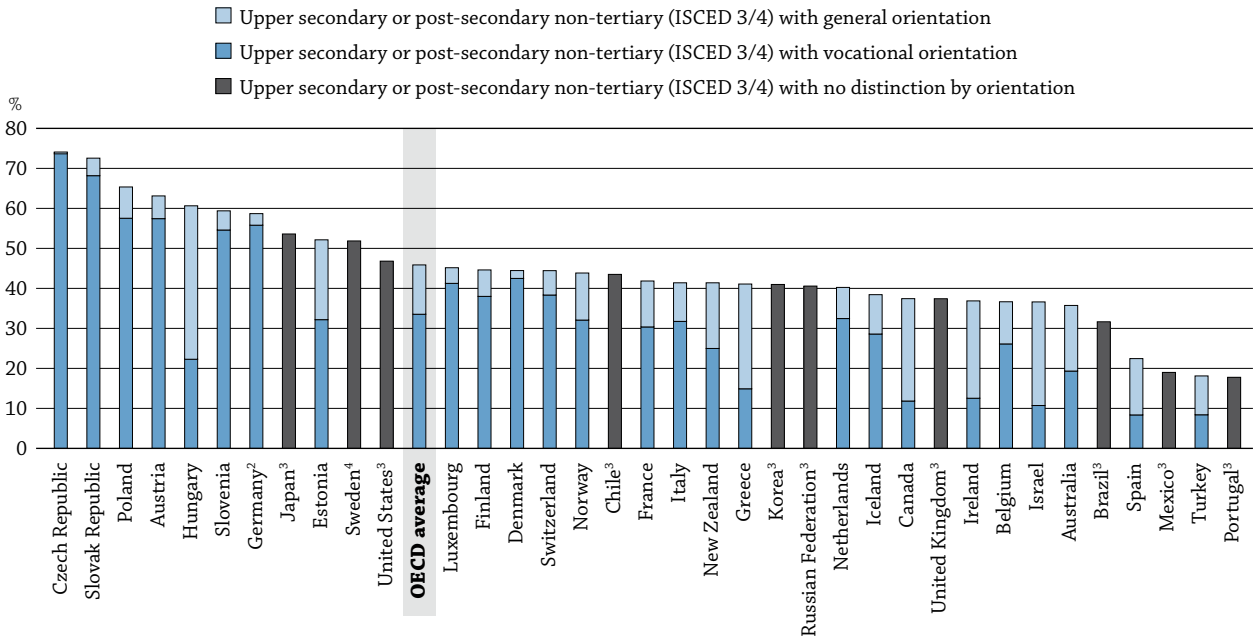
Upper secondary attainment and the weight of vocational education and training (VET)

More adults (25-64 year-olds) have attained upper secondary education (including post-secondary non-tertiary education, but excluding upper secondary short programmes, i.e. ISCED levels 3A, 3B, 3C long and 4; see the Reader's Guide for definitions of ISCED levels) than have attained any other level of education across OECD countries. More than a third of the population in most OECD countries, and more than half the population in Austria, the Czech Republic, Estonia, Germany, Hungary, Japan, Poland, the Slovak Republic, Slovenia and Sweden have attained an upper secondary education as the highest level of attainment (Table A1.4a).

Only in Mexico, Portugal and Turkey, less than 20% of the population attained upper secondary education as the highest level of education; and these countries, together with Italy and Spain, are the sole countries in which the proportion of people with below upper secondary education is larger than the proportion of adults with upper secondary education or with tertiary attainment (Table A1.4a).

Chart A1.2. Population whose highest level of attainment is upper secondary or post-secondary non-tertiary education (2011)[1]

Percentage of 25-64 year-olds who have attained ISCED level 3 or 4 as the highest level, and programme orientation



1. Excluding ISCED 3C short programmes.
2. Persons with ISCED 4A attainment in Germany have successfully completed both a general and a vocational programme. In this chart they have been allocated to vocational.
3. Countries for which no information about programme orientation is available.
4. Figures for Sweden include about 10% of 25-64 year-olds who have attained ISCED 3 or 4 in programmes that cannot be allocated by orientation.

Countries are ranked in descending order of the percentage of 25-64 year-olds with upper secondary or post-secondary non-tertiary attainment (ISCED 3/4) regardless of the orientation of the programmes.

Source: OECD. Table A1.5a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846234

Chart A1.2 shows that the difference in upper secondary attainment rates between adults in vocational and general tracks is substantial in many OECD countries. In Austria, the Czech Republic, Germany, Poland, the Slovak Republic and Slovenia, at least half the population has attained upper secondary or post-secondary non-tertiary VET qualifications as the highest level of attainment; however in these countries, people tend to leave education after attaining upper secondary qualifications (Table A1.5a).

Box A1.1. Public-private partnership in VET

In some countries, such as Austria, Germany, Luxembourg and Switzerland, public-private partnerships in vocational education and training (VET) are a longstanding tradition and play an important role in preparing students for the labour market. Their importance is reflected in the high levels of upper secondary attainment, graduation and enrolment in these countries (Tables A1.1a, A1.5a and Indicators A2 and C1).

Also known as "dual" or "co-operative" systems of vocational education and training, these partnerships are characterised by:

- their links between work- and school-based learning to prepare apprentices for a successful transition to full-time employment;
- the high degree of engagement on the part of employers and other social partners;
- the opportunity for governments to share education costs with the private sector;
- the opportunity for enterprises to acquire a young, employable workforce and reduce advertising, hiring and induction costs; and
- the opportunity for trainees to benefit from highly motivating earning and learning situations, to take responsibility, and to develop personally and professionally.

One of the strengths of dual VET systems is that several stakeholders, including experts from workplace practice and from VET schools, employers and trade unions, are involved in developing vocational training regulations and curricular frameworks. While the private sector generally assumes responsibility for practical training, the vocational school inculcates the theoretical knowledge necessary for practicing a profession. This partnership ensures that the needs of both companies and employees are met. The binding requirements of the training regulations and the curricular framework guarantee a national standard while giving companies the flexibility to agree a training plan with trainees. This is largely why the transition from education to first employment is notably smooth (Table C5.2a, Tables C5.2b, c and d [available on line]) and the youth unemployment rate is below the OECD average across these countries.

Nevertheless, labour-market initiatives and systemic measures are needed to balance the effects of economic downturns and to support particular sub-groups, such as migrants and students with special needs. In Austria, for example, graduates of compulsory schooling who do not have a place at an upper secondary school or cannot find a place in a company-based apprenticeship programme are given the opportunity to learn an apprenticeship trade at a supra-company training institution financed by Public Employment Service Austria (Arbeitsmarktservice, AMS).

These systems show that obtaining an academic qualification is not the only way for individuals to gain the skills needed in today's labour market. Upgraded training for higher positions provides a real alternative to a degree in higher education, and is highly regarded both by individuals and society in general. In Germany and Switzerland, qualifications obtained through advanced vocational training and from trade and technical schools lead to recognised occupational certificates and titles, providing a means of career advancement without a university degree. Advanced vocational training builds on initial training and leads to qualifications such as "master craftsman" that are regarded as equivalent to academic degrees. To emphasise the equivalence of general and vocational education, new pathways to tertiary education have been opened for VET graduates.

However, despite the similarities of systems in Austria, Germany, Luxembourg and Switzerland, the international diversity of VET systems is large. The OECD has carried out extensive work in the assessment of the challenges of VET systems throughout OECD countries in the reviews *Learning for Jobs* (OECD, 2010) and *Skills beyond School* (OECD, 2013).

Through upper secondary VET programmes, students can acquire the skills, knowledge and practical experience relevant to specialised occupations, and young people can prepare for entry into the labour market (see Box A1.1, which provides details on the VET systems in Austria, Germany, Luxembourg and Switzerland). However, reliable data on these systems is scarce and international comparisons are difficult to establish, especially for tertiary programmes. Not only do VET systems vary greatly among countries, but even when VET education is an important part of an education system, as it is in several countries, it is usually eclipsed in prestige by general education (OECD, 2010 and 2013) (see Table A1.5a and Table A1.5b, available on line).

Tertiary attainment

Over the past decade, tertiary attainment (including advanced research programmes, i.e. ISCED levels 5A, 5B and 6) has increased by almost 10 percentage points across OECD countries. On average, 33% of adult women and 30% of adult men have attained tertiary education (Table A1.3b, available on line). In most OECD countries, younger adults have a higher rate of tertiary attainment than all adults by an average of 7 percentage points. In 15 countries, this difference is larger than the OECD average, and is larger than 10 percentage points in Chile, France, Japan, Korea and Poland (Chart A1.1).

Despite this increase, only in Australia, Canada, Ireland, Israel, New Zealand, Spain and the United Kingdom are attainment rates for tertiary education higher than those for upper secondary education. In Korea, rates for both upper secondary and tertiary education are almost equal. Spain is the only country in this group where there are more adults with below upper secondary education than adults who have attained a tertiary education (Table A1.4a).

There is an important difference between upper secondary and tertiary education attainment. Data show that high upper secondary attainment rates do not necessarily imply high tertiary education attainment rates. This is particularly true for countries with strong upper secondary or post-secondary non-tertiary (ISCED levels 3 and 4) VET systems.

One reason for this are the strong links between upper secondary attainment and the labour market, links that are likely to have an effect on an individual's decision to continue in education. This disparity may also reflect the difficulties encountered when switching between programme tracks in the transition to tertiary level, the dissuasive effects of tuition fees and related loans, or the feeling that studies beyond compulsory or VET education will delay entry into the labour market and wage-earning.

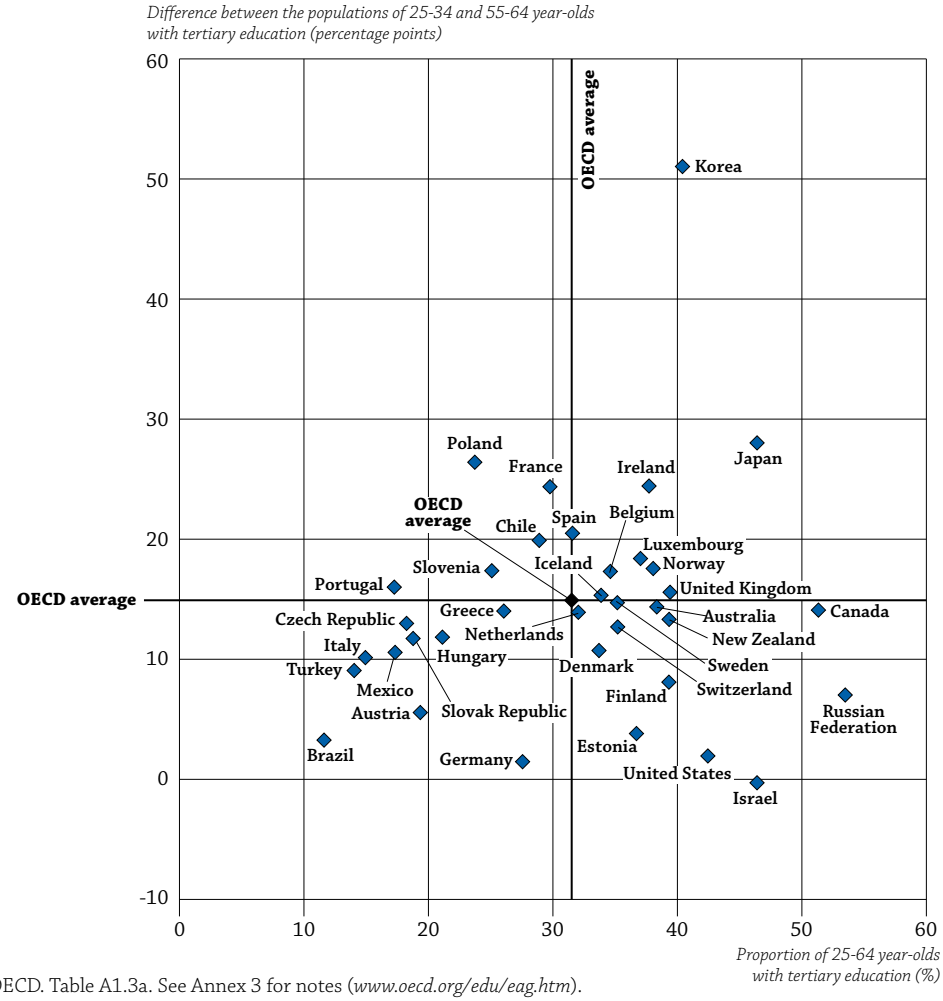
Trends in attainment levels in OECD countries

Evolution of educational attainment

Nowadays there are more people participating in education than ever before. Differences between generations in educational attainment and growth in tertiary and secondary attainment are reflected in the trends in attainment rates. On average, since 2000 the proportion of people with no upper secondary education decreased and the proportion of people with tertiary education grew in most OECD countries. Upper secondary and post-secondary non-tertiary attainment levels have remained stable in most OECD countries during the same period. Australia, Canada, Ireland, Japan, Korea, Luxembourg, Poland, Switzerland and the United Kingdom have reported a growth in tertiary attainment rates of more than 10 percentage points between 2000 and 2011.

As shown in Chart A1.3, countries in the upper right quadrant not only have already-high attainment levels but the difference between generations is considerable: attainment rates among younger adults (25-34 year-olds) are higher than those among older adults (55-64 year-olds). In Japan, Poland and most notably Korea, the gap between the two age groups in tertiary attainment is larger than 25 percentage points. In contrast, there is less than a 10 percentage-point difference between the two age groups in Austria, Brazil, Estonia, Finland, the Russian Federation and Turkey. In Germany and the United States, the difference in attainment rates between the two age groups is slightly more than 1 percentage point, while in Israel, the proportion of older adults with tertiary education is slightly larger than that of younger adults. The lower left quadrant shows countries where tertiary attainment rates are below the OECD average and where rates have not increased much from one generation to the next (Chart A1.3).

Chart A1.3. Proportion of population with tertiary education and difference in attainment between 25-34 and 55-64 year-olds (2011)



Source: OECD. Table A1.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846253

Between 2000 and 2011, in Australia, Belgium, Finland, Greece, Hungary, Iceland, Ireland, Italy, Korea, Luxembourg, New Zealand, Portugal, Spain and the United Kingdom, the share of adults who have only a below upper secondary education decreased by more than 10 percentage points. At the opposite extreme, the share of people in Denmark and Norway without an upper secondary education grew by about 3 percentage points in the same period (Table A1.4a).

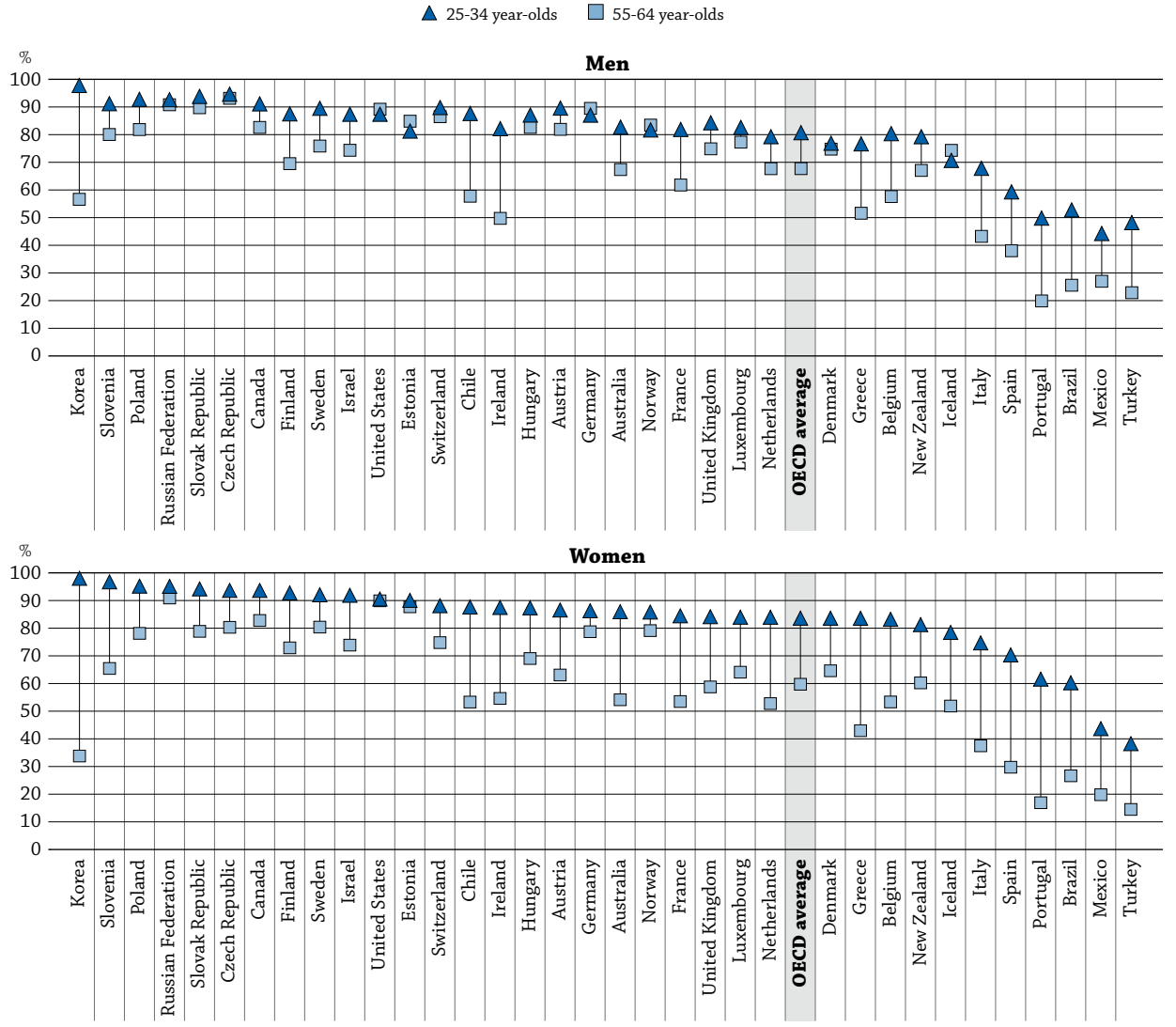
Generational differences and gender

In most OECD countries, younger adults (25-34 year-olds) have attained higher levels of education than older adults (55-64 year-olds). On average, 82% of younger adults have attained at least upper secondary education compared to 64% of older adults (Table A1.2a). Younger adults also have higher tertiary attainment rates than older adults by about 15 percentage points. In some countries, the difference between generations is significant. In Korea, for example, there is a 51 percentage-point gap between these two age groups in tertiary attainment levels. Belgium, Chile, France, Ireland, Japan, Luxembourg, Norway, Poland, Portugal, Slovenia, Spain and the United Kingdom also have above-average differences in attainment rates between the two age groups. By contrast, in Germany and the United States, differences between age groups are very small; and in Israel, the proportion of younger adults with a tertiary education is slightly smaller than the proportion of older adults with that level of education (Table A1.3a).

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Chart A1.4. Population that has attained at least upper secondary education (2011)

Percentage, by age group and gender



Note: These calculations exclude ISCED 3C short programmes.

Countries are ranked in descending order of the attainment rates of 25-34 year-old women who have attained at least upper secondary education.

Source: OECD. Table A1.2b, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846272

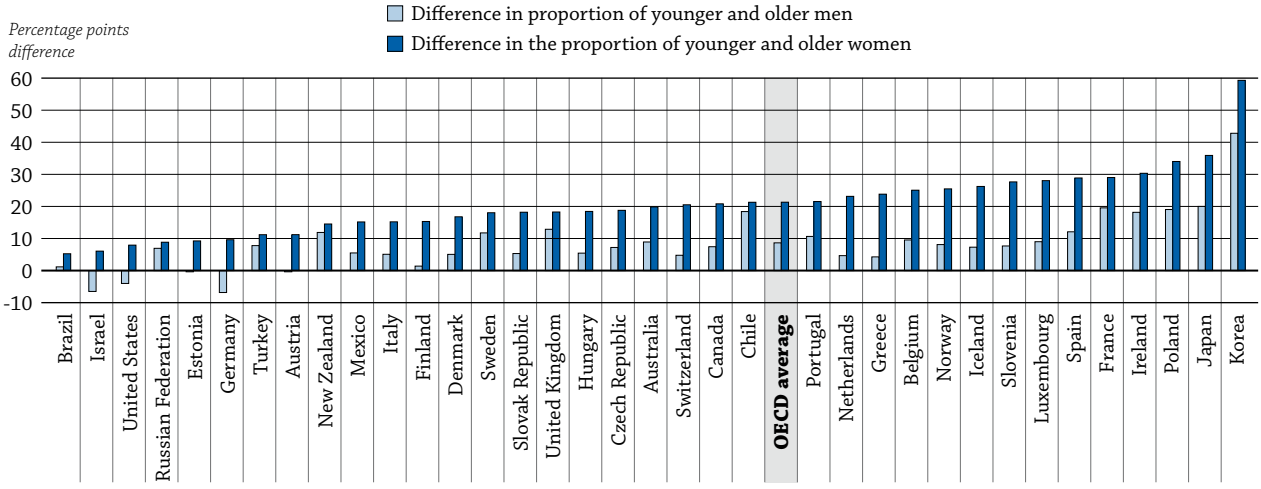
Chart A1.4, which focuses on the population with at least upper secondary education, i.e. those individuals with upper secondary or post-secondary non-tertiary education or tertiary education, shows how attainment levels vary between men and women across countries and generations. Generational differences are particularly striking among women. On average, there is a 24 percentage-point difference in attainment rates in upper secondary and tertiary education between younger (84%) and older (60%) women. This gap suggests that there has been strong growth in upper secondary and tertiary education attainment rates among the younger generations of women in most OECD countries (Chart A1.4, and Table A1.3b, available on line).

Generational differences in attainment rates among men are similar to those among women but less pronounced. Across almost all OECD countries, except Estonia, Germany, Iceland, Norway and the United States, the proportion of younger men who have attained at least upper secondary education is equal to or larger than the proportion of older men with the same attainment level (Chart A1.4).

Gender differences in educational attainment have also evolved over the years. In 2000, adult men had higher tertiary attainment rates than adult women. In 2011, the situation was reversed: 33% of women had attained a tertiary education compared with 30% of men. In addition, younger women have, on average, higher attainment rates in upper secondary and tertiary education than men of the same age. On average, 84% of younger women have attained at least an upper secondary education while 81% of younger men have (Tables A1.2b and A1.4b, available on line).

Chart A1.5. Difference in the proportion of younger and older adults with tertiary education (2011)

Percentage points difference, by age group (25-34 and 55-64 year-olds) and gender



Countries are ranked in ascending order of the difference in the proportion of 25-34 year-old women and 55-64 year-old women with tertiary education.

Source: OECD. Table A1.3b, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846291

Women are more likely to hold a tertiary qualification than men in most OECD countries. In Australia, Canada, Ireland, Israel and New Zealand the proportion of women with tertiary education is larger than the proportion of either men or women with any other level of education. In Canada, even though both genders have high tertiary attainment rates, women have significantly higher rates (56%) than men (46%), and among younger adults there is a 16 percentage-point difference between the two genders. In Estonia, Finland, Iceland, New Zealand, the Russian Federation, Slovenia and Sweden, tertiary attainment rates for women are also higher than those for men by at least 10 percentage points.

However, while on average across OECD countries tertiary attainment rates among younger women are almost 10 percentage points higher than those among younger men, among older adults (55-64 year-olds), men are more likely to hold a tertiary degree (25%) than women (22%). Tertiary attainment rates among young women have grown strongly in Australia, Canada, Ireland, Israel, New Zealand, Norway and Sweden, where 50% or more of younger women have attained tertiary education while less than 50% of younger men have (Table A1.3b, available on line).

Definitions

Age groups: adults refers to the 25-64 year-old population; **younger adults** refers to 25-34 year-olds; **older adults** refers to 55-64 year-olds.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** correspond to ISCED levels 3A, 3B, 3C long programmes, and 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

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Methodology

Data on population and educational attainment for most countries are taken from OECD and Eurostat databases, which are compiled from National Labour Force Surveys. Data on educational attainment for Argentina, China, Indonesia, Saudi Arabia and South Africa are taken from the UNESCO Institute of Statistics (UIS) database on educational attainment of the population aged 25 years and older, *http://stats.uis.unesco.org/unesco/ReportFolders/ReportFolders.aspx* (accessed on 22 May 2013). See Annex 3 (*www.oecd.org/edu/eag.htm*) for additional information.

Attainment profiles are based on the percentage of the population aged 25 to 64 that has successfully completed a specified level of education.

Most OECD countries include people without education (i.e. illiterate adults or people whose educational attainment does not fit national classifications) under the international classification ISCED 0 and therefore averages for ISCED 0/1 (i.e. pre-primary and primary education) are likely to be influenced.

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing. *www.oecd.org/edu/skills-beyond-school/oecdreviewsofvocationaleducationandtraining-learningforjobs.htm* *http://dx.doi.org/10.1787/9789264087460-en*

OECD (2013), "Skills beyond School: the OECD Review of Post-Secondary Vocational Education and Training", OECD Publishing. *www.oecd.org/edu/skills-beyond-school/skillsbeyondschool.htm*

Indicator A1 Tables

	Table A1.1a	Educational attainment of 25-64 year-olds (2011) StatLink http://dx.doi.org/10.1787/888932848001
WEB	Table A1.1b	Educational attainment of 25-64 year-olds, by gender (2011) StatLink http://dx.doi.org/10.1787/888932848020
	Table A1.2a	Percentage of the population that has attained at least upper secondary education, by age group (2011) StatLink http://dx.doi.org/10.1787/888932848039
WEB	Table A1.2b	Percentage of the population that has attained at least upper secondary education, by age group and gender (2011) StatLink http://dx.doi.org/10.1787/888932848058
	Table A1.3a	Percentage of the population that has attained tertiary education, by type of programme and age group (2011) StatLink http://dx.doi.org/10.1787/888932848077
WEB	Table A1.3b	Percentage of the population that has attained tertiary education, by type of programme, age group and gender (2011) StatLink http://dx.doi.org/10.1787/888932848096
	Table A1.4a	Trends in educational attainment, by age group, and average annual growth rate (2000-11) StatLink http://dx.doi.org/10.1787/888932848115
WEB	Table A1.4b	Trends in educational attainment, by gender and age group, and average annual growth rate (2000-11) StatLink http://dx.doi.org/10.1787/888932848134
	Table A1.5a	Educational attainment of 25-64 year-olds, by programme orientation and gender (2011) StatLink http://dx.doi.org/10.1787/888932848153
WEB	Table A1.5b	Educational attainment by programme orientation, age group and gender (2011) StatLink http://dx.doi.org/10.1787/888932848172

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Table A1.1a. Educational attainment of 25-64 year-olds (2011)

		Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A	Tertiary education: Advanced research programmes	All levels of education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	6	20	a	15	16	4	10	27	1	100
	Austria	x(2)	16	1	47	6	10	7	12	x(8)	100
	Belgium	12	16	a	10	24	3	18	16	1	100
	Canada	3	8	a	x(5)	26	12	25	27	x(8)	100
	Chile	14	13	a	x(5)	44	a	12	17	n	100
	Czech Republic	n	7	a	39	35	x(5)	x(8)	18	x(8)	100
	Denmark	1	21	1	37	6	n[r]	6	27	1	100
	Estonia	1	10	a	14	31	7	12	24	n	100
	Finland	6	10	a	a	44	1	14	24	1	100
	France	11	18	a	30	11	n	11	18	1	100
	Germany	3	10	a	48	3	8	11	15	1	100
	Greece	22	11	x(4)	7	26	8	8	18	n	100
	Hungary	1	17	a	29	29	2	1	20	1	100
	Iceland	27	c	2	18	13	6	4	29	1	100
	Ireland	11	15	1	x(5)	23	13	15	22	1	100
	Israel	10	7	a	9	28	a	15	30	1	100
	Italy	11	33	n	7	33	1	n	14	n	100
	Japan	x(5)	x(5)	x(5)	x(5)	54	a	20	26	x(8)	100
	Korea	8	10	a	x(5)	41	a	13	28	x(8)	100
	Luxembourg	10	8	5	17	19	4	12	24	1	100
	Mexico	41	23	a	6	13	a	1	16	x(8)	100
	Netherlands	8	20	x(4)	14	23	3	3	29	n	100
	New Zealand	x(2)	19	7	14	10	11	16	24	x(8)	100
	Norway	n	18	a	28	12	4	2	35	1	100
	Poland	x(2)	11	a	31	31	4	x(8)	24	x(8)	100
	Portugal	44	21	x(5)	x(5)	17	n	x(8)	15	2	100
	Slovak Republic	1	8	x(4)	34	39	x(5)	1	17	n	100
	Slovenia	1	14	a	26	33	a	11	12	2	100
	Spain	18	28	a	8	14	n	9	22	1	100
	Sweden	4	9	a	x(5)	45	7	9	25	1	100
	Switzerland	3	9	2	40	5	6	11	22	3	100
	Turkey	57	11	a	8	10	a	a	14	x(8)	100
	United Kingdom	n	10	13	30	7	n	10	29	1	100
	United States	4	7	x(5)	x(5)	47	x(5)	10	31	1	100
		Below upper secondary education			Upper secondary level of education			Tertiary level of education			
	OECD average	25			44			32			
	EU21 average	24			48			29			
Other G20	Argentina[1]	44	14	a	28	x(4)	a	x(8)	14	x(8)	100
	Brazil	41	15	x(5)	x(5)	32	a	x(8)	12	x(8)	100
	China[2]	35	43	m	x(5)	14	5	x(8)	4	x(8)	100
	India	m	m	m	m	m	m	m	m	m	m
	Indonesia[3]	58	14	a	20	x(4)	a	x(8)	8	x(8)	100
	Russian Federation	1	5	x(4)	19	21	x(4)	26	27	n	100
	Saudi Arabia[4]	51	15	a	15	x(4)	5	x(8)	15	x(8)	100
	South Africa	27	14	a	46	x(4)	7	x(8)	6	x(8)	100
	G20 average	36			34			25			

Note: Due to discrepancies in the data, OECD and EU21 averages have not been calculated for each column individually.

1. Data from 2003.
2. Data from 2010.
3. Data from 2009.
4. Data from 2004.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia; and UNESCO Institute of Statistics (UIS) database on educational attainment for Argentina, China, Indonesia, Saudi Arabia and South Africa. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888932848001

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Table A1.2a. Percentage of the population that has attained at least upper secondary education, by age group (2011)

		Age group					
		25-64	30-34	25-34	35-44	45-54	55-64
		(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia	74	84	84	78	69	61
	Austria	82	88	88	86	82	72
	Belgium	71	82	82	79	68	56
	Canada	89	93	92	92	88	83
	Chile	72	m	88	77	67	56
	Czech Republic	92	95	94	95	93	87
	Denmark	77	82	80	82	76	70
	Estonia	89	86	86	89	94	87
	Finland	84	91	90	89	86	71
	France	72	83	83	78	68	58
	Germany	86	87	87	87	87	84
	Greece	67	78	80	74	64	47
	Hungary	82	87	87	83	81	75
	Iceland	71	75	75	75	69	63
	Ireland	73	86	85	80	68	52
	Israel	83	89	90	85	79	74
	Italy	56	69	71	60	52	40
	Japan	m	m	m	m	m	m
	Korea	81	98	98	96	75	45
	Luxembourg	77	82	83	78	75	71
	Mexico	36	40	44	37	34	23
	Netherlands	72	82	82	77	71	60
	New Zealand	74	81	80	78	73	64
	Norway	82	86	84	85	78	81
	Poland	89	94	94	92	90	80
	Portugal	35	52	56	39	24	18
	Slovak Republic	91	95	94	94	92	84
	Slovenia	84	94	94	87	83	73
	Spain	54	66	65	61	50	34
	Sweden	87	91	91	91	87	78
	Switzerland	86	89	89	87	85	81
	Turkey	32	41	43	30	25	19
	United Kingdom	77	84	84	80	75	67
	United States	89	89	89	89	89	90
	OECD average	75	82	82	78	73	64
	EU21 average	76	84	84	80	75	65
Other G20	Argentina[1]	42	m	m	m	m	m
	Brazil	43	53	57	44	36	26
	China[2]	22	m	m	m	m	m
	India	m	m	m	m	m	m
	Indonesia[3]	28	m	m	m	m	m
	Russian Federation	94	93	94	95	95	91
	Saudi Arabia[4]	34	m	m	m	m	m
	South Africa	58	m	m	m	m	m
	G20 average	60	76	77	72	66	57

Note: These calculations exclude ISCED 3C short programmes.

1. Data from 2003.
2. Data from 2010.
3. Data from 2009.
4. Data from 2004.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia; and UNESCO Institute of Statistics (UIS) database on educational attainment for Argentina, China, Indonesia, Saudi Arabia and South Africa. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848039

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Table A1.3a. Percentage of the population that has attained tertiary education, by type of programme and age group (2011)

		Tertiary-type B education						Tertiary-type A and advanced research programmes						Total tertiary education						
		25-64	30-34	25-34	35-44	45-54	55-64	25-64	30-34	25-34	35-44	45-54	55-64	25-64	30-34	25-34	35-44	45-54	55-64	25-64 (in thousands)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
OECD	Australia	**10**	10	10	11	12	9	**28**	35	35	30	24	21	**38**	45	45	41	35	30	4 491
	Austria	**7**	6	5	7	8	8	**12**	18	16	14	10	8	**19**	24	21	21	19	16	901
	Belgium	**18**	21	19	20	17	14	**17**	22	23	19	14	11	**35**	43	42	39	31	25	2 041
	Canada	**25**	27	26	26	25	21	**27**	31	31	32	23	22	**51**	58	57	58	48	43	9 677
	Chile	**12**	m	15	15	11	7	**17**	m	27	15	12	15	**29**	m	41	30	23	21	2 490
	Czech Republic	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**18**	24	25	18	17	12	**18**	24	25	18	17	12	1 111
	Denmark	**6**	6	5	6	6	5	**28**	35	33	31	26	23	**34**	41	39	37	31	28	953
	Estonia	**12**	13	12	12	13	11	**25**	28	27	23	24	24	**37**	40	39	35	37	35	267
	Finland	**14**	3	2	17	22	17	**25**	43	38	30	19	15	**39**	46	39	47	41	31	1 132
	France	**11**	17	16	14	9	7	**18**	27	27	21	13	12	**30**	43	43	36	22	19	9 711
	Germany	**11**	10	9	11	12	11	**16**	21	18	18	15	15	**28**	31	28	29	27	26	12 308
	Greece	**8**	9	12	9	6	3	**18**	20	21	19	18	15	**26**	29	33	28	24	19	1 601
	Hungary	**1**	1	2	1	n	c	**20**	27	27	21	18	16	**21**	28	28	21	18	16	1 178
	Iceland	**4**	c	3	5	4	4	**30**	41	37	34	27	20	**34**	41	39	39	31	24	55
	Ireland	**15**	18	16	18	13	10	**23**	32	31	26	18	13	**38**	49	47	43	31	23	904
	Israel	**15**	15	13	16	16	17	**31**	38	32	34	29	28	**46**	53	45	50	45	45	1 673
	Italy	**n**	n	n	n	n	n	**15**	20	21	16	11	11	**15**	20	21	17	11	11	5 019
	Japan	**20**	m	24	25	20	12	**26**	m	35	26	27	18	**46**	m	59	51	47	31	29 520
	Korea	**13**	24	25	15	6	2	**28**	40	39	35	22	11	**40**	64	64	49	28	13	11 885
	Luxembourg	**12**	14	14	13	10	10	**25**	34	32	27	21	19	**37**	48	47	40	31	28	104
	Mexico	**1**	1	1	1	1	1	**16**	19	21	14	15	11	**17**	20	23	15	16	12	9 036
	Netherlands	**3**	3	2	3	3	2	**30**	38	38	31	27	24	**32**	41	40	34	29	26	2 852
	New Zealand	**16**	14	15	15	16	16	**24**	33	31	26	20	17	**39**	47	46	41	37	33	851
	Norway	**2**	2	1	2	3	3	**36**	48	46	39	31	26	**38**	50	47	42	34	29	973
	Poland	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**24**	37	39	24	16	13	**24**	37	39	24	16	13	5 150
	Portugal	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**17**	26	27	19	11	11	**17**	26	27	19	11	11	1 027
	Slovak Republic	**1**	1	1	1	1	1	**17**	22	24	16	15	13	**19**	23	26	17	16	14	595
	Slovenia	**11**	14	13	12	12	9	**14**	24	21	16	10	8	**25**	38	34	28	22	16	298
	Spain	**9**	13	12	12	7	4	**22**	27	27	25	20	15	**32**	41	39	37	27	19	8 350
	Sweden	**9**	8	9	9	9	10	**26**	40	34	31	21	18	**35**	48	43	39	31	28	1 702
	Switzerland	**11**	11	9	12	12	9	**25**	32	30	28	22	18	**35**	44	40	39	33	27	1 545
	Turkey	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**14**	17	19	13	10	10	**14**	17	19	13	10	10	4 709
	United Kingdom	**10**	8	8	11	12	9	**30**	40	39	32	24	22	**39**	48	47	43	36	31	12 958
	United States	**10**	10	10	10	11	10	**32**	34	33	34	30	31	**42**	44	43	45	41	41	68 921
	OECD average	**10**	10	10	11	10	8	**23**	30	30	25	19	17	**32**	39	39	34	28	24	
	OECD total (in thousands)																			215 988
	EU21 average	**9**	9	9	10	9	8	**21**	29	28	23	18	15	**29**	37	36	31	25	21	
Other G20	Argentina[1]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**14**	m	m	m	m	m	m
	Brazil	**x(13)**	x(14)	x(15)	x(16)	x(17)	x(18)	**12**	13	13	12	11	9	**12**	13	13	12	11	9	11 671
	China[2]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**4**	m	m	m	m	m	m
	India	**m**	m	m	m	m	m	**m**	m	m	m	m	m	**m**	m	m	m	m	m	m
	Indonesia[3]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**8**	m	m	m	m	m	m
	Russian Federation	**26**	23	22	27	28	29	**27**	32	34	28	24	21	**53**	55	56	55	52	49	43 576
	Saudi Arabia[4]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**15**	m	m	m	m	m	m
	South Africa	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**6**	m	m	m	m	m	m
	G20 average	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**26**	m	m	m	m	m	
	G20 total (in thousands)																			m

1. Data from 2003.
2. Data from 2010.
3. Data from 2009.
4. Data from 2004.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia; and UNESCO Institute of Statistics (UIS) database on educational attainment for Argentina, China, Indonesia, Saudi Arabia and South Africa. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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A1

Table A1.4a. [1/2] Trends in educational attainment, by age group, and average annual growth rate (2000-11)[1]

		Educational attainment	25-64 year-olds					25-34 year-olds					55-64 year-olds				
			2000	2005	2008	2011	2000-11 average annual growth rate	2000	2005	2008	2011	2000-11 average annual growth rate	2000	2005	2008	2011	2000-11 average annual growth rate
			(1)	(2)	(5)	(8)	(9)	(10)	(11)	(14)	(17)	(18)	(19)	(20)	(23)	(26)	(27)
OECD	Australia	Below upper secondary	41	35	30	26	-4.1	32	21	18	16	-6.3	54	50	45	39	-2.8
		Upper secondary or post-secondary non-tertiary	31	33	34	36	1.2	37	41	40	40	0.7	27	26	27	31	1.1
		Tertiary education	27	32	36	38	3.1	31	38	42	45	3.3	19	24	29	30	4.3
	Austria	Below upper secondary	24	19	19	18	-2.8	16	13	12	12	-2.8	37	30	29	28	-2.7
		Upper secondary or post-secondary non-tertiary	62	63	63	63	0.1	69	68	68	67	-0.3	53	56	55	57	0.7
		Tertiary education	14	18	18	19	3.0	14	20	19	21	3.5	10	14	15	16	4.1
	Belgium	Below upper secondary	41	34	30	29	-3.3	25	19	17	18	-2.8	62	52	48	44	-2.9
		Upper secondary or post-secondary non-tertiary	31	35	37	37	1.4	39	40	41	39	0.0	22	26	30	30	3.1
		Tertiary education	27	31	32	35	2.3	36	41	42	42	1.5	17	22	22	25	3.7
	Canada	Below upper secondary	19	15	13	11	-4.8	12	9	8	8	-4.0	36	25	20	17	-6.5
		Upper secondary or post-secondary non-tertiary	41	39	38	37	-0.7	40	37	36	36	-1.0	36	39	40	40	1.1
		Tertiary education	40	46	49	51	2.3	48	54	56	57	1.5	28	36	40	43	3.8
	Chile	Below upper secondary	m	m	32	28	m	m	m	16	12	m	m	m	61	45	m
		Upper secondary or post-secondary non-tertiary	m	m	44	44	m	m	m	51	46	m	m	m	22	34	m
		Tertiary education	m	m	24	29	m	m	m	34	41	m	m	m	17	21	m
	Czech Republic	Below upper secondary	14	10	9	8	-5.4	8	6	6	6	-2.5	24	17	15	13	-5.3
		Upper secondary or post-secondary non-tertiary	75	77	76	74	-0.1	81	80	77	69	-1.5	67	73	75	74	1.0
		Tertiary education	11	13	14	18	4.7	11	14	18	25	7.6	9	11	11	12	2.6
	Denmark[2]	Below upper secondary	20	19	26	23	1.2	13	13	21	20	3.8	31	25	33	30	-0.2
		Upper secondary or post-secondary non-tertiary	54	47	42	43	-2.0	58	48	43	42	-2.9	51	48	41	42	-1.8
		Tertiary education	26	34	31	34	2.5	29	40	36	39	2.5	18	27	26	28	3.9
	Estonia[2]	Below upper secondary	15	11	12	11	-2.9	9	13	15	14	4.2	33	20	17	13	-8.0
		Upper secondary or post-secondary non-tertiary	56	56	54	52	-0.6	60	55	49	47	-2.2	39	51	51	51	2.5
		Tertiary education	29	33	34	37	2.2	31	33	36	39	2.0	27	29	32	35	2.3
	Finland	Below upper secondary	27	21	19	16	-4.4	14	11	10	10	-3.0	50	39	34	29	-4.9
		Upper secondary or post-secondary non-tertiary	41	44	44	44	0.8	48	52	52	51	0.6	27	34	37	40	3.7
		Tertiary education	33	35	37	39	1.7	39	38	38	39	0.2	23	27	29	31	2.7
	France	Below upper secondary	38	33	30	28	-2.6	24	19	17	17	-3.1	56	49	45	42	-2.5
		Upper secondary or post-secondary non-tertiary	41	41	42	42	0.3	45	42	42	40	-1.0	31	35	37	39	2.2
		Tertiary education	22	25	27	30	3.0	31	40	41	43	2.9	13	16	17	19	3.4
	Germany	Below upper secondary	18	17	15	14	-2.6	15	16	14	13	-1.2	26	21	18	16	-4.2
		Upper secondary or post-secondary non-tertiary	58	59	60	59	0.1	63	62	62	59	-0.5	54	56	58	58	0.6
		Tertiary education	23	25	25	28	1.5	22	23	24	28	2.0	20	23	24	26	2.4
	Greece	Below upper secondary	51	43	39	33	-3.9	31	26	25	20	-4.0	75	68	61	53	-3.1
		Upper secondary or post-secondary non-tertiary	32	36	38	41	2.4	45	49	47	48	0.6	17	20	24	29	5.1
		Tertiary education	18	21	23	26	3.6	24	26	28	33	2.8	8	12	15	19	7.5
	Hungary	Below upper secondary	31	24	20	18	-4.6	19	15	14	13	-3.5	60	39	30	25	-7.8
		Upper secondary or post-secondary non-tertiary	55	59	61	61	0.9	67	65	62	59	-1.1	28	46	54	59	6.9
		Tertiary education	14	17	19	21	3.8	15	20	24	28	6.1	12	15	16	16	3.0
	Iceland	Below upper secondary	44	37	36	29	-3.7	37	31	31	25	-3.4	60	51	44	37	-4.4
		Upper secondary or post-secondary non-tertiary	32	32	33	37	1.3	33	33	36	35	0.6	27	28	32	39	3.5
		Tertiary education	24	31	31	34	3.3	30	36	33	39	2.6	13	21	24	24	6.0
	Ireland	Below upper secondary	43	35	31	27	-4.2	27	19	15	15	-5.2	64	60	55	48	-2.7
		Upper secondary or post-secondary non-tertiary	36	35	36	36	0.0	43	40	40	38	-1.2	22	23	26	29	2.6
		Tertiary education	22	29	34	38	5.2	30	41	45	47	4.3	13	17	19	23	5.1
	Israel	Below upper secondary	m	21	19	17	m	m	14	13	10	m	m	31	28	26	m
		Upper secondary or post-secondary non-tertiary	m	33	37	37	m	m	36	45	45	m	m	26	28	29	m
		Tertiary education	m	46	44	46	m	m	50	42	45	m	m	43	44	45	m
	Italy	Below upper secondary	55	50	47	44	-2.0	41	34	31	29	-3.2	76	70	65	60	-2.2
		Upper secondary or post-secondary non-tertiary	36	38	39	41	1.3	49	50	49	50	0.3	18	22	25	29	4.8
		Tertiary education	10	12	14	15	4.1	11	16	20	21	6.5	6	8	10	11	5.5
	Japan	Below upper secondary	17	m	m	m	m	6	m	m	m	m	37	m	m	m	m
		Upper secondary or post-secondary non-tertiary	49	60	57	54	0.8	46	47	45	41	-1.1	48	78	74	69	3.4
		Tertiary education	34	40	43	46	3.0	48	53	55	59	1.9	15	22	26	31	6.7
	Korea	Below upper secondary	32	24	21	19	-4.7	7	3	2	2	-10.4	71	65	60	55	-2.4
		Upper secondary or post-secondary non-tertiary	44	44	43	41	-0.7	56	46	40	34	-4.4	20	25	28	32	4.5
		Tertiary education	24	32	37	40	4.9	37	51	58	64	5.1	9	10	12	13	3.7
	Luxembourg	Below upper secondary	39	34	32	23	-4.8	32	23	21	17	-5.7	51	45	43	29	-5.0
		Upper secondary or post-secondary non-tertiary	43	39	40	40	-0.5	45	40	41	37	-1.9	36	37	38	43	1.7
		Tertiary education	18	27	28	37	6.6	23	37	39	47	6.7	13	19	19	28	7.3
	Mexico	Below upper secondary	71	68	66	64	-1.0	63	62	60	56	-1.1	87	84	81	77	-1.2
		Upper secondary or post-secondary non-tertiary	14	17	18	19	2.5	20	20	20	21	0.8	6	8	10	11	6.3
		Tertiary education	15	15	16	17	1.5	17	18	20	23	2.3	7	8	10	12	4.9

1. Years 2006, 2007, 2009, 2010 are available for consultation on line (see *Statlink* below).

2. Figures for 2011 for Denmark, Estonia and the Netherlands in this table may differ from figures in other tables of Indicator A1 because the source of the figures is different. This table uses EU-LFS for all years.

3. The average annual growth for Norway is calculated from 2005 onwards because attainment numbers for 2000 use the former classification of educational attainment and are not comparable with more recent years.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Estonia, Finland, France (only for 2000), Iceland, Ireland, Italy (only for 2000), Luxembourg, the Netherlands and Slovenia. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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A1

Table A1.4a. [2/2] Trends in educational attainment, by age group, and average annual growth rate (2000-11)[1]

		Educational attainment	25-64 year-olds					25-34 year-olds					55-64 year-olds				
			2000	2005	2008	2011	2000-11 average annual growth rate	2000	2005	2008	2011	2000-11 average annual growth rate	2000	2005	2008	2011	2000-11 average annual growth rate
			(1)	(2)	(5)	(8)	(9)	(10)	(11)	(14)	(17)	(18)	(19)	(20)	(23)	(26)	(27)
OECD	Netherlands[2]	Below upper secondary	34	28	27	28	-1.8	25	19	18	18	-2.8	46	41	38	40	-1.4
		Upper secondary or post-secondary non-tertiary	42	42	41	40	-0.4	48	46	43	42	-1.2	35	35	36	34	-0.1
		Tertiary education	24	30	32	32	2.6	27	35	40	40	3.6	19	24	26	26	3.0
	New Zealand	Below upper secondary	37	32	28	26	-3.1	31	24	21	20	-4.2	49	44	38	36	-2.7
		Upper secondary or post-secondary non-tertiary	34	29	32	35	0.1	40	33	32	34	-1.3	28	24	28	31	0.9
		Tertiary education	29	39	40	39	2.9	29	43	48	46	4.3	23	32	34	33	3.3
	Norway[3]	Below upper secondary	15	23	19	18	-3.8	7	17	16	16	-0.4	30	27	22	19	-6.2
		Upper secondary or post-secondary non-tertiary	57	45	45	44	-0.3	59	43	38	37	-2.3	50	49	50	52	1.1
		Tertiary education	28	33	36	38	2.6	35	41	46	47	2.3	20	24	28	29	3.4
	Poland	Below upper secondary	20	15	13	11	-5.4	11	8	7	6	-5.2	43	30	24	20	-6.7
		Upper secondary or post-secondary non-tertiary	69	68	68	65	-0.4	75	66	61	55	-2.8	47	58	64	67	3.3
		Tertiary education	11	17	20	24	6.9	14	26	32	39	9.7	10	13	12	13	2.4
	Portugal	Below upper secondary	81	74	72	65	-1.9	68	57	53	44	-3.8	92	87	87	82	-1.1
		Upper secondary or post-secondary non-tertiary	11	14	14	18	4.9	19	24	23	29	3.9	3	5	6	7	7.2
		Tertiary education	9	13	14	17	6.3	13	19	23	27	6.9	5	7	8	11	7.9
	Slovak Republic	Below upper secondary	16	12	10	9	-5.5	6	7	6	6	-0.6	38	23	19	16	-7.6
		Upper secondary or post-secondary non-tertiary	73	74	75	73	-0.1	82	77	76	68	-1.7	54	65	70	70	2.3
		Tertiary education	10	14	15	19	5.5	11	16	18	26	7.8	8	12	11	14	5.4
	Slovenia	Below upper secondary	25	20	18	16	-4.3	15	9	8	6	-7.7	39	31	29	27	-3.3
		Upper secondary or post-secondary non-tertiary	59	60	59	59	0.0	66	67	62	60	-0.9	49	53	55	56	1.4
		Tertiary education	16	20	23	25	4.3	19	25	30	34	5.2	12	16	16	16	2.6
	Spain	Below upper secondary	62	51	49	46	-2.6	45	36	35	35	-2.1	85	74	71	66	-2.2
		Upper secondary or post-secondary non-tertiary	16	21	22	22	3.3	21	24	26	26	1.7	6	11	13	15	9.3
		Tertiary education	23	28	29	32	3.1	34	40	39	39	1.3	10	14	16	19	6.2
	Sweden	Below upper secondary	22	16	15	13	-4.9	13	9	9	9	-3.0	37	28	25	22	-4.8
		Upper secondary or post-secondary non-tertiary	47	54	53	52	0.8	54	53	50	48	-1.0	40	47	48	50	2.1
		Tertiary education	30	30	32	35	1.4	34	37	41	43	2.2	23	25	26	28	1.9
	Switzerland	Below upper secondary	16	15	13	14	-1.0	10	10	10	11	0.6	26	21	17	19	-2.8
		Upper secondary or post-secondary non-tertiary	60	56	53	50	-1.5	64	59	52	49	-2.4	55	57	55	54	-0.3
		Tertiary education	24	29	34	35	3.5	26	31	38	40	4.1	18	22	27	27	3.6
	Turkey	Below upper secondary	77	72	70	68	-1.1	72	63	60	57	-2.2	87	84	81	81	-0.7
		Upper secondary or post-secondary non-tertiary	15	18	18	18	1.8	19	24	25	25	2.4	7	8	9	10	3.2
		Tertiary education	8	10	12	14	4.8	9	13	15	19	7.1	6	8	9	10	4.8
	United Kingdom	Below upper secondary	37	33	28	23	-4.3	33	27	20	16	-6.6	45	40	38	33	-2.6
		Upper secondary or post-secondary non-tertiary	37	37	36	37	0.1	38	38	37	37	-0.1	37	36	34	35	-0.3
		Tertiary education	26	30	35	39	4.0	29	35	43	47	4.5	19	24	28	31	4.7
	United States	Below upper secondary	13	12	11	11	-1.4	12	13	12	11	-0.7	18	14	11	10	-5.0
		Upper secondary or post-secondary non-tertiary	51	49	48	47	-0.8	50	47	47	46	-0.8	52	49	49	48	-0.6
		Tertiary education	36	39	41	42	1.4	38	39	42	43	1.1	30	37	40	41	3.0
	OECD average	Below upper secondary	34	30	28	25	-2.7	24	21	19	18	-2.8	51	43	40	36	-3.0
		Upper secondary or post-secondary non-tertiary	44	44	44	44	0.1	49	47	46	44	-1.0	34	38	39	41	1.7
		Tertiary education	22	27	29	32	3.3	26	33	35	39	3.5	15	20	22	24	4.2
	OECD average for countries with data available for all reference years	Below upper secondary	35	30	28	25	-2.8	25	21	20	18	-2.8	51	44	40	36	-3.1
		Upper secondary or post-secondary non-tertiary	44	44	44	44	0.1	49	47	46	44	-1.0	34	37	39	41	1.8
		Tertiary education	22	26	28	31	3.2	26	32	35	38	3.5	15	19	21	23	3.8
	EU21 average	Below upper secondary	34	29	27	24	-3.2	23	19	18	16	-3.2	51	42	39	35	-3.4
		Upper secondary or post-secondary non-tertiary	46	48	48	48	0.3	53	52	50	48	-0.9	35	40	42	44	2.1
		Tertiary education	20	24	26	29	3.4	24	29	32	36	3.8	14	18	19	21	3.8
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	Below upper secondary	m	m	61	57	m	m	m	50	43	m	m	m	77	74	m
		Upper secondary or post-secondary non-tertiary	m	m	28	32	m	m	m	39	44	m	m	m	14	17	m
		Tertiary education	m	m	11	12	m	m	m	11	13	m	m	m	9	9	m
	China		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	6	m	m	m	m	6	m	m	m	m	9	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Years 2006, 2007, 2009, 2010 are available for consultation on line (see *Statlink* below).

2. Figures for 2011 for Denmark, Estonia and the Netherlands in this table may differ from figures in other tables of Indicator A1 because the source of the figures is different. This table uses EU-LFS for all years.

3. The average annual growth for Norway is calculated from 2005 onwards because attainment numbers for 2000 use the former classification of educational attainment and are not comparable with more recent years.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Estonia, Finland, France (only for 2000), Iceland, Ireland, Italy (only for 2000), Luxembourg, the Netherlands and Slovenia. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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A1

Table A1.5a. Educational attainment of 25-64 year-olds, by programme orientation and gender (2011)

		Upper secondary or post-secondary non-tertiary (ISCED 3/4)									Tertiary (ISCED 5)[1]								
		Vocational			General			Total[2]			Vocational			General			Total[3]		
		M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD	Australia	19	25	13	16	16	17	36	41	31	10	9	12	27	25	29	38	34	41
	Austria	57	61	54	6	5	6	63	66	60	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	19	22	17
	Belgium	26	29	24	11	10	12	37	38	35	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	34	32	36
	Canada	12	15	8	26	26	25	37	41	34	22	18	25	30	28	31	51	46	56
	Chile	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	44	43	44	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	29	29	28
	Czech Republic[4]	74	76	71	n	n	n	74	77	72	a	a	a	x(16)	x(17)	x(18)	18	18	18
	Denmark	42	46	38	2	2	2	43	48	39	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	33	29	37
	Estonia	32	36	28	20	22	18	52	58	47	12	8	16	24	20	28	36	27	44
	Finland	38	40	36	7	8	6	44	48	41	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	38	32	44
	France	30	35	26	11	9	13	42	45	39	11	10	13	x(16)	x(17)	x(18)	29	27	31
	Germany[5]	56	55	56	3	3	3	59	58	59	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	26	29	24
	Greece	15	17	12	26	24	29	41	41	41	8	8	7	16	15	17	26	26	26
	Hungary	22	21	23	38	44	33	61	66	56	1	1	1	x(16)	x(17)	x(18)	21	18	23
	Iceland	29	37	20	10	9	11	37	45	29	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	33	27	39
	Ireland	13	13	12	24	24	25	36	36	35	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	37	34	41
	Israel	11	13	9	26	26	26	37	39	35	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	45	42	49
	Italy	32	36	28	10	6	13	41	41	41	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	15	13	16
	Japan	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	54	53	54	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	46	47	46
	Korea	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	41	41	41	13	12	13	28	32	23	40	45	36
	Luxembourg	41	41	42	4	3	5	40	40	41	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	35	37	33
	Mexico	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	19	19	19	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	17	19	15
	Netherlands	32	33	32	8	8	8	40	40	40	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	32	33	30
	New Zealand	25	31	19	16	15	18	35	40	29	16	13	18	24	22	26	39	34	44
	Norway	32	37	27	12	11	12	44	48	40	2	3	1	35	30	41	37	33	42
	Poland[4]	58	64	51	8	6	10	65	69	61	a	a	a	x(16)	x(17)	x(18)	24	20	28
	Portugal[4]	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	18	18	18	a	a	a	x(16)	x(17)	x(18)	15	13	18
	Slovak Republic	68	74	63	4	3	6	73	76	69	1	1	2	x(16)	x(17)	x(18)	18	17	20
	Slovenia	55	62	47	5	4	6	59	66	52	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	23	18	28
	Spain	8	8	9	14	14	14	22	22	23	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	31	30	32
	Sweden	31	36	25	11	11	10	52	56	48	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	34	28	40
	Switzerland	38	37	40	6	5	8	50	47	54	11	14	7	22	24	20	33	38	27
	Turkey[4]	8	10	6	10	11	9	18	21	15	a	a	a	x(16)	x(17)	x(18)	14	16	12
	United Kingdom	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	37	40	35	10	9	10	29	28	29	38	38	39
	United States	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	47	48	46	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	41	39	43
	OECD average	34	37	30	12	12	13	44	46	42	m	m	m	m	m	m	31	29	33
	EU21 average	38	41	36	11	11	11	48	50	45	m	m	m	m	m	m	28	26	30
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil[4]	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	32	30	33	a	a	a	x(16)	x(17)	x(18)	12	10	13
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	41	47	35	x(16)	x(17)	x(18)	x(16)	x(17)	x(18)	53	46	60
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. This table includes only ISCED 5A and 5B data for tertiary education given that most data for ISCED 6 cannot be classified by programme orientation.

2. Figures stand for one of the following: the combined proportions of people with vocational and general attainment; the combined proportions of people with attainment in both tracks and in programmes for which no orientation is specified; or the proportion of people with attainment in programmes for which no orientation is specified. Figures in these columns are equivalent to those for upper secondary or post-secondary non-tertiary education in Table A1.4a and Table A1.5b, available on line.

3. Figures stand for one of the following: the combined proportions of people with vocational and general attainment; the combined proportions of people with attainment in both tracks and in programmes for which no orientation is specified; or the proportion of people with attainment in programmes for which no orientation is specified. Figures in these columns have no exact equivalences in this Indicator. Table A1.1a and Table A1.1b, available on line, include separate values for ISCED 5A and ISCED 5B.

4. In Brazil, the Czech Republic, Poland, Portugal and Turkey, figures for programmes with orientation not specified include only ISCED 5A programmes.

5. Persons with ISCED 4A attainment in Germany have successfully completed both a general and a vocational programme. In this table they have been allocated to vocational.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on vocational education, Learning and Labour Transitions Working Group for most countries; and European Union LFS (EU-LFS) and LFS with information on fields of education (EULFS_VET) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

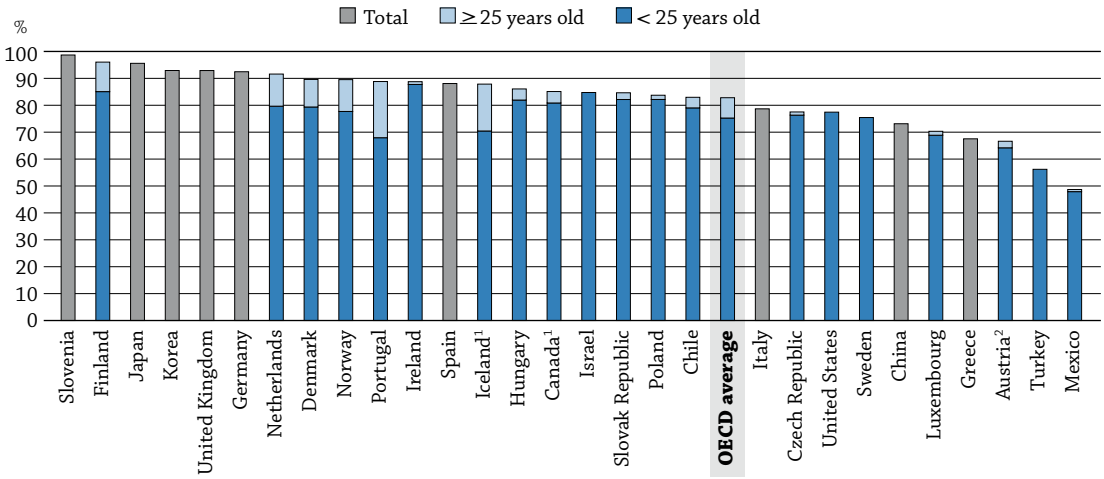
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HOW MANY STUDENTS ARE EXPECTED TO COMPLETE UPPER SECONDARY EDUCATION?

- Based on current patterns, it is estimated that an average of 83% of today's young people in OECD countries will complete upper secondary education over their lifetimes; in G20 countries, some 79% of young people will.
- Young women are now more likely than young men to graduate from upper secondary programmes in almost all OECD countries, a reversal of the historical pattern.
- Around 10% of upper secondary graduates in Denmark, Finland, the Netherlands and Norway are 25 or older while in Iceland and Portugal the proportions are almost 20% and 30% respectively.

Chart A2.1. Upper secondary graduation rates (2011)



Note: Only first-time graduates in upper secondary programmes are reported in this chart.
1. Year of reference 2010.
2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.
Countries are ranked in descending order of the upper secondary graduation rates in 2011.
Source: OECD. China: UNESCO Institute for Statistics (World Education Indicators Programme). Tables A2.1a and b.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
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Context

Upper secondary education, which consolidates students' basic skills and knowledge through either an academic or a vocational pathway, aims to prepare students for entry into tertiary education or the labour market, and to become engaged citizens. In many countries, this level of education is not compulsory and can last from two to five years. What is crucial, however, is that these two pathways are of equal quality and that both ensure that students can make those transitions successfully.

Graduating from upper secondary education has become increasingly important in all countries, as the skills needed in the labour market are becoming more knowledge-based and as workers are progressively required to adapt to the uncertainties of a rapidly changing global economy. While graduation rates give an indication of the extent to which education systems are succeeding in preparing students to meet the labour market's minimum requirements, they do not capture the quality of education outcomes.

Other findings

- **In 23 of 29 countries with available data, first-time upper secondary graduation rates equal or exceed 75%**. In Denmark, Finland, Germany, Japan, Korea, the Netherlands, Norway, Slovenia and the United Kingdom, graduation rates equal or exceed 90%.
- **On average across OECD countries, students graduate for the first time at upper secondary level at the age of 20 years**, from the age of 17 in Israel, Turkey and the United States to the age of 22 or older in Finland, Iceland, Norway and Portugal.
- **More young women are graduating from vocational programmes than ever before**. Their graduation rates from these programmes are now approaching those of young men.
- **Most boys in vocational programmes at the upper secondary level choose to study engineering, manufacturing and construction, while girls in such programmes opt for several different fields of study, notably business, law, social sciences, health and welfare, and services.**

Trends

Since 1995, upper secondary graduation rates have increased by an average of 8 percentage points among OECD countries with comparable data. The greatest increase occurred in Mexico, which showed an annual growth rate of 4% between 2000 and 2011.

Note

Graduation rates represent the estimated percentage of people from a given age cohort that is expected to graduate at some point during their lifetime. This estimate is based on the number of graduates in 2011 and the age distribution of this group. Graduation rates are based on both the population and the current pattern of graduation, and are thus sensitive to any changes in the education system, such as the introduction of new programmes, and the lengthening or shortening of programme duration. Graduation rates can be very high – even above 100% – during a period when an unexpected number of people goes back to school. This happened in Portugal, for example, when the "New Opportunities" programme was launched to provide a second chance for those individuals who left school early without a secondary diploma.

In this indicator, the age refers generally to the age of the students at the beginning of the calendar year; students could be one year older than the age indicated when they graduate at the end of the school year. Twenty-five is regarded as the upper age limit for completing initial education. Among OECD countries, more than 90% of first-time graduates from upper secondary programmes in 2011 were younger than 25. People who graduate from this level at age 25 or older are usually enrolled in specific programmes, e.g. second-chance programmes.

A2

Analysis

Graduation from upper secondary programmes

A snapshot of upper secondary graduation rates

Since 1995, first-time upper secondary graduation rates increased about 8 percentage points. Current estimates indicate that 83% of people will complete upper secondary education over their lifetime across OECD countries (Table A2.1a). Attaining an upper secondary education is often considered to be the minimum credential for successful entry into the labour market. The costs, to both individuals and society, of not completing this level of education on-time can be considerable (see Indicators A6 and A7).

Graduation rates offer an indication of whether government initiatives have been successful in increasing the number of people who graduate from upper secondary education. The great differences in graduation rates between countries reflect the variety of systems and programmes available.

In Denmark, Finland, Germany, Japan, Korea, the Netherlands, Norway, Slovenia, and the United Kingdom, more than 90% of people are expected to graduate from upper secondary school during their lifetime; in Mexico and Turkey, less than 60% of people are expected to do so (Table A2.1a). Yet both Mexico, Portugal and Turkey, in addition to Spain, show the highest average annual growth rates (from 1995 or 2000 to 2011) for upper secondary graduation – considerably above the OECD average of 0.6%. The annual growth rate in Spain and Turkey exceeds 2%, while in Mexico and Portugal annual increase is more than 3% (Table A2.2a).

Vocational education and training (VET) is an important part of upper secondary education in many OECD countries (see Indicator A1). Between 2005 and 2011, graduation rates for pre-vocational and vocational programmes kept pace with overall upper secondary rates, increasing by about 2 percentage points, on average. However, countries vary considerably in these trends. In the Czech Republic, for example, upper secondary VET graduation rates shrunk by 15 percentage points during the period while in Finland they increased by 20 percentage points (Table A2.2b, available on line).

In addition, graduation rates do not imply that all graduates will pursue a tertiary degree or enter the labour force immediately. Indeed, the number of graduates who wind up neither employed nor in education or training (NEET) has been growing throughout OECD countries (see Indicator C5). For this reason, it is important to provide the right mix of education opportunities and to ensure that there are no dead-ends once students have graduated.

Upper secondary graduation rates, by age

Graduation rates also vary according to the age of the graduates. This can indicate whether there are opportunities available to complete upper secondary education later on in life, and whether there are differences in the typical age of graduates from general and vocational programmes.

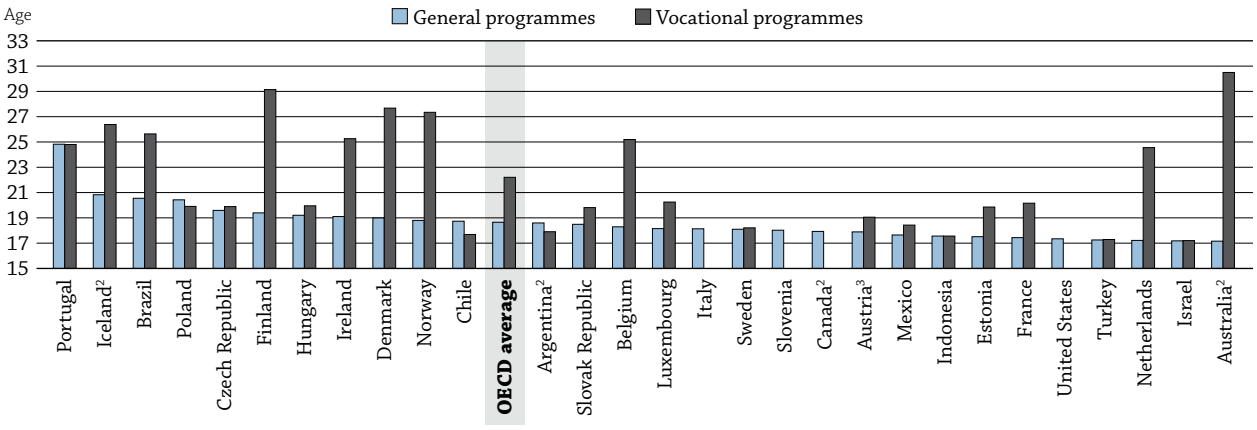
The average age of a first-time upper secondary graduate in OECD countries is 20; more than 90% of first-time graduates are 25 or younger. However, the age at which students graduate from upper secondary education varies between countries, sometimes significantly. In Israel, Turkey and the United States, the average age of a first-time graduate rate is 17 – the youngest age among all OECD countries. Finland, Iceland, Norway and Portugal are at the opposite extreme, with an average age of 22 or higher (Tables A2.1a and b).

Variations in the age of graduates are found within countries as well. As shown in Chart A2.2, there are marked differences between the ages of students graduating from vocational programmes and those graduating from general programmes within the same country. On average, the age at graduation is higher for vocational graduates (22 years old) than for graduates of general programmes (19 years old). However, in Belgium, Brazil, Denmark, Finland, Iceland, Ireland, the Netherlands and Norway, the average age of graduates from vocational programmes is 25 or higher; in Australia, it reaches 30 (Chart A2.2).

The average age at graduation also reflects specific national contexts. In some countries, students can leave the education system relatively easily and re-enter later on. That is why graduation rates for students 25 years or older

are relatively high in Denmark, Finland, the Netherlands and Norway, where at least 10% of graduates are older than 25, while in Iceland and Portugal, almost 20% and 30% respectively of upper secondary graduates are older than 25. Likewise, the fact that the proportion of graduates outside the typical age at graduation varies between countries and programmes may also be related to the availability of "second-chance" programmes. These types of programmes help to improve skills for the labour market. In Portugal, for example, the "New Opportunities" programme, launched in 2005, was introduced to provide a second chance to individuals who left school early or were at risk of doing so, and to assist those in the labour force who want to acquire further qualifications. As a result of this initiative, graduation rates rose by more than 40 percentage points between 2008 and 2010. In 2010, more than 40% of the students concerned were older than 25.

Chart A2.2. Average age of upper secondary graduates[1] (2011)



1. The average age refers generally to the age of the students at the beginning of the calendar year; students could be one year older than the age indicated when they graduate at the end of the school year.
2. Year of reference 2010.
3. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.
Countries are ranked in descending order of the average age for upper secondary graduation in general programmes in 2011.
Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table A2.1a.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
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Upper secondary graduation rates, by gender

In most OECD countries, first-time upper secondary graduation rates also vary significantly between men and women. On average, graduation rates for women (86%) are higher than those for men (79%). In Greece, Iceland and Portugal, graduation rates for women are at least 15 percentage points higher than those for men. Only in Austria, the Czech Republic and Germany is the proportion of male graduates slightly higher than that of women (Table A2.1a).

This tendency is even more stark among students younger than 25. In 2011, graduation rates from general upper secondary programmes were 53% for women and 41% for men, on average across OECD countries. In Argentina, Austria, the Czech Republic, Italy, Poland, the Slovak Republic and Slovenia, women outnumber men as graduates by at least three to two (Table A2.1b).

Traditionally, men have had higher graduation rates than women for pre-vocational and vocational programmes and this is still true today. On average, graduation rates from these programmes are higher for men than for women by 4 percentage points (49% and 45%, respectively). However, this tendency has been changing in some countries. In Australia, Belgium, Brazil, Chile, China, Finland, Iceland, Ireland, the Netherlands, Portugal and Spain, graduation rates for women are higher than those for men. However, vocational programmes are not available to the same extent in all countries, thus graduation rates can differ quite substantially. Pre-vocational and vocational graduation rates are over 70% in Austria, Finland, the Netherlands, Slovenia and Switzerland; but in Argentina, Brazil, Canada, Estonia, Hungary, Indonesia, Japan, Korea, Mexico and Turkey, the rates are below 30% (Table A2.1a).

Upper secondary graduation and field of education

Gender differences are also apparent in young people's choice of field of study when pursuing vocational education. These differences can be attributed to traditional perceptions of gender roles and identities as well as the cultural values sometimes associated with particular fields of education. On average, most students in upper secondary vocational education graduate from engineering, manufacturing and construction programmes (34%) (Table A2.3b, available on line). However, the great majority of graduates from this field are men. Across OECD countries, 49% of graduates from this field are men; in the Czech Republic, Estonia, Hungary and Norway, more than 70% are. By contrast, women graduates are more dispersed among social sciences, business and law (26%), health and welfare (17%) and services (17%) (Table A2.3a).

An awareness of the distribution of graduates across fields of education can help policy makers to ensure that qualified vocational trainers are available to meet the demand of both students and prospective employers. OECD recommendations concerning upper secondary vocational education and training include providing a mix of training that not only reflects student preferences and employers' needs, but also helps students acquire the numeracy, literacy and generic, transferable skills that are needed for lifelong learning and career development (OECD, 2010).

Box A2.1. **The difficult choices for upper secondary students**

Students' choices at this education level can have long-term consequences; that is why it is important that upper secondary pathways are relevant to students and match the requirements of tertiary education institutions and the labour market. Students who leave the education system without an upper secondary education face severe difficulties in entering and remaining in the labour force, lower wages, greater risk of poverty, and greater chances of becoming an economic and social burden to society (Le Métais, 2003; Levin, 2012; Lyche, 2010) (see Indicators A5, A6 and A7).

Upper secondary education, whether academic/general or vocational, should be designed to provide students with the skills and knowledge that will allow them to enter tertiary education and/or the labour market. Making systems more flexible to accommodate movement between vocational and general pathways meet the needs of students who might not otherwise be motivated to pursue upper secondary education. A number of OECD countries offer students the opportunity to change pathways during their education:

- Students in the Netherlands are tracked into general or vocational pathways when entering lower secondary education, but the structure of upper secondary education allows them to change tracks so that students can pursue programmes leading to tertiary education and/or the labour market.
- The upper secondary education system in Finland gives students the choice and flexibility to transfer between academic and VET programmes, which are considered to be the students' right and, in most cases, students take courses in other tracks to meet their study plans (Sahlberg, 2006).
- In Iceland, students can easily switch between schools and programmes because of the credit-unit system that makes transferring credits easy (Blondal et al., 2011).
- In Germany and France, students in VET might not be able to change pathways in upper secondary school, but they do have the option of earning a diploma to continue on to higher education.

This said, it is difficult and rare for students to change pathways during their upper secondary education; in addition, these policies can extend the duration of the programme, which might deter some students from finishing. Further research and internationally comparable data would be helpful to better understand what kinds of systems and pathway designs are most successful in keeping students in school. The OECD has carried out some work on upper secondary education, including *Completing the Foundation for Lifelong Learning: An OECD Survey of Upper Secondary Schools* (OECD, 2004), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools* (OECD, 2012) and the working paper "Upper Secondary Practices and Challenges In OECD Countries And A Literature Review" (Zapata, forthcoming).

Graduation from post-secondary non-tertiary programmes

Various kinds of post-secondary non-tertiary programmes are offered in OECD countries. These programmes straddle upper secondary and post-secondary education and may be considered either as upper secondary or post-secondary programmes, depending on the country concerned. Although the content of these programmes may not be significantly more advanced than upper secondary programmes, they broaden the knowledge of individuals who have already attained an upper secondary qualification.

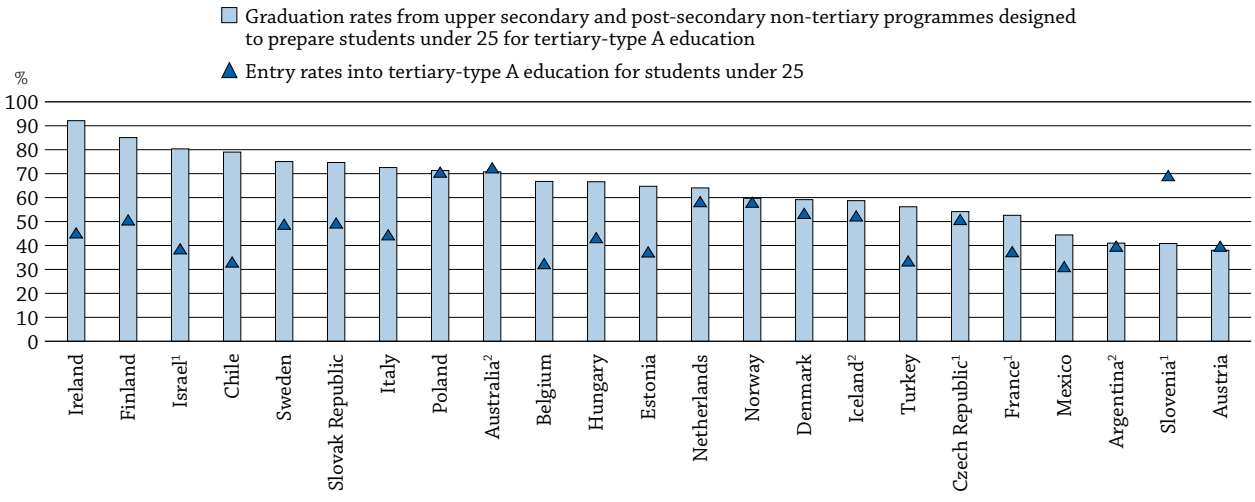
Students in these programmes tend to be older than those enrolled in upper secondary schools. These programmes usually offer trade and vocational certificates, and include nursery-teacher training in Austria and vocational training in the dual system for those who have attained general upper secondary qualifications in Germany. Apprenticeships designed for students who have already graduated from an upper secondary programme are also included among these programmes (Table A2.1c, available on line).

First-time graduation rates from post-secondary non-tertiary education are low compared with those from upper secondary programmes. On average, 8% of graduates come from post-secondary non-tertiary programmes, and the rate for women (9%) is slightly higher than that for men (8%). The highest graduation rates for these programmes are in Austria (25%), Czech Republic (27%) and New Zealand (33%); and in these three countries, rates are considerably higher among women (30%, 30% and 39%, respectively) than men (19%, 23% and 27%, respectively) (Table A2.1c, available on line).

Transitions following upper secondary education or post-secondary non-tertiary programmes

The vast majority of students who graduate from upper secondary education graduate from programmes designed to provide access to tertiary education (ISCED 3A and 3B). Programmes that facilitate direct entry into tertiary-type A education (ISCED 3A) are preferred by students in all countries except Austria, Slovenia and Switzerland, where the education systems are more strongly oriented towards vocational education and thus, more young people graduate from upper secondary programmes that lead to tertiary-type B programmes. In 2011, graduation rates from long upper secondary programmes (ISCED 3C long) averaged 18% in OECD countries (Table A2.1a).

Chart A2.3. Access to tertiary-type A education for upper secondary and post-secondary non-tertiary graduates under 25 (2011)



1. Data for post-secondary non-tertiary graduates are missing.
2. Year of reference for graduation rates 2010.

Countries are ranked in descending order of graduation rates from upper secondary programmes designed to prepare students under 25 for tertiary-type A education in 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table A2.1b, Table A2.1c (available on line) and Table C3.1b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Chart A2.3 shows how countries vary when the proportion of students who graduate from programmes designed as preparation for entry into tertiary-type A programmes (ISCED 3A and 4A) are compared with the proportion of students who actually enter these programmes under the age of 25. In Belgium, Chile, Finland, Ireland and Israel, there is at least a 30 percentage-point difference between these two groups. This suggests that many students who attain qualifications that would allow them to enter tertiary-type A programmes do not do so, although upper secondary programmes in Belgium and Israel also prepare students for tertiary-type B programmes.

In Finland, upper secondary education includes vocational training, and many graduates enter the labour market immediately after completing this level, without any studies at the tertiary level. There is also a *numerus clausus* system in Finnish higher education, which means that the number of entry places is restricted. Therefore, graduates from upper secondary general education may have to take a break of two to three years before obtaining a place in a university or polytechnic institution. In Ireland, the majority of secondary students take the "Leaving Certificate Examination" (ISCED 3A). Although this is designed to allow students to enter tertiary education, not all of the students who take this examination intend to do so. Until the onset of the global economic crisis, school-leavers in Ireland could benefit from a strong labour market, and this also may have had an impact on the difference.

In contrast, in Slovenia, the upper secondary and post-secondary non-tertiary graduation rate is markedly lower – by more than 20 percentage points – than entry rates into tertiary-type A programmes. Although many students in Slovenia are more likely to graduate from upper secondary programmes leading to tertiary-type B programmes, some may choose to pursue university studies later, and can do so because of the flexible pathways between the two types of tertiary programmes in the country.

Definition

Graduates in the reference period can be either first-time graduates or repeat graduates. A **first-time graduate** is a student who has graduated for the first time at a given level of education in the reference period. Thus, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

Net graduation rates represent the estimated percentage of an age group that will complete upper secondary education, based on current patterns of graduation.

Methodology

Data refer to the academic year 2010-11 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details, see Annex 3 at *www.oecd.org/edu/eag.htm*).

Data on trends in graduation rates at upper secondary level for the years 1995 and 2000 through 2004 are based on a special survey carried out in January 2007.

Unless otherwise indicated, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

Graduates of ISCED 3A, 3B and 3C (or 4A, 4B, 4C) programmes are not considered as first-time counts. Therefore, graduation rates cannot be added, as some individuals graduate from more than one upper secondary programme and would be counted twice. The same applies for graduation rates according to programme orientation, i.e. general or vocational. In addition, the typical graduation ages are not necessarily the same for the different types of programmes (see Annex 1). Pre-vocational and vocational programmes include both school-based programmes and combined school- and work-based programmes that are recognised as part of

the education system. Entirely work-based education and training programmes that are not overseen by a formal education authority are not included.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator A2 Tables

	Table A2.1a	Upper secondary graduation rates and average ages (2011)
		StatLink http://dx.doi.org/10.1787/888932848210
	Table A2.1b	Upper secondary graduation rates for students under 25 (2011)
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WEB	Table A2.1c	Post-secondary non-tertiary graduation rates (2011)
		StatLink http://dx.doi.org/10.1787/888932848248
	Table A2.2a	Trends in first-time graduation rates at upper secondary level (1995-2011)
		StatLink http://dx.doi.org/10.1787/888932848267
WEB	Table A2.2b	Trends in graduation rates (general and pre-vocational/vocational programmes) at upper secondary level (2005-11)
		StatLink http://dx.doi.org/10.1787/888932848286
	Table A2.3a	Distribution of upper secondary vocational graduates, by field of education and gender (2011)
		StatLink http://dx.doi.org/10.1787/888932848305
WEB	Table A2.3b	Distribution of upper secondary vocational graduates, by field of education (2011)
		StatLink http://dx.doi.org/10.1787/888932848324

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Table A2.1a. Upper secondary graduation rates and average ages (2011)

Sum of age-specific graduation rates, by programme destination, programme orientation and gender

		Total (first-time graduates)				General programmes				Pre-vocational/ vocational programmes				ISCED 3A[1]	ISCED 3B[1]	ISCED 3C (long)[1]	ISCED 3C (short)[1]
		M + W	Men	Women	Average age[2]	M + W	Men	Women	Average age[2]	M + W	Men	Women	Average age[2]	M + W	M + W	M + W	M + W
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(17)	(21)	(25)
OECD	Australia[3]	**m**	m	m	*m*	**71**	67	75	*17*	**51**	49	53	*30*	**71**	**a**	**51**	**a**
	Austria	**67**	70	64	*18*	**18**	14	22	*18*	**76**	86	64	*19*	**18**	**55**	**1**	**20**
	Belgium	**m**	m	m	*m*	**35**	31	40	*18*	**68**	62	73	*25*	**59**	**a**	**20**	**23**
	Canada[3]	**85**	82	88	*19*	**82**	78	86	*18*	**4**	4	3	*m*	**82**	**a**	**4**	**a**
	Chile	**83**	80	86	*18*	**53**	50	56	*19*	**30**	29	31	*18*	**83**	**a**	**a**	**a**
	Czech Republic	**78**	78	77	*20*	**23**	17	28	*20*	**55**	60	49	*20*	**55**	**n**	**22**	**a**
	Denmark	**90**	85	94	*21*	**60**	52	68	*19*	**46**	46	46	*28*	**60**	**a**	**46**	**n**
	Estonia	**m**	m	m	*m*	**55**	45	66	*18*	**23**	29	18	*20*	**66**	**21**	**2**	**a**
	Finland	**96**	94	99	*22*	**46**	39	54	*19*	**99**	93	106	*29*	**96**	**a**	**a**	**a**
	France	**m**	m	m	*m*	**52**	46	59	*17*	**69**	70	68	*20*	**53**	**19**	**4**	**46**
	Germany	**92**	93	92	*m*	**46**	41	51	*m*	**47**	52	41	*m*	**46**	**46**	**a**	**1**
	Greece	**68**	60	76	*m*	**68**	60	76	*m*	**33**	41	26	*m*	**68**	**a**	**33**	**x(21)**
	Hungary	**86**	83	89	*19*	**70**	63	77	*19*	**17**	21	13	*20*	**70**	**a**	**17**	**x(21)**
	Iceland[3]	**88**	76	101	*23*	**69**	58	81	*21*	**54**	53	55	*26*	**65**	**a**	**37**	**18**
	Ireland	**89**	88	90	*19*	**68**	68	68	*19*	**69**	56	83	*25*	**94**	**a**	**6**	**37**
	Israel	**85**	79	91	*17*	**54**	48	59	*17*	**33**	35	32	*17*	**80**	**a**	**7**	**a**
	Italy	**79**	76	82	*m*	**36**	26	47	*18*	**62**	69	55	*m*	**75**	**1**	**a**	**23**
	Japan	**96**	95	96	*m*	**73**	70	76	*m*	**23**	25	20	*m*	**73**	**1**	**22**	**x(21)**
	Korea	**93**	92	93	*m*	**71**	70	72	*m*	**22**	22	21	*m*	**71**	**a**	**22**	**a**
	Luxembourg	**70**	67	74	*19*	**29**	24	34	*18*	**45**	47	43	*20*	**43**	**10**	**19**	**2**
	Mexico	**49**	45	52	*18*	**45**	42	48	*18*	**4**	4	4	*18*	**45**	**a**	**4**	**a**
	Netherlands	**92**	87	96	*21*	**41**	37	44	*17*	**75**	74	76	*25*	**68**	**a**	**47**	**a**
	New Zealand	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Norway	**90**	85	95	*22*	**61**	50	72	*19*	**35**	43	27	*27*	**61**	**a**	**35**	**m**
	Poland	**84**	80	88	*20*	**51**	39	64	*20*	**39**	48	30	*20*	**76**	**a**	**14**	**a**
	Portugal	**89**	78	100	*25*	**51**	42	59	*25*	**38**	35	41	*25*	**m**	**m**	**m**	**m**
	Slovak Republic	**85**	82	87	*19*	**26**	20	31	*18*	**66**	70	62	*20*	**76**	**a**	**15**	**1**
	Slovenia	**99**	94	104	*m*	**37**	30	46	*18*	**75**	81	68	*m*	**41**	**48**	**21**	**2**
	Spain	**88**	84	92	*m*	**51**	44	58	*m*	**53**	52	54	*m*	**51**	**20**	**9**	**23**
	Sweden	**75**	73	78	*18*	**32**	26	37	*18*	**44**	47	41	*18*	**75**	**n**	**n**	**n**
	Switzerland	**m**	m	m	*m*	**33**	27	40	*m*	**73**	78	69	*m*	**30**	**71**	**6**	**x(21)**
	Turkey	**56**	56	56	*17*	**31**	29	33	*17*	**25**	27	23	*17*	**56**	**a**	**a**	**m**
	United Kingdom	**93**	91	95	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**75**	**17**
	United States	**77**	74	81	*17*	**x(1)**	x(2)	x(3)	*x(4)*	**x(1)**	x(2)	x(3)	*x(4)*	**x(1)**	**x(1)**	**x(1)**	**x(1)**
	OECD average	**83**	79	86	*20*	**50**	44	56	*19*	**47**	49	45	*22*	**64**	**10**	**18**	**9**
	EU21 average	**84**	81	88	*20*	**45**	38	51	*19*	**55**	57	53	*22*	**63**	**12**	**18**	**11**
Other G20	Argentina[3]	**m**	m	m	*m*	**36**	29	44	*19*	**7**	8	5	*18*	**43**	**a**	**a**	**a**
	Brazil	**m**	m	m	*m*	**63**	50	77	*21*	**12**	9	15	*26*	**65**	**12**	**a**	**a**
	China	**73**	72	74	*m*	**40**	39	42	*m*	**53**	52	53	*m*	**42**	**x(13)**	**31**	**20**
	India	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Indonesia	**m**	m	m	*m*	**34**	31	37	*18*	**22**	25	18	*18*	**34**	**22**	**a**	**a**
	Russian Federation	**m**	m	m	*m*	**47**	x(5)	x(5)	*m*	**45**	36	14	*m*	**47**	**19**	**22**	**4**
	Saudi Arabia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	South Africa	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	G20 average	**79**	78	81	*m*	**52**	47	58	*m*	**32**	32	28	*m*	**57**	**9**	**16**	**9**

Notes: Columns showing graduation rates for men, women and average age at upper secondary level by programme orientation (i.e. columns 14-16, 18-20, 22-24, 26-28) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated (for instance Luxembourg) and those that are net importers may be overestimated.

1. ISCED 3A (designed to prepare for direct entry to tertiary-type A education).
ISCED 3B (designed to prepare for direct entry to tertiary-type B education).
ISCED 3C (long) similar to duration of typical 3A or 3B programmes.
ISCED 3C (short) shorter than duration of typical 3A or 3B programmes.

2. The average age refers generally to the age of the students at the beginning of the calendar year; students could be one year older than the age indicated when they graduate at the end of the school year. It refers to an average weighted age. Please see Annex 3 to learn how it is calculated.

3. Year of reference 2010.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848210

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Table A2.1b. Upper secondary graduation rates for students under 25 (2011)

Sum of graduation rates for single year of age, by programme destination, programme orientation and gender

		Total (first-time graduates)				General programmes				Pre-vocational/vocational programmes				ISCED 3A[1]	ISCED 3B[1]	ISCED 3C (long)[1]	ISCED 3C (short)[1]
		M + W	Men	Women	Share of graduates below 25[2]	M + W	Men	Women	Share of graduates below 25[2]	M + W	Men	Women	Share of graduates below 25[2]	M + W	M + W	M + W	M + W
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(16)	(19)	(22)
OECD	Australia[3]	**m**	m	m	*m*	**71**	67	75	*100*	**24**	25	22	*47*	**71**	**a**	**24**	**a**
	Austria	**64**	67	61	*96*	**18**	14	22	*99*	**69**	80	58	*90*	**18**	**50**	**1**	**18**
	Belgium	**m**	m	m	*m*	**35**	31	40	*100*	**50**	49	50	*71*	**59**	**a**	**20**	**4**
	Canada[3]	**81**	78	84	*95*	**80**	76	84	*97*	**1**	2	1	*34*	**80**	**a**	**1**	**a**
	Chile	**79**	77	82	*96*	**49**	47	51	*94*	**30**	29	30	*99*	**79**	**a**	**a**	**a**
	Czech Republic	**76**	77	76	*98*	**23**	17	28	*100*	**54**	59	48	*97*	**54**	**n**	**22**	**a**
	Denmark	**79**	77	82	*89*	**58**	50	67	*98*	**27**	32	22	*57*	**58**	**a**	**27**	**n**
	Estonia	**m**	m	m	*m*	**65**	53	78	*97*	**22**	28	16	*95*	**65**	**21**	**1**	**a**
	Finland	**85**	84	86	*89*	**46**	38	54	*99*	**53**	55	50	*54*	**85**	**a**	**a**	**a**
	France	**m**	m	m	*m*	**53**	46	60	*100*	**62**	66	58	*89*	**53**	**19**	**3**	**40**
	Germany	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**a**	**m**
	Greece	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**a**	**m**	**m**
	Hungary	**82**	80	84	*94*	**67**	61	73	*94*	**17**	21	12	*95*	**67**	**a**	**17**	**x(19)**
	Iceland	**70**	61	78	*80*	**62**	51	71	*89*	**32**	32	32	*60*	**59**	**a**	**21**	**13**
	Ireland	**88**	87	89	*99*	**66**	66	66	*96*	**51**	45	58	*69*	**92**	**a**	**6**	**19**
	Israel	**85**	79	91	*100*	**54**	48	59	*100*	**33**	35	32	*100*	**80**	**a**	**7**	**a**
	Italy	**m**	m	m	*m*	**36**	26	47	*100*	**m**	m	m	*m*	**73**	**m**	**a**	**m**
	Japan	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Korea	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**a**	**m**	**a**
	Luxembourg	**69**	66	72	*97*	**29**	24	34	*100*	**43**	45	41	*95*	**43**	**9**	**18**	**2**
	Mexico	**48**	45	51	*99*	**44**	41	48	*99*	**3**	3	3	*95*	**44**	**a**	**3**	**a**
	Netherlands	**80**	76	83	*86*	**41**	37	44	*100*	**57**	58	57	*76*	**64**	**a**	**34**	**a**
	New Zealand	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Norway	**78**	74	82	*86*	**59**	48	70	*98*	**22**	29	14	*62*	**59**	**a**	**22**	**m**
	Poland	**82**	79	86	*98*	**47**	35	59	*90*	**39**	47	30	*99*	**71**	**a**	**14**	**a**
	Portugal	**68**	60	76	*70*	**39**	32	47	*70*	**29**	29	29	*69*	**m**	**m**	**m**	**m**
	Slovak Republic	**82**	81	83	*97*	**25**	20	31	*98*	**63**	68	57	*94*	**74**	**a**	**14**	**n**
	Slovenia	**m**	m	m	*m*	**37**	29	45	*100*	**m**	m	m	*m*	**41**	**m**	**m**	**2**
	Spain	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Sweden	**75**	73	78	*100*	**32**	26	37	*100*	**44**	47	41	*100*	**75**	**m**	**n**	**m**
	Switzerland	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Turkey	**56**	56	56	*100*	**31**	29	33	*100*	**25**	27	23	*100*	**56**	**a**	**a**	**m**
	United Kingdom	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	United States	**77**	74	81	*100*	**x(1)**	x(2)	x(3)	*m*	**x(1)**	x(2)	x(3)	*m*	**x(1)**	**x(1)**	**x(1)**	**x(1)**
	OECD average	**75**	72	78	*93*	**47**	41	53	*97*	**37**	40	34	*80*	**63**	**4**	**11**	**5**
	EU21 average	**78**	75	80	*93*	**42**	36	49	*97*	**45**	49	42	*83*	**62**	**7**	**11**	**7**
Other G20	Argentina[3]	**m**	m	m	*m*	**34**	27	42	*95*	**7**	8	5	*98*	**41**	**a**	**a**	**a**
	Brazil	**m**	m	m	*m*	**55**	46	64	*87*	**7**	5	8	*60*	**55**	**7**	**a**	**a**
	China	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	India	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Indonesia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Russian Federation	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Saudi Arabia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	South Africa	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	G20 average	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**

Notes: Columns showing graduation rates for men and women at upper secondary level by programme orientation (i.e. columns 14-15, 17-18, 20-21, 23-24) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated (for instance Luxembourg) and those that are net importers may be overestimated.

1. ISCED 3A (designed to prepare for direct entry to tertiary-type A education).
   ISCED 3B (designed to prepare for direct entry to tertiary-type B education).
   ISCED 3C (long) similar to duration of typical 3A or 3B programmes.
   ISCED 3C (short) shorter than duration of typical 3A or 3B programmes.
2. Share of graduates who are below 25 among the total population of graduates.
3. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848229

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Table A2.2a. Trends in first-time graduation rates at upper secondary level (1995-2011)

		1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average annual growth rate 1995-2011[1]
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Austria[2]	m	m	m	m	m	m	m	m	m	m	m	m	**67**	m
	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Canada	m	m	77	79	83	79	80	79	76	79	81	85	**m**	m
	Chile	m	m	m	m	m	79	85	82	82	83	85	83	**83**	m
	Czech Republic	78	m	84	83	88	87	89	89	88	85	83	80	**78**	0.0%
	Denmark	83	95	95	94	88	88	82	84	85	83	85	86	**90**	0.5%
	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Finland	91	91	85	84	90	95	94	94	97	93	95	93	**96**	0.3%
	France	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Germany[3]	100	92	92	94	97	99	99	100	100	97	84	87	**92**	m
	Greece	80	54	76	85	96	93	100	98	96	91	m	m	**68**	-1.0%
	Hungary	m	m	83	82	87	86	84	87	84	78	86	86	**86**	m
	Iceland	80	67	70	79	81	87	79	87	86	89	89	88	**m**	m
	Ireland	m	74	77	78	91	92	91	87	90	88	91	94	**89**	*1.6%*
	Israel	m	m	m	90	89	93	90	90	92	90	89	92	**85**	m
	Italy	m	78	81	78	m	82	85	86	84	86	81	83	**79**	*0.1%*
	Japan	96	95	93	94	95	96	95	96	96	95	95	96	**96**	0.0%
	Korea	88	96	100	99	92	94	94	93	91	93	89	94	**93**	0.4%
	Luxembourg	m	m	m	69	71	69	75	71	75	73	69	70	**70**	m
	Mexico	m	33	34	35	37	39	40	42	43	44	45	47	**49**	*3.6%*
	Netherlands	m	m	m	m	m	m	m	m	m	m	m	m	**92**	m
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Norway	77	99	105	97	92	100	89	88	92	91	91	87	**90**	0.9%
	Poland	m	90	93	91	86	79	85	81	84	83	85	84	**84**	*-0.7%*
	Portugal[4]	52	52	48	50	60	53	51	54	65	63	96	104	**89**	3.3%
	Slovak Republic	85	87	72	60	56	83	85	86	86	82	82	86	**85**	0.0%
	Slovenia	m	m	m	m	m	m	85	97	91	85	96	94	**99**	m
	Spain	62	60	66	66	67	66	72	72	74	73	74	80	**88**	2.2%
	Sweden	m	75	71	72	76	78	76	75	74	74	74	75	**75**	*0.1%*
	Switzerland	86	88	91	91	88	87	87	88	88	88	92	94	**m**	m
	Turkey	37	37	37	37	41	55	48	52	58	26	45	54	**56**	2.6%
	United Kingdom	m	m	m	m	m	m	86	88	89	91	92	93	**93**	m
	United States	69	70	71	73	74	75	76	75	75	76	76	77	**77**	0.7%
	OECD average	78	76	77	78	79	81	82	82	83	81	83	84	**83**	m
	OECD average for countries with 1995, 2000 and 2011 data	77	77											*84*	*0.6%*
	EU21 average	79	77	79	77	79	78	81	82	84	84	85	85	**83**	m
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	China	m	m	m	m	m	m	m	m	m	m	m	69	**73**	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	78	**79**	m

Notes: Up to 2004, graduation rates at upper secondary level were calculated on a gross basis. From 2005 and for countries with available data, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

1. For countries that do not have data for the year 1995, the 2000-11 average annual growth rate is indicated in italics.

2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.

3. Break in the series between 2008 and 2009 due, in Germany, to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B, and in New Zealand, to the inclusion of ISCED 3C short programmes.

4. Year of reference 1997 instead of 1995.

Source: OECD. China: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848267

Table A2.3a. Distribution of upper secondary vocational graduates, by field of education and gender (2011)

		Men									Women								
		Pre-vocational/ vocational programmes graduation rates	Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Not known or unspecified	Pre-vocational/ vocational programmes graduation rates	Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Not known or unspecified
		(1)	(2)	(5)	(6)	(7)	(8)	(9)	(14)	(15)	(16)	(17)	(20)	(21)	(22)	(23)	(24)	(29)	(30)
OECD	Australia[1]	**49**	2	5	13	12	59	2	5	2	**53**	6	36	29	17	4	1	2	5
	Austria[2]	**86**	1	2	10	8	45	2	8	24	**64**	2	10	34	16	6	n	8	24
	Belgium	**62**	15	6	11	7	33	3	2	24	**73**	23	23	12	13	2	n	1	25
	Canada[1]	**4**	m	m	m	m	m	m	m	m	**3**	m	m	m	m	m	m	m	m
	Chile	**29**	1	2	24	7	58	n	7	1	**31**	13	7	48	16	11	n	4	1
	Czech Republic	**60**	3	1	10	13	70	n	3	n	**49**	7	13	35	31	10	n	5	n
	Denmark	**46**	3	6	13	12	58	n	8	n	**46**	1	50	29	10	6	n	4	n
	Estonia	**29**	1	n	2	9	75	7	6	n	**18**	6	2	17	38	26	4	7	n
	Finland	**93**	4	5	10	16	57	4	4	n	**106**	8	31	21	25	10	1	5	n
	France	**70**	2	3	15	12	63	n	6	n	**68**	2	29	34	26	6	n	2	n
	Germany	**52**	2	2	26	9	54	3	3	n	**41**	3	16	53	19	7	1	1	n
	Greece	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	Hungary	**21**	1	1	6	16	73	n	4	n	**13**	4	12	33	36	12	n	4	n
	Iceland[1]	**53**	11	1	12	13	59	1	2	n	**55**	26	19	20	24	6	n	4	n
	Ireland	**56**	m	m	m	m	m	m	m	m	**83**	m	m	m	m	m	m	m	m
	Israel	**35**	m	m	m	m	m	m	m	m	**32**	m	m	m	m	m	m	m	m
	Italy	**69**	m	m	m	m	m	m	m	m	**55**	m	m	m	m	m	m	m	m
	Japan	**25**	n	1	17	2	56	n	11	11	**20**	n	10	40	13	8	n	12	17
	Korea	**22**	17	n	7	3	60	11	2	n	**21**	32	1	24	5	23	13	2	n
	Luxembourg	**47**	m	m	m	m	m	m	m	m	**43**	m	m	m	m	m	m	m	m
	Mexico	**4**	m	m	m	m	m	m	m	m	**4**	m	m	m	m	m	m	m	m
	Netherlands	**74**	4	6	18	23	37	7	5	n	**76**	7	47	22	19	2	n	3	n
	New Zealand	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	Norway	**43**	1	4	2	14	74	3	3	n	**27**	5	48	13	23	9	n	3	n
	Poland	**48**	1	n	7	13	63	11	5	n	**30**	3	n	34	47	11	2	4	n
	Portugal	**35**	m	m	m	m	m	m	m	m	**41**	m	m	m	m	m	m	m	m
	Slovak Republic	**70**	4	2	12	19	60	n	3	n	**62**	7	12	36	32	9	n	4	n
	Slovenia	**81**	3	5	14	11	55	7	5	n	**68**	14	21	37	16	7	n	6	n
	Spain	**52**	16	4	11	12	45	8	4	n	**54**	25	22	30	16	4	2	1	n
	Sweden	**47**	12	5	5	9	66	n	3	1	**41**	34	22	11	14	10	n	8	1
	Switzerland	**78**	2	2	24	6	55	4	6	n	**69**	4	23	48	13	9	n	3	n
	Turkey	**27**	1	2	12	4	55	13	n	14	**23**	5	25	17	8	13	11	n	20
	United Kingdom	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	United States	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	OECD average	**49**	4	2	11	9	49	3	4	18	**46**	9	17	26	17	8	1	3	18
	EU21 average	**58**	3	3	11	11	51	3	4	13	**54**	7	19	28	21	8	1	4	13
Other G20	Argentina[1]	**8**	2	n	13	1	65	8	7	5	**5**	6	1	31	2	38	12	9	2
	Brazil	**9**	m	m	m	m	m	m	m	m	**15**	m	m	m	m	m	m	m	m
	China	**52**	m	m	m	m	m	m	m	m	**53**	m	m	m	m	m	m	m	m
	India	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	Indonesia	**25**	2	2	49	n	39	n	n	8	**18**	2	6	49	n	29	n	4	10
	Russian Federation	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	Saudi Arabia	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	South Africa	**m**	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	G20 average	**32**	m	m	m	m	m	m	m	m	**29**	m	m	m	m	m	m	m	m

Note: Columns showing the breakdown of humanities, arts and education (3, 4, 18 and 19) and science (10-13, 25-28) are available for consultation on line (see *StatLink* below).

1. Year of reference 2010.

2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

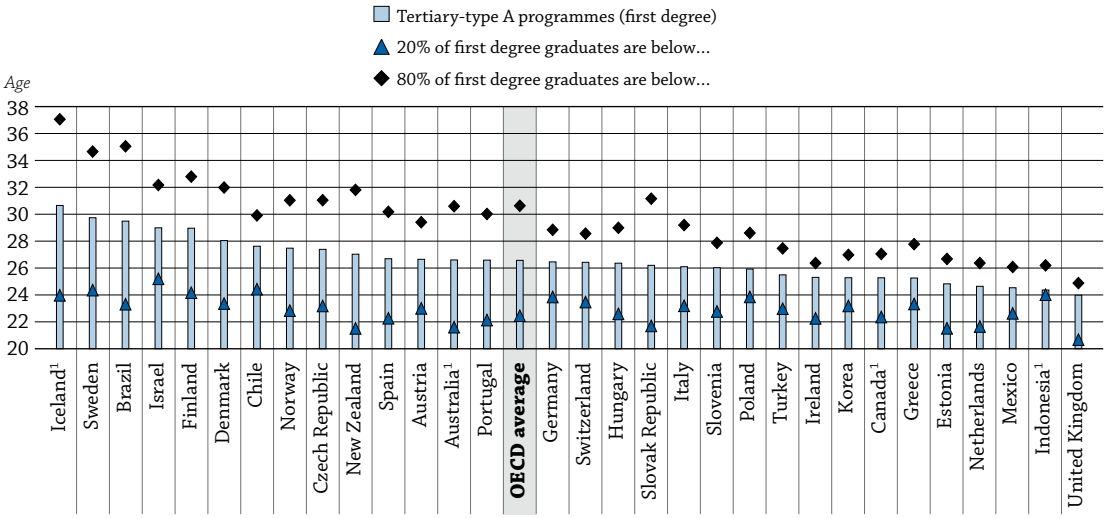
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848305

HOW MANY STUDENTS ARE EXPECTED TO COMPLETE TERTIARY EDUCATION?

- Based on current patterns of graduation, an average of 40% of today's young adults in OECD countries is expected to complete tertiary-type A (largely theory-based) education over their lifetimes.
- An average of 11% of today's young adults in OECD countries is expected to complete tertiary-type B (vocationally oriented) education over their lifetimes.
- On average across OECD countries, a student obtains his/her first university-level degree at the age of 27, with ages ranging from 24 in Indonesia and the United Kingdom to 29 or more in Brazil, Finland, Iceland, Israel and Sweden.

Chart A3.1. Average age of graduates at ISCED 5A level and age distribution (2011)



Note: The average age refers to an average weighted age, generally the age of the students at the beginning of the calendar year. Students may be one year older than the age indicated when they graduate at the end of the school year. Please see Annex 3 to learn how the average age is calculated.

1. Year of reference 2010.

Countries are ranked in descending order of the average age of tertiary-type A graduates (first-degree) in 2011.

Source: OECD. Table A3.1a. Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Context

Tertiary graduation rates indicate a country's capacity to equip future workers with advanced and specialised knowledge and skills. In OECD countries, individuals have strong incentives to obtain a tertiary qualification, including higher salaries and better employment prospects (see Indicators A5 and A6). Tertiary education varies widely in structure and scope among countries, and graduation rates seem to be influenced by the ease of access to these programmes, flexibility in completing them and the demand for higher skills in the labour market. Expanding access to and improving the quality of tertiary education is vital to knowledge-based economies; but these objectives are even more difficult to achieve when budgets are tight.

In recent decades, access to tertiary education has expanded remarkably, involving new types of institutions, more and different educational offerings, and new modes of delivery (OECD, 2008).

In parallel, the student population is becoming increasingly heterogeneous, as groups that were traditionally excluded now participate in tertiary education, as older individuals seek to upgrade their qualifications to succeed in a more competitive labour market, and as first-time graduates pursue a second degree.

Other findings

- Most graduates at all levels of tertiary education are women, except at the doctoral level. Based on current patterns of graduation, it is estimated that **an average of 48% of today's young women and 32% of today's young men in OECD countries will complete tertiary-type A education over their lifetimes**.
- On average across OECD countries, 1.6% of young people are expected to complete advanced research programmes,
- **International students represent a significant share of tertiary graduates in a number of countries,** such as Australia, New Zealand and the United Kingdom.

Trends

Over the past 16 years, tertiary-type A graduation rates have risen by 20 percentage points on average across OECD countries with available data, while rates for tertiary-type B programmes have remained stable. Doctorates represent only a small proportion of tertiary programmes but the graduation rate has doubled over the past 16 years.

Note

Graduation rates represent the estimated percentage of an age cohort that is expected to graduate over their lifetimes. This estimate is based on the number of graduates in 2011 and the age distribution of this group. Therefore, graduation rates are based on the current pattern of graduation, and thus are sensitive to any changes in the educational system, such as the introduction of new programmes or increases and decreases in programme duration, like those that are occurring with the implementation of the Bologna process.

In this indicator, 30 is regarded as the upper age limit of the typical first-time graduate from a tertiary-type A or B degree programme. The upper age limit of the typical graduate from an advanced research programme is 35.

Many countries make a clear distinction between first and second university degrees (i.e. undergraduate and graduate programmes). However, in some countries, degrees that are internationally comparable to a master's degree are obtained through a single programme of long duration. In order to make accurate comparisons, data presented in this indicator refer to first-time graduates unless otherwise indicated.

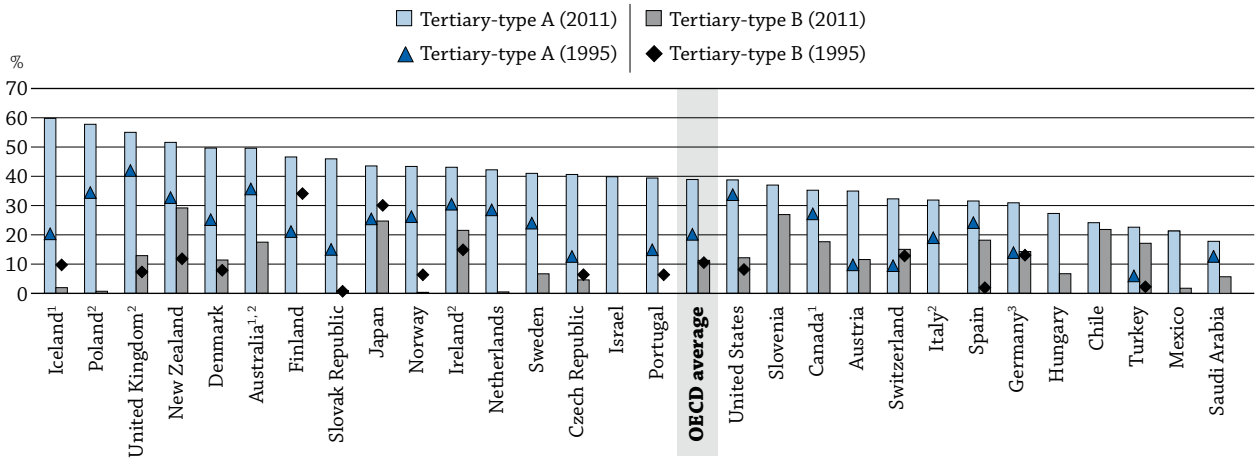
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Analysis

Based on 2011 patterns of graduation, 40% of young people, on average across the 28 OECD countries with comparable data, will graduate for the first time from tertiary-type A programmes during their lifetimes. The proportion ranges from less than 25% in Chile, Mexico, Saudi Arabia and Turkey, to 50% or more in Australia, Denmark, Iceland, New Zealand, Poland and the United Kingdom (Chart A3.2).

These programmes are largely theory-based and are designed to provide qualifications for entry into advanced research programmes and professions with high requirements in knowledge and skills. They are typically delivered by universities.

Chart A3.2. First-time graduation rates in tertiary-type A and B education (1995 and 2011)



1. Year of reference 2010 instead of 2011.
2. Year of reference 2000 instead of 1995.
3. Break in the series between 2008 and 2009 due to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B.

Countries are ranked in descending order of first-time graduation rates for tertiary-type A education in 2011.

Source: OECD. Saudi Arabia: Observatory on Higher Education. Table A3.2a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846386

Based on 2011 patterns of graduation, on average across OECD countries, 39% of young people will graduate from tertiary-type A first-degree programmes (often called a bachelor's degree) and 17% from tertiary-type A second degree programmes (often called a master's degree). For first-degree programmes, the graduation rate equals or exceeds 50% in Australia, Denmark, Iceland, New Zealand, Poland and the Russian Federation but is 25% or less in Argentina, Belgium, Chile, China, Estonia, Greece, Indonesia, Mexico, Saudi Arabia, South Africa and Turkey. The low graduation rates in Belgium and China are counterbalanced by a higher level of first-degree graduation rates from tertiary-type B programmes. In China, an estimated 16% of young people today will graduate from a tertiary-type A first-degree programme, and 19% will graduate from a tertiary-type B first-degree programme during their lifetimes. The graduation rate from second-degree programmes equals or exceeds 25% in Belgium, the Czech Republic, Poland, the Slovak Republic and the United Kingdom. With the implementation of the Bologna process, programmes at this level of education have expanded considerably (Table A3.1a).

The rapidly expanding demand for university programmes over recent decades is also being met by shorter, vocationally oriented (tertiary-type B) programmes. In 2011, graduation rates for tertiary-type B programmes averaged 11% among the 26 OECD countries with comparable data; 13% of women graduated from such programmes compared with 10% of men. These programmes are classified at the same academic level as more theory-based programmes, but are often shorter in duration (usually two to three years). They are generally not intended to lead to further university-level degrees, but rather to equip individuals with skills that can be used directly in the labour market and also to respond to employers' needs for specialised skills (Table A3.1a).

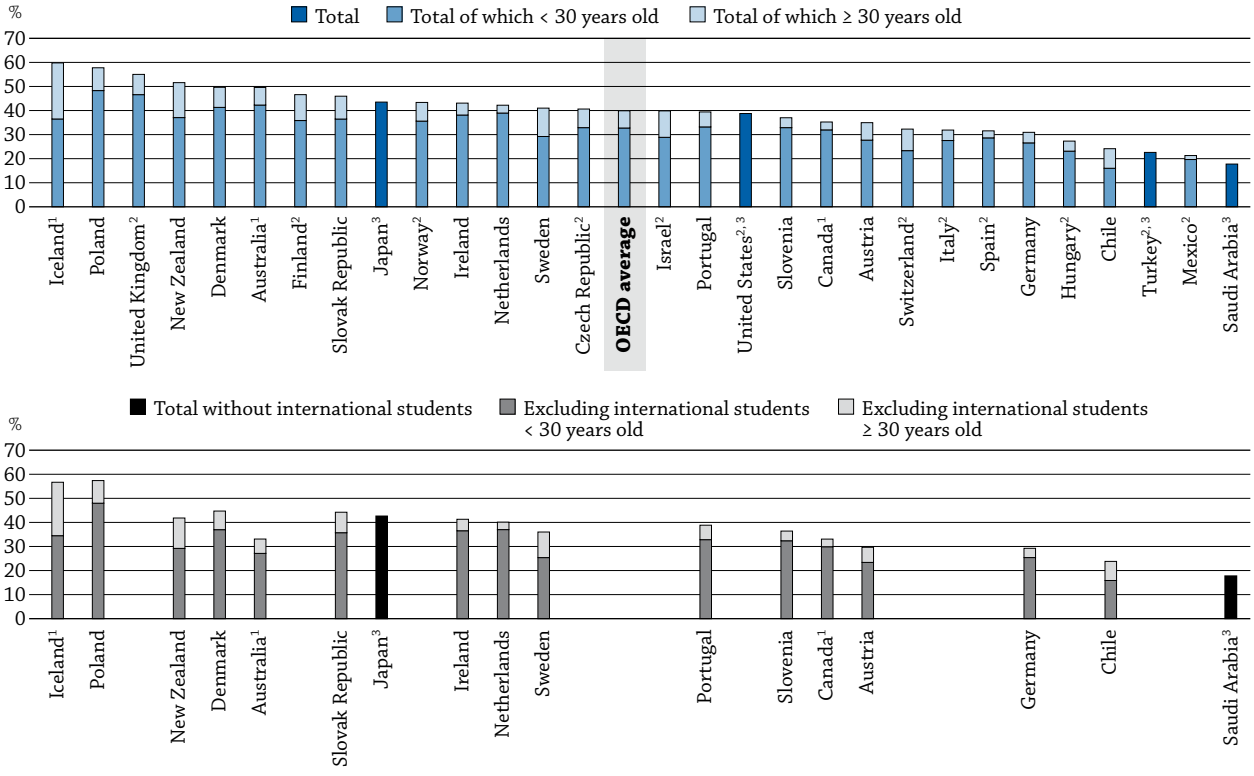
Trend data

In every country for which comparable data are available, tertiary-type A graduation rates increased between 1995 and 2011. The increase was particularly steep between 1995 and 2005, and then levelled off. Over the past four years, tertiary type-A graduation rates have remained stable, at around 39%. Since 1995, or since the year for which data is first available, the expected tertiary graduation rates increased by at least 20 percentage points in Austria, the Czech Republic, Denmark, Finland, Poland, Portugal, the Slovak Republic and Switzerland (Table A3.2a).

Because of increasing harmonisation among the systems of higher education involved in the Bologna Process and a general shift away from longer programmes in favour of three-year programmes, some countries have seen rapid rises in their graduation rates. For example, graduation rates rose sharply in the Czech Republic between 2004 and 2007, and in Finland and the Slovak Republic between 2007 and 2008 with the implementation of the Bologna Process reforms.

Trends in tertiary-type B education between 1995 and 2011 vary, even though the OECD average has been stable. For example, in Spain, the sharp rise in graduation rates from this type of education during this period can be attributed to the introduction of new advanced-level vocational training programmes. By contrast, in Finland, where tertiary-type B programmes are being phased out, graduation rates from these programmes have fallen sharply in favour of more academically oriented tertiary education (Chart A3.2).

Chart A3.3. Tertiary-type A graduation rates, including and excluding international students, by age (2011)



Note: Only first-time graduates in tertiary-type A programmes are reported in this chart.
1. Year of reference 2010.
2. Graduates for international students are missing.
3. Graduates by age are missing.
Countries are ranked in descending order of the total graduation rates for tertiary-type A education in 2011.
Source: OECD. Saudi Arabia: Observatory on Higher Education. Tables A3.1a and b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846405

Trend data by gender show that the growth in tertiary-type A graduation rates has been particularly strong for women in several OECD countries, namely in the Czech Republic, the Slovak Republic and Slovenia with increases of 25 percentage points or more from 2005 to 2011. Men's graduation rates in these countries increased too but by much smaller proportions (Table A3.2b, available on line).

Graduation rates below the typical age of graduation

On average across OECD countries, a student obtains his/her first university-level degree at the age of 27, but the age at graduation varies greatly among countries. Students in Indonesia and the United Kingdom graduate before their 25th birthday, while students in Brazil, Finland, Iceland, Israel and Sweden receive their first university degree just after their 29th birthday (Chart A3.1).

The proportion of young people who graduate from tertiary education and their ages vary across countries. In some countries, a large proportion of graduates consists of older students. Age differences among graduates may be linked to structural factors, such as graduation from upper secondary education, the length of tertiary education programmes or the obligation to do military service. Age differences may also be linked to economic factors, such as the lack of scholarships and flexibility to combine work and study, or the existence of policies to encourage those who have already gained experience in the workplace to enrol in tertiary education and improve or add to their skills. In the current global economy, some young people have decided to stay in education instead of risking entry into an unstable labour market (see Indicator C3). The fact that these men and women are entering the labour force later has economic repercussions that policy makers should consider, such as higher expenditure per student and foregone tax revenues as a result of these individuals' shorter working lives.

Less than a third of young adults are expected to complete tertiary-type A education before the age of 30, from a high of more than 40% in Australia, Denmark, Poland and the United Kingdom to only 20% or less in Chile and Mexico (Chart A3.3).

Graduation rates excluding international students

The term "international students" refers to students who have crossed borders expressly with the intention to study. For various reasons, international students have a marked impact on estimated graduation rates. By definition, they are considered first-time graduates, regardless of their previous education in other countries (i.e. an international student who enters and graduates from a second-degree programme will be considered a first-time graduate in the country of destination). Furthermore, as they have crossed borders with the intention to study and not necessarily to work or to stay in the country, they might increase the absolute number of graduates among the population. For countries with a high proportion of international students, such as Australia, New Zealand and the United Kingdom, graduation rates are thus artificially inflated. For example, when international students are excluded from consideration, first-time tertiary-type A graduation rates for Australia and New Zealand drop by 16 and 10 percentage points, respectively, and first-time tertiary-type B graduation rates drop by 8 percentage points in New Zealand (Table A3.1a).

The contribution of international students to graduation rates is also significant at the first stage (i.e. bachelor's level) of tertiary-type A education. In Australia, Austria, New Zealand, Switzerland and the United Kingdom, at least 10% of students graduating with a first degree in tertiary education are international students. The contribution of international students to graduation rates tends to be even greater in second-degree programmes, such as master's degrees. In Australia and the United Kingdom, graduation rates drop by 13 and 12 percentage points, respectively, when international graduates are excluded (Chart A3.3).

Graduation rates for advanced research degrees

Doctoral graduates are those who have obtained the highest level of formal education, and typically include researchers who hold a Ph.D. Based on 2011 patterns of graduation, 1.6% of young people, on average across OECD countries, will graduate from advanced research programmes, compared to 1.0% in 2000. Countries with the highest increase in advanced research graduation rates are Denmark, Ireland, New Zealand, the Slovak Republic and the United Kingdom, where graduation rates increased by at least 1 percentage point from 2000 to 2011 (Table A3.2c, available on line). China had a graduation rate of 2.2% in 2011 – above the OECD average (Table A3.1a).

At this level of education, the graduation rate for women (1.5%) is lower than that for men (1.7%). This is the case in all countries except Argentina, Estonia, Finland, Israel, Italy, Poland, Portugal, Saudi Arabia, the Slovak Republic and the United States, where the estimated proportion of women who will graduate from an advanced research programme exceeds that of men (Table A3.1a).

Some countries aim to attract international students to study at the doctoral level. For example, the high graduation rates at this level (more than 2.5%) observed in Finland, Germany, Sweden and Switzerland, are partly due to the high proportion of international students at the doctoral level (Table A3.1a). Excluding international students from the calculations reduces graduation rates from 0.3 percentage points in Finland to 1.6 percentage points in Switzerland.

On average across OECD countries, graduates from an advanced research programme are 35 years old, but the average age at graduation ranges from 32 in Italy and the Netherlands (26 in Indonesia) to 38 or older in Brazil, Finland, Korea, New Zealand, Norway and Portugal (Table A3.1a).

Gender differences in fields of education

The distribution of graduates by field of education is driven by the relative popularity of these fields among students, the relative number of positions offered in universities and equivalent institutions, and the degree structure of the various disciplines in a particular country.

Women predominate among graduates in the field of education: they represent 70% or more of tertiary students (tertiary-type A and advanced research programmes) in this field in all countries except Japan (60%), Saudi Arabia (66%) and Turkey (57%). They also dominate in the fields of health and welfare, accounting for 75% of all degrees awarded in this field, on average (Table A3.3, available on line).

In contrast, in all countries except Argentina, Estonia, Iceland, Italy, Poland and Slovenia, one-third or fewer of all graduates in the fields of engineering, manufacturing and construction are women. This situation has changed only slightly since 2000, despite many initiatives to promote gender equality in OECD countries and at the EU level. For example, in 2000, the European Union established a goal to increase the number of tertiary-type A graduates in mathematics, science and technology by at least 15% by 2010, and to reduce the gender imbalance in these subjects. So far, however, progress towards this goal has been marginal. The Czech Republic, Germany, the Slovak Republic and Switzerland are the only four countries in which the proportion of women in science grew by at least 10 percentage points between 2000 and 2011. As a result, these countries are now closer to the OECD average in this respect. Among OECD countries, the proportion of women in these fields has grown slightly from 40% in 2000 to 41% in 2011 – even as the proportion of women graduates in all fields grew from 54% to 58% during that period. The proportion of women in engineering, manufacturing and construction is also low, though it increased slightly (from 23% to 27%) over the past decade (Table A3.3, available on line).

Definitions

A **first-degree programme** at tertiary-type A level has a minimum cumulative theoretical duration of three years, full-time equivalent, e.g. the bachelor's degrees in many English-speaking countries, the *Diplom* in many German-speaking countries, and the *licence* in many French-speaking countries.

A **first-time graduate** is a student who has graduated for the first time at a given level of education or, in the case of ISCED 5, from a type A or type B programme, during the reference period. Therefore, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

International students are those students who left their country of origin and moved to another country for the purpose of study. By definition, they are considered first-time graduates, regardless of their previous education in other countries.

Net graduation rates represent the estimated percentage of people from a specific age cohort who will complete tertiary education over their lifetimes, based on current patterns of graduation.

Second degree and higher theory-based programmes (e.g. master's degree in many countries) are classified as tertiary-type A separately from advanced research qualifications, which have their own classification as ISCED 6.

Tertiary graduates are those who obtain a university degree, vocational qualifications, or advanced research degrees of doctoral standard.

Methodology

Data refer to the academic year 2010-11 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details, see Annex 3 at *www.oecd.org/edu/eag.htm*).

Data on the impact of international students on tertiary graduation rates are based on a special survey conducted by the OECD in December 2012.

Data on trends in graduation rates at the tertiary level for the years 1995 and 2000 through 2004 are based on a special survey carried out in January 2007.

To allow for comparisons that are independent of differences in national degree structures, university-level degrees are subdivided according to the total theoretical duration of study, in other words, the standard number of years, established by law or regulations, in which a student can complete the programme. Degrees obtained from programmes of less than three years' duration are not considered equivalent to completing this level of education and are not included in this indicator. Second-degree programmes are classified according to the cumulative duration of the first- and second-degree programmes. Individuals who already hold a first degree are not included in the count of first-time graduates.

Unless otherwise indicated, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Reference

OECD (2008), *Tertiary Education for the Knowledge Society: Volume 1 and Volume 2*, OECD Publishing. *http://dx.doi.org/10.1787/9789264046535-en*

Indicator A3 Tables

	Table A3.1a	Tertiary graduation rates and average ages (2011) StatLink http://dx.doi.org/10.1787/888932848362
	Table A3.1b	Tertiary graduation rates among students under the typical age at graduation (2011) StatLink http://dx.doi.org/10.1787/888932848381
	Table A3.2a	Trends in tertiary graduation rates (1995-2011) StatLink http://dx.doi.org/10.1787/888932848400
WEB	Table A3.2b	Trends in tertiary graduation rates, by gender (2005-11) StatLink http://dx.doi.org/10.1787/888932848419
WEB	Table A3.2c	Trends in graduation rates at advanced research level (1995-2011) StatLink http://dx.doi.org/10.1787/888932848438
WEB	Table A3.3	Percentage of tertiary qualifications awarded to women in tertiary-type A and advanced research programmes, by field of education (2000, 2011) StatLink http://dx.doi.org/10.1787/888932848457

Table A3.1a. Tertiary graduation rates and average ages (2011)

Sum of age-specific graduation rates by gender and programme destination

		Tertiary-type B programmes (first-time graduates)			Tertiary-type B programmes (first degreee)			Tertiary-type A programmes (first-time graduates)			Tertiary-type A programmes (first degreee)			Tertiary-type A programmes (second and further degrees)			Advanced research programmes		
		Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]
		(1)	(4)	(5)	(6)	(9)	(10)	(11)	(14)	(15)	(16)	(19)	(20)	(21)	(24)	(25)	(26)	(29)	(30)
OECD	Australia[2]	**17**	14	*28*	**26**	20	*30*	**50**	33	*25*	**60**	43	*27*	**21**	8	*31*	**1.9**	1.3	*37*
	Austria	**12**	11	*30*	**14**	13	*32*	**35**	30	*27*	**33**	29	*27*	**10**	9	*32*	**2.1**	1.6	*33*
	Belgium	**m**	m	*m*	**30**	29	*24*	**m**	m	*m*	**18**	17	*m*	**26**	21	*m*	**1.5**	1.1	*m*
	Canada[2]	**18**	16	*26*	**20**	19	*26*	**35**	33	*25*	**37**	35	*25*	**10**	9	*33*	**1.2**	1.1	*36*
	Chile	**22**	22	*28*	**23**	23	*28*	**24**	24	*30*	**20**	20	*28*	**6**	6	*37*	**0.2**	0.2	*37*
	Czech Republic	**5**	m	*27*	**5**	5	*27*	**41**	m	*28*	**41**	37	*27*	**25**	23	*29*	**1.4**	1.3	*34*
	Denmark	**11**	10	*27*	**12**	11	*28*	**50**	45	*27*	**50**	47	*28*	**22**	19	*30*	**2.2**	1.7	*34*
	Estonia	**m**	m	*m*	**19**	19	*28*	**m**	m	*m*	**25**	24	*25*	**12**	12	*28*	**1.3**	1.2	*36*
	Finland	**n**	n	*m*	**n**	n	*m*	**47**	m	*28*	**49**	47	*29*	**22**	20	*32*	**2.5**	2.2	*39*
	France[2]	**m**	m	*m*	**26**	25	*m*	**m**	m	*m*	**36**	32	*m*	**15**	12	*m*	**1.6**	0.9	*m*
	Germany	**14**	m	*m*	**14**	14	*m*	**31**	29	*26*	**31**	29	*26*	**5**	4	*29*	**2.7**	2.3	*33*
	Greece	**m**	m	*m*	**14**	m	*26*	**m**	m	*m*	**25**	m	*25*	**7**	m	*m*	**1.0**	m	*m*
	Hungary	**7**	m	*23*	**8**	8	*23*	**27**	m	*26*	**31**	29	*26*	**10**	10	*34*	**0.8**	0.7	*36*
	Iceland[2]	**2**	2	*38*	**2**	2	*37*	**60**	57	*31*	**63**	62	*31*	**24**	22	*36*	**m**	m	*m*
	Ireland	**22**	21	*30*	**22**	21	*30*	**43**	41	*25*	**43**	41	*25*	**23**	21	*32*	**1.9**	1.6	*34*
	Israel	**m**	m	*m*	m	m	*m*	**40**	m	*29*	**40**	39	*29*	**17**	16	*35*	**1.4**	1.4	*37*
	Italy	**m**	m	*m*	**1**	1	*m*	**32**	32	*26*	**32**	32	*26*	**24**	m	*m*	**1.4**	1.4	*32*
	Japan	**25**	24	*m*	**25**	24	*m*	**44**	43	*m*	**44**	43	*m*	**6**	6	*m*	**1.1**	0.9	*m*
	Korea	**m**	m	*m*	**29**	29	*25*	**m**	m	*m*	**48**	47	*25*	**10**	10	*34*	**1.4**	1.3	*40*
	Luxembourg	**m**	m	*m*	m	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*
	Mexico	**2**	m	*22*	**2**	m	*22*	**21**	m	*25*	**21**	m	*25*	**3**	m	*m*	**0.2**	m	*m*
	Netherlands	**n**	n	*m*	**n**	n	*m*	**42**	40	*24*	**45**	43	*25*	**20**	19	*27*	**1.8**	1.2	*32*
	New Zealand	**29**	21	*30*	**35**	27	*30*	**52**	42	*28*	**55**	48	*27*	**18**	14	*34*	**1.9**	1.2	*38*
	Norway	**n**	m	*m*	**n**	n	*m*	**43**	m	*27*	**47**	46	*27*	**13**	12	*32*	**1.9**	1.7	*38*
	Poland	**1**	m	*m*	**1**	m	*m*	**58**	57	*26*	**58**	57	*26*	**43**	43	*m*	**0.5**	m	*m*
	Portugal	**n**	n	*m*	**n**	n	*m*	**39**	39	*27*	**39**	39	*27*	**23**	22	*31*	**1.4**	1.3	*39*
	Slovak Republic	**1**	m	*24*	**1**	m	*24*	**46**	44	*26*	**46**	44	*26*	**39**	38	*28*	**1.9**	1.7	*33*
	Slovenia	**27**	27	*31*	**28**	28	*31*	**37**	36	*26*	**37**	37	*26*	**5**	5	*35*	**1.7**	1.5	*35*
	Spain	**18**	m	*24*	**18**	m	*24*	**32**	m	*25*	**38**	38	*27*	**8**	8	*31*	**1.1**	0.9	*37*
	Sweden	**7**	7	*29*	**7**	7	*29*	**41**	36	*29*	**38**	37	*30*	**10**	5	*32*	**2.8**	2.1	*37*
	Switzerland	**15**	m	*m*	**23**	m	*m*	**32**	m	*29*	**28**	25	*26*	**18**	14	*31*	**3.2**	1.7	*33*
	Turkey	**17**	m	*24*	**17**	17	*24*	**23**	m	*m*	**23**	23	*25*	**3**	3	*30*	**0.4**	0.4	*34*
	United Kingdom	**13**	m	*31*	**16**	15	*32*	**55**	m	*25*	**43**	37	*24*	**27**	15	*30*	**2.4**	1.3	*34*
	United States	**12**	m	*m*	**12**	12	*m*	**39**	m	*m*	**39**	38	*m*	**19**	17	*m*	**1.7**	1.3	*m*
	OECD average	**11**	m	*28*	**14**	m	*28*	**40**	m	*27*	**39**	m	*27*	**17**	m	*32*	**1.6**	m	*35*
	EU21 average	**9**	m	*28*	**12**	m	*28*	**41**	m	*26*	**38**	m	*26*	**19**	m	*31*	**1.7**	m	*35*
Other G20	Argentina[2]	**m**	m	*m*	**15**	m	*m*	**m**	m	*m*	**12**	m	*m*	**1**	m	*m*	**0.2**	m	*m*
	Brazil	**m**	m	*m*	**6**	6	*32*	**m**	m	*m*	**28**	28	*29*	**1**	1	*m*	**0.4**	0.4	*39*
	China	**m**	m	*m*	**19**	m	*m*	**m**	m	*m*	**16**	m	*m*	**n**	m	*m*	**2.2**	m	*m*
	India	**m**	m	*m*	m	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*
	Indonesia[2]	**m**	m	*m*	**1**	m	*m*	**m**	m	*m*	**12**	m	*24*	**1**	m	*m*	**0.1**	m	*26*
	Russian Federation	**m**	m	*m*	**25**	25	*m*	**m**	m	*m*	**58**	57	*m*	**1**	m	*m*	**0.4**	m	*m*
	Saudi Arabia	**8**	8	*m*	**8**	8	*m*	**18**	18	*m*	**18**	18	*m*	**1**	1	*m*	**0.1**	0.1	*m*
	South Africa	**m**	m	*m*	**5**	m	*m*	**m**	m	*m*	**6**	m	*m*	**4**	m	*m*	**0.1**	m	*m*
	G20 average	**m**	m	*m*	**14**	m	*m*	**m**	m	*m*	**29**	m	*m*	**9**	m	*m*	**1.1**	m	*m*

Notes: Columns showing graduation rates for men and women (i.e. columns 2, 3, 7, 8, 12, 13, 17, 18, 22, 23, 27, 28) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated, and those that are net importers may be overestimated. The adjusted graduation rates in Tables A3.1a and b seek to compensate for that.

1. The average age refers to an average weighted age, generally the age of the students at the beginning of the calendar year. Students may be one year older than the age indicated when they graduate at the end of the school year. Please see Annex 3 to learn how the average age is calculated.

2. Year of reference 2010.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme); Saudi Arabia: Observatory on Higher Education; South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848362

A3

Table A3.1b. Tertiary graduation rates among students under the typical age at graduation (2011)

Sum of age-specific graduation rates up to 30 years for tertiary-type A or B, and up to 35 years for advanced research programmes, by gender and programme destination

		Tertiary-type B programmes (first-time graduates)		Tertiary-type B programmes (first degree)		Tertiary-type A programmes (first time)		Tertiary-type A programmes (first degree)		Tertiary-type A programmes (second degree)		Advanced research programmes	
		Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)
		(1)	(4)	(5)	(8)	(9)	(12)	(13)	(16)	(17)	(20)	(21)	(24)
OECD	Australia[1]	**11**	8	14	9	**42**	27	48	33	13	3	1.0	0.7
	Austria	**7**	7	8	8	**28**	23	27	24	6	5	1.6	1.2
	Belgium	**m**	m	27	m	**m**	m	m	m	m	m	m	m
	Canada[1]	**14**	13	16	15	**32**	30	33	31	5	5	0.8	0.6
	Chile	**15**	15	16	16	**16**	16	16	16	2	1	0.2	n
	Czech Republic	**4**	m	4	m	**33**	m	33	m	20	m	0.7	m
	Denmark	**9**	8	10	8	**41**	37	39	37	16	14	1.5	1.1
	Estonia	**m**	m	13	m	**m**	m	21	m	9	m	0.8	m
	Finland	**n**	n	n	n	**36**	m	36	35	12	11	1.1	0.9
	France[1]	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	Germany	**m**	m	m	m	**27**	25	27	25	4	3	2.2	1.9
	Greece	**m**	m	13	m	**m**	m	22	m	m	m	m	m
	Hungary	**6**	m	7	m	**23**	m	26	m	5	m	0.5	m
	Iceland[1]	**m**	m	m	m	**36**	34	38	38	9	8	0.4	n
	Ireland	**14**	13	14	13	**38**	37	38	36	13	12	1.3	1.1
	Israel	**m**	m	m	m	**29**	m	29	29	5	5	0.7	0.7
	Italy	**m**	m	m	m	**28**	m	28	m	m	m	1.0	m
	Japan	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	Korea	**m**	m	25	25	**m**	m	46	45	5	5	0.5	n
	Luxembourg	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	Mexico	**2**	m	2	m	**20**	m	20	m	m	m	m	m
	Netherlands	**n**	n	n	m	**39**	37	41	39	17	16	1.6	1.1
	New Zealand	**18**	11	21	14	**37**	29	42	35	9	6	0.9	0.5
	Norway	**n**	m	n	m	**36**	m	38	m	8	m	1.0	m
	Poland	**1**	m	1	m	**48**	48	48	48	m	m	m	m
	Portugal	**n**	n	n	n	**33**	33	33	33	15	14	0.7	0.6
	Slovak Republic	**1**	m	1	m	**36**	36	36	36	29	29	1.3	1.3
	Slovenia	**16**	16	16	16	**33**	32	33	32	2	2	1.2	1.1
	Spain	**16**	m	16	m	**29**	m	33	m	6	m	0.7	m
	Sweden	**4**	4	5	5	**29**	25	26	25	6	2	1.6	1.1
	Switzerland	**m**	m	m	m	**23**	m	24	22	11	8	2.6	1.3
	Turkey	**15**	m	15	m	**m**	m	20	m	2	m	0.3	m
	United Kingdom	**8**	m	9	m	**47**	m	38	m	17	m	1.7	m
	United States	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	OECD average	**8**	m	10	m	**33**	m	32	m	10	m	1.1	m
	EU21 average	**6**	m	8	m	**34**	m	33	m	12	m	1.2	m
Other G20	Argentina[1]	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	Brazil	**m**	m	3	m	**m**	m	17	m	1	m	0.2	m
	China	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	India	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	Indonesia[1]	**m**	m	1	m	**m**	m	12	m	1	m	0.1	m
	Russian Federation	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	Saudi Arabia	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	South Africa	**m**	m	m	m	**m**	m	m	m	m	m	m	m
	G20 average	**m**	m	m	m	**m**	m	m	m	m	m	m	m

Notes: Columns showing graduation rates for men and women (i.e. columns 2, 3, 6, 7, 10, 11, 14, 15, 18, 19, 22, 23) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages. Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated, and those that are net importers may be overestimated. The adjusted graduation rates in Tables A3.1a and b seek to compensate for that.

1. Year of reference 2010.

Source: OECD. Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

***Please** refer to the Reader's Guide for information concerning the symbols replacing missing data.*

StatLink http://dx.doi.org/10.1787/888932848381

Table A3.2a. Trends in tertiary graduation rates (1995-2011)

Sum of age-specific graduation rates, by programme destination

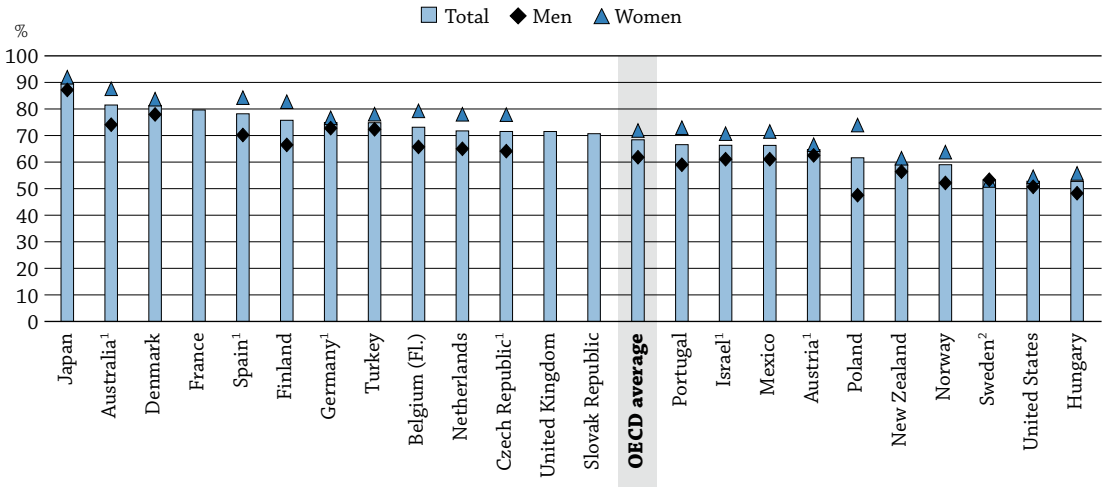
		Tertiary-type 5A (first-time graduates)							Tertiary-type 5B (first-time graduates)						
		1995	2000	2005	2008	2009	2010	2011	1995	2000	2005	2008	2009	2010	2011
		(1)	(2)	(7)	(10)	(11)	(12)	(13)	(14)	(15)	(20)	(23)	(24)	(25)	(26)
OECD	Australia	m	36	50	49	50	50	**m**	m	m	m	16	16	17	**m**
	Austria	10	15	20	25	29	30	**35**	m	m	8	8	10	12	**12**
	Belgium	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Canada	27	27	29	37	36	35	**m**	m	m	m	29	29	18	**m**
	Chile	m	m	m	m	m	m	**24**	m	m	m	m	m	m	**22**
	Czech Republic	13	14	23	36	38	38	**41**	6	5	6	5	4	5	**5**
	Denmark	25	37	46	47	50	50	**50**	8	10	10	11	11	9	**11**
	Estonia	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Finland	21	40	47	63	44	49	**47**	34	7	n	n	n	n	**n**
	France	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Germany[1]	14	18	20	25	28	30	**31**	13	11	11	10	14	14	**14**
	Greece	14	15	25	m	m	m	**m**	5	6	11	m	m	m	**m**
	Hungary	m	m	33	30	31	31	**27**	m	m	4	4	5	6	**7**
	Iceland	20	33	56	57	51	60	**m**	10	5	4	4	2	2	**m**
	Ireland	m	30	38	46	47	47	**43**	m	15	24	26	26	26	**22**
	Israel	m	m	35	36	37	37	**40**	m	m	m	m	m	m	**m**
	Italy	m	19	41	33	33	32	**32**	m	n	1	1	1	1	**m**
	Japan	25	29	37	39	40	40	**44**	30	30	28	27	26	25	**25**
	Korea	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Luxembourg	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Mexico	m	m	17	18	19	20	**21**	m	m	1	1	1	1	**2**
	Netherlands	29	35	42	41	42	42	**42**	m	m	n	n	n	n	**n**
	New Zealand	33	50	51	48	50	47	**52**	12	17	21	21	24	26	**29**
	Norway	26	37	41	41	41	42	**43**	6	6	2	1	n	n	**n**
	Poland	m	34	47	50	50	55	**58**	m	m	n	n	n	1	**1**
	Portugal	15	23	32	45	40	40	**39**	6	8	9	2	1	n	**n**
	Slovak Republic	15	m	30	58	62	49	**46**	1	2	2	1	1	1	**1**
	Slovenia	m	m	18	20	27	29	**37**	m	m	24	26	26	26	**27**
	Spain[2]	24	29	30	27	27	30	**32**	2	8	15	14	15	16	**18**
	Sweden	24	28	38	40	36	37	**41**	m	4	5	6	6	6	**7**
	Switzerland	9	12	27	32	31	31	**32**	13	14	8	19	19	16	**15**
	Turkey	6	9	11	20	21	23	**23**	2	m	m	13	15	19	**17**
	United Kingdom	m	42	47	48	48	51	**55**	m	7	11	12	12	12	**13**
	United States	33	34	34	37	38	38	**39**	9	8	10	10	11	11	**12**
	OECD average	20	28	34	*39*	*39*	39	**39**	11	9	*9*	11	11	10	**11**
	OECD average for countries with 1995, 2000 and 2011 data	*20*	*27*					*40*	*11*	*10*					*11*
	EU21 average	18	27	34	*40*	*39*	40	**41**	9	7	*8*	8	*8*	8	**9**
Other G20	Argentina	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Brazil	m	10	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	China	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	India	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Indonesia	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Russian Federation	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Saudi Arabia	11	13	18	21	19	20	**18**	n	3	5	6	6	8	**8**
	South Africa	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	G20 average	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**

Notes: Years 2001, 2002, 2003, 2004, 2006, 2007 are available for consultation on line (see *Statlink* below).
Up to 2004, graduation rates at the tertiary-type A or B levels were calculated on a gross basis. From 2005 and for countries with available data, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Please refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.
1. Break in the series between 2008 and 2009 due to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B.
2. Break in time series following methodological change in 2008 for ISCED 5A.
Source: OECD. Saudi Arabia: Observatory on Higher Education. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932848400

HOW MANY STUDENTS COMPLETE TERTIARY EDUCATION?

- On average across OECD countries with available data, around 70% of students who enter a tertiary programme graduate with a first degree at this level.
- Women enrolled in tertiary-type A programmes are more likely than men to earn a tertiary degree at the end of the programme: their completion rate is an average of 10 percentage points higher than men's.

Chart A4.1. Proportion of students who enter tertiary education and graduate with at least a first degree/qualification at this level, by gender (2011)



Note: Some of the students who have not graduated may be still enrolled, or may have finished their education at a different institution than the one they originally attended, as occurs frequently in the United States. Please refer to Table A4.1 for details concerning methods used to calculate the completion rates.

1. Tertiary-type A only.
2. Includes students entering single courses who may never intend to study all courses needed for a degree.

Countries are ranked in descending order of the proportion of students who graduate from tertiary education with at least a first degree.

Source: OECD. Table A4.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846424

Context

Tertiary completion rates can indicate the efficiency of tertiary education systems, as they show how many of the students who enter a tertiary programme ultimately graduate from it. However, low completion rates do not necessarily imply inefficiency, as students may leave a tertiary programme for a variety of reasons: they may realise that they have chosen a subject or educational programme that is not a good fit for them; they may fail to meet the standards set by their educational institution, particularly in tertiary systems that provide relatively broad access; or they may find attractive employment opportunities before completing the programme. Students may find that the educational programmes offered do not meet their expectations or labour-market needs, or that the programmes last longer than the student wishes to remain outside the labour market. Low completion rates (i.e. high drop-out rates) may indicate, on the other hand, that the education system is not meeting students' needs.

Other findings

- In Hungary, New Zealand, Norway, Sweden and the United States, less than 60% of students who enter a tertiary programme graduate with a first degree at this level; while in Australia, Denmark, Finland, France, Japan and Spain, more than 75% do.
- **Average tertiary-type B completion rates (61%) are somewhat lower than average tertiary-type A completion rates**, ranging from 75% or higher in Germany, Japan and the Slovak Republic to 18% in the United States.
- **Full-time students have a better chance of graduating from their programmes than part-time students.** The largest difference between full-time and part-time students is observed in New Zealand, where completion rates for full-time students who enter tertiary-type A programmes are 34 percentage points higher than those for students with part-time status.
- **Students may choose to leave the education system before graduating because, in some countries, they will be offered attractive job opportunities after just one year of study.** Similarly, some mature students who enter tertiary education, such as those in New Zealand and Sweden, do not intend to graduate from a specific programme, but rather choose to study a few courses as part of lifelong learning or upskilling.
- **There is no clear relationship between the amount of tuition fees charged by tertiary-type A educational institutions and completion rates.**

A4

Analysis

Completion rates in tertiary education

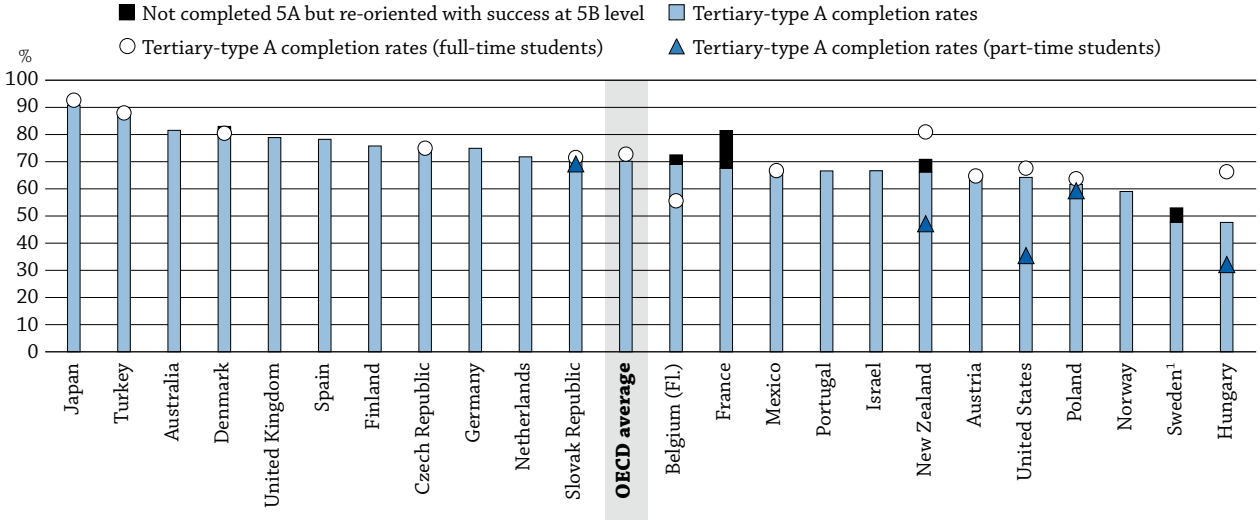
A student who "completes" a tertiary education is one who enters a tertiary-type A programme and graduates with either a tertiary-type A or a tertiary-type B qualification, or one who enters a tertiary-type B programme and graduates with either a tertiary-type A or a tertiary-type B qualification. On average across the 18 OECD countries for which data are available, some 32% of tertiary students did not graduate from a programme at this level of education.

In Hungary, New Zealand, Norway, Sweden and the United States, more than 40% of those who enter a tertiary programme do not graduate at the tertiary level of education (either tertiary-type A or tertiary-type B) in contrast to their counterparts in Denmark, Finland, France and Japan, where less than 25% do not graduate. Among the countries for which only tertiary-type A data are available, non-completion rates vary from 18% in Australia to 35% in Austria (Chart A4.1).

The difference between the proportion of skilled jobs in the labour market and the proportion of people with tertiary education (see Indicator A1) suggests that most countries may benefit if more of their students graduate with a tertiary qualification. Increasing that number requires different strategies for different countries.

In most countries, full-time students are more likely to complete their studies than part-time students are. However, in certain countries, older students who enter tertiary education do not intend to graduate from a specific programme; rather, they study a few courses as part of lifelong learning. Still, these students are included in the category of new entrants in tertiary education, alongside more traditional full-time students. In New Zealand, where part-time study is common (completion rates for full-time students who enter tertiary-type A education are 34 percentage points higher than for part-time students), around one in five students completes all modules in which they are enrolled, yet never enroll in enough modules to graduate with a qualification. This pattern tends to obscure the completion rate of more traditional full-time students in tertiary-type A programmes, which was 81% in 2011 (Tables A4.1 and A4.2).

Chart A4.2. Proportion of students who enter tertiary-type A education and graduate with at least a first degree at this level, by status of enrolment (2011)



Note: Some of the students who have not graduated may be still enrolled, or may have finished their education at a different institution than the one they originally attended, as occurs frequently in the United States. Please refer to Table A4.1 for details concerning methods used to calculate the completion rates.

1. Includes students entering single courses who may never intend to study all courses needed for a degree.

Countries are ranked in descending order of the proportion of students who graduate from tertiary-type A education with at least a first degree.

Source: OECD. Tables A4.1 and A4.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846443

Women enrolled in tertiary-type A programmes are more likely than men to earn a tertiary degree at the end of the programme: their completion rate is 10 percentage points higher than men's. Only in Austria, Germany, Sweden and the United States is the difference between women's and men's completion rates below five percentage points. In the Czech Republic, Finland and Poland, the gender gap in favour of women is more than 15 percentage points wide (Chart A4.1).

Completion rates in tertiary-type A and tertiary-type B education

On average across the 23 OECD countries for which data are available, some 30% of tertiary-type A students do not graduate from the programme they enter. However, completion rates differ widely among OECD countries. In Hungary, Norway and Sweden, less than 60% of those who enter tertiary-type A programmes graduate from the programme, in contrast to their counterparts in Australia, Denmark, Japan and Turkey where the completion rates are 80% or more. Tertiary-type B completion rates are, at 61% on average, somewhat lower than those for tertiary-type A programmes, and again there is wide variation among countries. Tertiary-type B completion rates range from 75% or higher in Germany, Japan and the Slovak Republic, to 18% in the United States (Table A4.1).

Policy makers in OECD countries with low tuition fees for tertiary-type A education often debate whether they should increase those fees in order to improve completion rates. The outcomes of these discussions have led to different decisions across countries. For example, in Italy, a recent law allows universities to increase tuition fees for students who have been enrolled for longer than the normal duration of their programme in an effort to reduce the average duration of tertiary studies. Some other OECD countries have already increased tuition fees, although some students are exempt based on their performance, with the idea that higher fees will increase students' incentives to finish their studies quickly. By contrast, tuition fees remain low in some countries because policy makers in these countries estimate that high tuition fees could lengthen the duration of study if students have to work to pay the tuition fees.

This lack of consensus on tuition-fee policy may explain why it is difficult to find a strong relationship between completion rates in tertiary-type A institutions and the level of tuition fees charged by those institutions. Thus, Australia, Japan, the Netherlands and the United Kingdom charge tuition fees in excess of USD 1 500 (see Indicator B5) and have completion rates significantly above the OECD average of 70%. By contrast, Denmark and Finland do not charge tuition fees and provide a high level of public subsidies for students, but they also have completion rates of more than 75%.

These results are not surprising since all indicators on tertiary education, and especially on rates of return, show that, compared to individuals with an upper secondary education, adults with a tertiary-type A education benefit significantly in terms of earnings (see Indicator A6) and employment (see Indicator A5). This can create a sufficiently large incentive, independent of the level of tuition fees, for students to finish their studies (see Indicator A7).

Consequences of non-completion of tertiary-type A programmes

Beginning a tertiary-type A programme but not graduating is not necessarily linked to failure if students can be successfully re-oriented towards tertiary-type B education and *vice versa*. In France, a significant proportion of students (14%) does not complete tertiary-type A level education, but these students are successfully re-oriented into tertiary-type B programmes. In other words, in France, out of 100 students who start a tertiary-type A programme, 68 will receive at least a first degree at that level, 14 will be re-oriented into a tertiary-type B programme, 4 are still in education, and only 14 will leave the programme without a tertiary qualification. In Belgium (Flemish Community), Denmark, New Zealand and Sweden, between 3% and 5% of students who do not complete a tertiary-type A programme are successfully re-oriented into a tertiary-type B programme. Re-orientation also exists among students initially enrolled in tertiary-type B programmes. In Denmark, New Zealand and Sweden, respectively, 6%, 7% and 6% of students who do not complete tertiary-type B programmes are re-oriented into a tertiary-type A programme. Among these countries, only New Zealand has a large proportion of students in tertiary-type B programmes (see Indicators A3 and C3).

A4

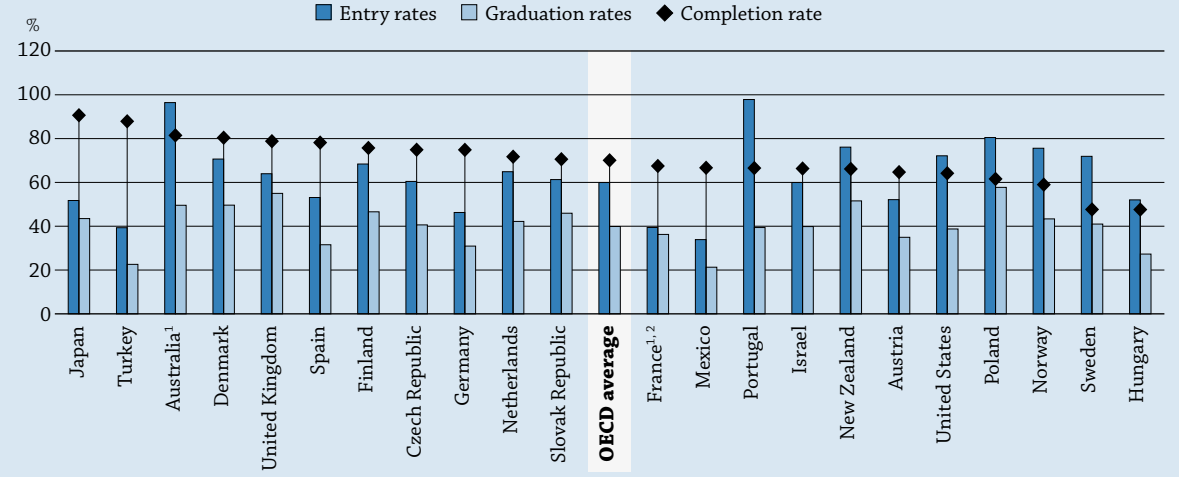
Non-completion of a degree does not mean that the skills and competences acquired are lost or not valued by the labour market; being in the labour market for a time could also help individuals in their studies later. In Sweden and the United States, students can leave a tertiary-type A programme before completing it, be employed for some time, and decide to continue their studies at a later date. They do not lose the benefit of the modules completed prior to employment. In countries with modular systems, like Sweden, students receive credit points for each course they have completed. Even if they have studied enough to graduate, they might not apply for a diploma as the credit points for the individual courses in many programmes are recognised as equivalent by the labour market.

The extent to which non-completion of tertiary education is a policy problem varies among countries, thus completion rates should be interpreted with caution. It will be interesting to see if future changes in the labour market will have an effect on the incentives for individuals to graduate from tertiary studies.

Box A4.1. Interaction between entry rates, graduation rates and completion rates

These three indicators are highly correlated and explain the main differences between tertiary education systems across countries. A change in one of these factors can affect the others. Entry and graduation rates are based on the total population, unlike completion rates, which are calculated from an entry cohort at a certain level of education.

Chart a. Entry, graduation and completion rates at tertiary-type A level (2011)



1. Year of reference 2010.
2. First-degree graduation rates instead of first-time graduation rates.
Countries are ranked in descending order of the completion rates in 2011.
Source: OECD. Tables A3.1a, A4.1 and C3.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846462

The definitions of entry rates, graduation rates and completion rates (see *Definitions* section) shed light on the relationships among them. In reality, completion rates do not correspond to the simple division of graduation rates by entry rates; but a significant change in entry rates or in completion rates will definitely influence the indicator on graduation rates.

...

A significant increase/decrease in tertiary completion rates should have a direct impact on tertiary graduation rates if tertiary entry rates remain stable over the same period. Similarly, a significant increase/decrease in entry rates into tertiary education can have a direct impact on tertiary graduation rates if the tertiary completion rates remain stable.

As mentioned in the text, completion rates differ widely among OECD countries. Japan is at the top end, with over 90% of students completing tertiary-type A studies, while in Hungary and Sweden, about one out of two students leaves tertiary education without at least a first degree.

For countries with low completion rates (and there may be many reasons why students do not complete a degree), high entry rates (such as those observed in New Zealand, Norway, Poland and Sweden) counterbalance this effect and serve to increase the number of graduates, compared to the OECD average, and meet labour-force needs. These countries have chosen to facilitate access to tertiary education for all types of students, including international students and mature students, which explain their ranking in both indicators.

Similarly, in countries such as Japan and Turkey, where there is limited access to tertiary programmes, higher-than-average completion rates counterbalance the lower entry rates and raise graduation rates, compared to the OECD average (Chart a).

Many countries have considerable room for improvement in increasing their graduation rates. In 11 of the 23 countries for which data on tertiary-type A education are available, more than 3 students out of 10 did not graduate from the level of studies in which they were enrolled. If entry rates in these countries were maintained and/or completion rates were increased to, for example, the same level as that of Japan (around 90%), graduation rates would rise sharply (Chart a).

Definitions

Completion rates are the proportion of new entrants into a specified level of education who graduate with at least a first degree at this level. The completion rates from true cohort methods are calculated as the proportion of graduates (within N years) among a given entry cohort (prospectively). The completion rates from cross cohort methods are calculated as the ratio of the number of students who graduate with an initial degree during the reference year to the number of new entrants in this degree *n* years before, *n* being the number of years of full-time study required to complete the degree.

Net entry rates are the estimated percentage of an age cohort that will enter tertiary education for the first time during its lifetime. Net entry rates are the sum of all net entry rates for a single age group. The total net entry rate is therefore the sum of the proportion of new entrants into tertiary-type A and tertiary-type B programmes, aged *i*, to the total population aged *i*, at all ages. Since data by single year are only available for people aged 15 to 29, net entry rates for older students are estimated from data concerning five-year age bands. Entry rates therefore indicate the accessibility of tertiary education and the perceived value of attending tertiary programmes (see Indicator C3).

Net graduation rates correspond to the estimated percentage of an age cohort that will complete tertiary education, based on current patterns of graduation (see Annex 1). Net graduation rates are calculated in the same way as entry rates. Graduation rates indicate the extent to which a country's education system is producing highly skilled adults (see Indicator A3).

Non completion is defined as students who leave the specified level of education without graduating with a first qualification at that level. The first qualification refers to any degree, regardless of the duration of study, obtained at the end of a programme that does not require a previous degree at the same level. For some countries, it is difficult to distinguish interruptions of studies from non completion.

Methodology

Data on completion rates were collected through a special survey undertaken in 2012. The completion rate is calculated from a cohort analysis in half of the countries listed in Table A4.1 (true cohort method), which is based on panel data that follow the individual student from entrance to graduation in the programme. Estimates for the other countries assume constant student flows at the tertiary level, owing to the need for consistency between the graduate cohort in the reference year and the entrant cohort *n* years before (cross-section method). This assumption may be an oversimplification (see Annex 3 at *www.oecd.org/edu/eag.htm*).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Indicator A4 Tables

Table A4.1	**Completion rates in tertiary education (2011)**	StatLink http://dx.doi.org/10.1787/888932848495
Table A4.2	**Completion rates in tertiary-type A education, by status of enrolment (2011)**	StatLink http://dx.doi.org/10.1787/888932848514

Table A4.1. Completion rates in tertiary education (2011)

		Method	Year for new entrants: 5A	Year for new entrants: 5B	Tertiary education: Completion rates (completed at least first 5B or 5A programme)[1] M+W	Tertiary education: Completion rates (completed at least first 5B or 5A programme)[1] Men	Tertiary education: Completion rates (completed at least first 5B or 5A programme)[1] Women	Tertiary education: Not graduated from tertiary education (4) = 100-(1)	Tertiary-type A education: 5A completion rates (completed at least first 5A programme)[2] M+W	Tertiary-type A education: 5A completion rates (completed at least first 5A programme)[2] Men	Tertiary-type A education: 5A completion rates (completed at least first 5A programme)[2] Women	Tertiary-type A education: Not graduated from 5A level but re-oriented with success at 5B level	Tertiary-type B education: 5B completion rates (completed at least first 5B programme)[3] M+W	Tertiary-type B education: 5B completion rates (completed at least first 5B programme)[3] Men	Tertiary-type B education: 5B completion rates (completed at least first 5B programme)[3] Women	Tertiary-type B education: Not graduated from 5B level but re-oriented with success at 5A level
					(1)	(2)	(3)	(4) = 100-(1)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	Cross-section	2005-07	m	m	m	m	m	82	74	88	m	m	m	m	m
OECD	Austria	Cross-section	2006-08	m	m	m	m	m	65	63	67	m	m	m	m	m
OECD	Belgium (Fl.)	True cohort	2007-08	2007-08	73	66	79	27	69	62	76	4	73	65	79	1
OECD	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Chile	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Czech Republic	True cohort (ISCED 5A), cross-section (ISCED 5B)	2001	2001	72	64	78	28	75	67	83	m	59	49	64	m
OECD	Denmark	True cohort	2000-01	2000-01	81	78	84	19	80	77	83	3	68	68	69	6
OECD	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Finland	True cohort	2000	a	76	66	83	24	76	66	83	a	a	a	a	a
OECD	France	Longitudinal survey	2002-09	2002-09	80	m	m	20	68	m	m	14	76	m	m	2
OECD	Germany	True cohort (ISCED 5A), cross-section (ISCED 5B)	1999-2002	2008-09	m	m	m	m	75	73	77	a	75	71	77	a
OECD	Greece	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Hungary	Cross-section	2006-07 / 2009-10	2009-10	53	48	56	47	48	45	50	m	42	33	47	m
OECD	Iceland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Ireland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Israel	m	m	m	m	m	m	m	66	62	70	m	m	m	m	m
OECD	Italy	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Japan	Cross-section	2004-06	2008	90	87	92	10	91	88	95	m	87	86	89	m
OECD	Korea	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Mexico	Cross-section	2007-08	2009-10	66	61	72	34	67	61	72	m	62	58	67	a
OECD	Netherlands	True cohort	2003-04	a	72	65	78	28	72	65	78	m	m	m	m	a
OECD	New Zealand	True cohort	2004	2004	59	56	61	41	66	65	67	5	45	41	48	7
OECD	Norway	True cohort	1999-2000	1999-2000	59	52	64	41	59	52	64	m	59	55	64	m
OECD	Poland	Cross-section	2006-09	2008-09	62	48	74	38	62	48	74	m	64	46	68	m
OECD	Portugal	Cross-section	2006-10	2009	67	59	73	33	67	59	73	m	m	m	m	n
OECD	Slovak Republic	Cross-section	2006-09	2008-10	71	m	m	29	71	m	m	m	76	68	80	m
OECD	Slovenia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Spain	Cross-section	2008-09	2007-10	m	m	m	m	78	70	84	m	73	71	74	m
OECD	Sweden[4]	True cohort	2002-03	2002-03	53	53	53	47	48	48	48	5	50	49	50	6
OECD	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
OECD	Turkey	Cross-section	2007-08	2009-10	75	72	78	25	88	86	90	m	62	60	66	m
OECD	United Kingdom	Cross-section	2007-08	2007-08	72	m	m	28	79	m	m	m	53	57	51	m
OECD	United States[5]	Longitudinal survey	2003-04	2003-04	53	51	54	47	64	61	67	m	18	18	18	m
	OECD average				68	62	72	32	70	65	74	m	61	53	60	m
	EU21 average				69	61	73	31	69	62	73	m	59	52	60	m
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Other G20	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average				m	m	m	m	m	m	m	m	m	m	m	m

Note: The cross-section method refers to the number of graduates from these programmes divided by the number of new entrants into these programmes in the year of entrance. The cross-section method refers to the number of graduates in the calendar year 2011 and is calculated according to the traditional OECD approach, taking into account different durations. True-cohort method is defined from a cohort analysis and based on panel data. Data refers to full-time and part-time when available (please see Table A4.2 for the availability of part-time data).

1. Completion rates in tertiary education represent the proportion of those who enter a tertiary-type A or a tertiary-type B programme, who go on to graduate from either a first tertiary-type A or a first tertiary-type B programme.

2. Completion rates in tertiary-type A education represent the proportion of those who enter a tertiary-type A programme and who go on to graduate from at least a first tertiary-type A programme.

3. Completion rates in tertiary-type B education represent the proportion of those who enter a tertiary-type B programme and who go on to graduate from at least a first tertiary-type B programme.

4. Including students entering single courses who may never intend to study all courses needed for a degree.

5. ISCED 5A completion rates include students enrolled in 4-year programmes who graduated from their entry institution within 6 years and ISCED 5B completion rates include students enrolled in all 2-year programmes who graduated from their entry institution within 3 years.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A4.2. Completion rates in tertiary-type A education, by status of enrolment (2011)

		Method	Year for new entrants: 5A	Proportion of new entrants enrolled[1]: Full-time (1)	Proportion of new entrants enrolled[1]: Part-time (2)	5A completion rates (completed at least first 5A programme): Full-time (3)	5A completion rates (completed at least first 5A programme): Part-time (4)
OECD	Australia	Cross-section	2005-07	m	m	m	m
	Austria	Cross-section	2006-08	100	m	65	m
	Belgium (Fl.)	True cohort	2007-08	89	11	56	m
	Canada	m	m	m	m	m	m
	Chile	m	m	m	m	m	m
	Czech Republic	True cohort	2001	100	m	75	m
	Denmark	True cohort	2000-01	100	m	80	m
	Estonia	m	m	m	m	m	m
	Finland	True cohort	2000	m	m	m	m
	France	Longitudinal survey	2002-09	m	m	m	m
	Germany	True cohort	1999-2002	m	m	m	m
	Greece	m	m	m	m	m	m
	Hungary	Cross-section	2006-07 / 2009-10	63	37	66	32
	Iceland	m	m	m	m	m	m
	Ireland	m	m	m	m	m	m
	Israel	m	m	m	m	m	m
	Italy	m	m	m	m	m	m
	Japan	Cross-section	2004-06	98	2	93	m
	Korea	m	m	m	m	m	m
	Luxembourg	m	m	m	m	m	m
	Mexico	Cross-section	2007-08	100	m	67	m
	Netherlands	True cohort	2003-04	m	m	m	m
	New Zealand	True cohort	2004	56	44	81	47
	Norway	True cohort	1999-2000	m	m	m	m
	Poland	Cross-section	2006-09	53	47	64	59
	Portugal	Cross-section	2006-10	m	m	m	m
	Slovak Republic	Cross-section	2006-09	62	38	72	69
	Slovenia	m	m	m	m	m	m
	Spain	Cross-section	2008-09	m	m	m	m
	Sweden	True cohort	2002-03	m	m	m	m
	Switzerland	m	m	m	m	m	m
	Turkey	Cross-section	2007-08	100	a	88	a
	United Kingdom	Cross-section	2007-08	m	m	m	m
	United States[2]	Longitudinal survey	2003-04	81	19	68	35
	OECD average			83	25	73	m
	EU21 average			81	33	68	m
Other G20	Argentina	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m
	China	m	m	m	m	m	m
	India	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m
	G20 average			m	m	m	m

Note: The cross-section method refers to the number of graduates in the calendar year 2011 and is calculated according to the traditional OECD approach, taking into account different durations. True-cohort method is defined from a cohort analysis and based on panel data.

1. Based on the data collected in the 2012 OECD survey.

2. Includes students enrolled in 4-year programmes who graduated from their entry institution within 6 years.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

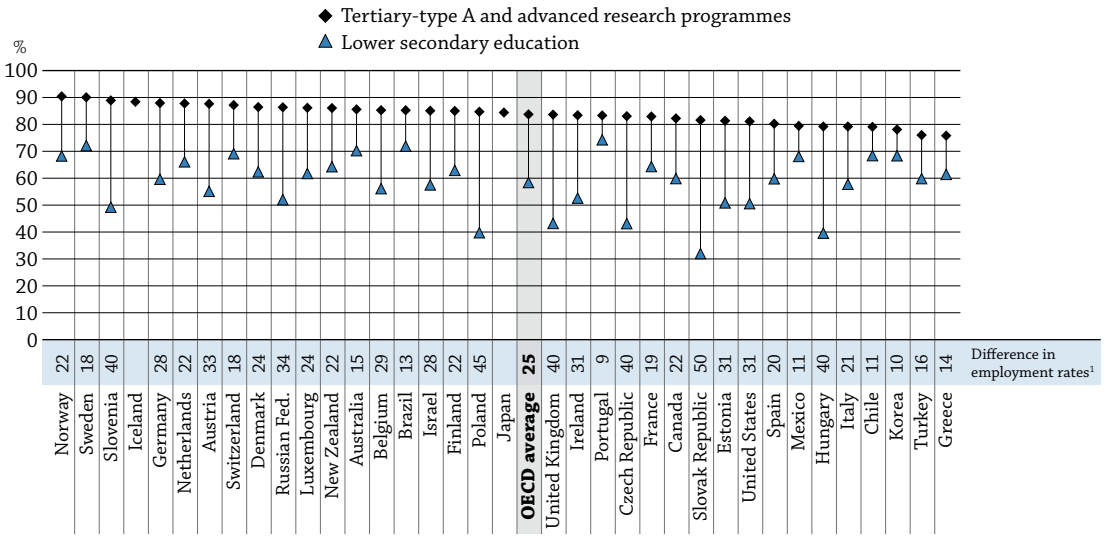
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HOW DOES EDUCATIONAL ATTAINMENT AFFECT PARTICIPATION IN THE LABOUR MARKET?

- Across OECD countries, employment rates are highest among people who have a tertiary education; and these individuals are also most likely to be employed full time.
- Unemployment rates are nearly three times higher among individuals who do not have an upper secondary education (13% on average across OECD countries) than among those who have a tertiary education (5%).
- Individuals who have at least an upper secondary education have a greater chance of being employed than those without that level of education.
- Gender differences in employment rates are smallest among tertiary-educated individuals and largest among men and women who do not have an upper secondary education.

Chart A5.1. Employment rates among 25-64 year-olds, by educational attainment (2011)



1. Difference in employment rates (in percentage points) between tertiary-educated adults and those with only lower secondary education.

Countries are ranked in descending order of the employment rate of tertiary-educated 25-64 year-olds.

Source: OECD. Table A5.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*)

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Context

The economies of OECD countries depend upon a sufficient supply of high-skilled workers. Educational attainment is frequently used as a measure of human capital and the level of an individual's skills. This indicator shows how well the supply of skills matches the demand. For example, high unemployment rates could indicate a mismatch between the educational attainment of the population and labour-market demands.

During the recent economic crisis, unemployment rates climbed steeply in most OECD countries and have remained high ever since. People without an upper secondary or post-secondary non-tertiary education were hit hardest: between 2008 and 2011 the unemployment rate among them increased by almost 4 percentage points, from 8.8% to 12.6% (Table A5.4a). But even before the crisis, rapid technological advances had been transforming the needs of the global labour market. People with higher or specific skills are in strong demand, while low-skilled workers are more likely to find that their jobs have been automated.

Data on employment and unemployment rates over time provide a basis for assessing the long-term trends and variations in labour-market risks among men and women with different levels of education and at different ages. These data could help governments better understand how economies may evolve in the coming years. In turn, that understanding could inform education policies with the aim of ensuring that the students of today are better prepared for the jobs of tomorrow.

Other findings

- **The probability of working full time increases with the level of education.** Some 64% of people with below upper secondary education work full time, while 71% of people with an upper secondary education and 75% of people with a tertiary education work full time.
- **Women are less likely to work full time than men.** On average across OECD countries, 60% of employed women work full time compared to 80% of employed men. The higher the educational attainment of women, the greater the likelihood that they are employed full time.
- Across OECD countries, **individuals with a vocationally oriented upper secondary education are more likely to be employed (76%) than those who have a general upper secondary degree (70%)**. They are also less likely to be unemployed (7.4%) than those with a general upper secondary degree (8.4%).

Trends

Over the past 15 years, employment rates across OECD countries have been consistently higher for people with a tertiary education than for those without that level of education. Conversely, unemployment rates among lower-educated men and women have been higher than among those who have attained a tertiary education. The economic crisis only widened these gaps, and young adults who have just entered the labour market have suffered most. With few exceptions, unemployment rates among younger adults are higher than those among older adults. This trend holds true at all levels of educational attainment, but the gaps are particularly wide among those who have not attained an upper secondary education.

Across OECD countries, it appears that the labour market recovered slightly in 2011 for those with the lowest levels of education; but a full understanding of how the labour market developed during this period will be possible only after data from more recent and future years are available.

Analysis

Labour-market outcomes by educational attainment, age group and gender

Employment by educational attainment

Having a tertiary education increases the likelihood of being employed. This finding holds true across all OECD and G20 countries for which data are available. Across OECD countries, over 80% of tertiary-educated people are employed compared with over 70% of people with an upper secondary or post-secondary non-tertiary education and less than 60% of people with below upper secondary education (Table A5.3a).

As shown in Chart A5.1, differences in employment rates between tertiary-educated individuals (tertiary-type A and advanced research programmes, ISCED levels 5A and 6) and those with lower secondary education (ISCED level 2) are particularly large in the Czech Republic, Hungary, Poland, Slovenia, the Slovak Republic and the United Kingdom, where they amount to 40 percentage points or more. Differences are least pronounced – but still around 10 to 15 percentage points – in Brazil, Chile, Greece, Korea, Mexico and Portugal (Table A5.1a).

Employment by age group

In general, younger adults are more likely to be employed than older adults. The proportion of 25-34 year-olds with upper secondary or post-secondary non-tertiary education who are employed is, on average, more than 20 percentage points larger than that of 55-64 year-olds who have attained the same level of education (76% and 54%, respectively). Some 58% of younger adults with below upper secondary education are employed compared to only 41% of older adults with that same level of education; while among tertiary-educated adults, 82% of younger adults are employed compared to 67% of older adults (Table A5.3a). The largest gap between age groups and educational attainment are seen in Austria, Luxembourg, Slovenia and Turkey. For example, in Slovenia, 79% of younger adults with upper secondary or post-secondary non-tertiary education are employed while only 28% of older adults with the same level of education are.

Employment by gender

For any economy, but particularly for ageing economies, it is crucial to make full use of all the skills available to the labour market. Yet across all OECD countries and education levels, only 65% of women are employed compared with 80% of men. The gender gap in employment rates is largest among those with the least education: the gap is around 20 percentage points between men and women with lower secondary education (69% for men and 48% for women); around 15 percentage points for men and women with an upper secondary education (81% for men and 64% for women at ISCED 3C (long programme)/3B level; 80% for men and 65% for women at ISCED 3A level); and less than 10 percentage points between men and women with a tertiary education (86% for men and 77% for women at ISCED 5B level; 88% for men and 79% for women at ISCED 5A/6 level). Although the gap between men's and women's employment rates narrows as educational attainment increases, the employment rate among tertiary-educated women across OECD countries is still considerably lower than that of men – despite the fact that in 2011 a slightly higher proportion of women (33%) than men (30%) in OECD countries had a tertiary education (Table A5.1b, and see Table A1.1b, available on line).

The difference in employment rates between tertiary-educated men and women (type A and advanced research programmes) is particularly large in the Czech Republic, Japan, Korea, Mexico and Turkey, where it exceeds 15 percentage points. In Iceland, Norway, Portugal, Slovenia and Sweden, the difference in employment rates between the genders is less than 3 percentage points (Table A5.1b).

Unemployment by educational attainment

In 2011, an average of 7.1% of adults across OECD countries were unemployed. The unemployment rate for all levels of education combined was particularly high in Spain (19.5%) and Greece (16.0%), and was higher than 10% in Estonia, Ireland, Portugal and the Slovak Republic. The unemployment rates in Korea, the Netherlands and Norway were below 3.5% (Table A5.2a).

Unemployment rates are closely related to educational attainment. Across OECD countries, an average of 12.6% of adults without an upper secondary or post-secondary non-tertiary education are unemployed compared with 7.3% of adults who have that level of education. Some 4.8% of adults with a tertiary education are unemployed. In some countries, the difference in unemployment rates between adults with different levels of education is particularly large. For example, in the Czech Republic, Estonia, Hungary, Ireland, the Slovak Republic and Spain, the gap in unemployment rates between individuals with a tertiary education and those who do not have an upper secondary or post-secondary non-tertiary education is around 15 percentage points or more. That gap is narrowest (less than 2 percentage points) in Brazil, Chile, Korea, Mexico and Turkey. In Chile, Korea and Mexico, unemployment rates among adults who do not have an upper secondary or post-secondary non-tertiary education are even slightly below those among tertiary-educated adults. In addition, unemployment rates among tertiary-educated individuals can vary by field of study (Box A5.1) and are not always linked to labour-market demand (Table A5.4a).

Unemployment by age group

Unemployment rates are higher among younger adults than among older adults at all levels of education. On average across OECD countries, 8.8% of older adults who have not attained an upper secondary education are unemployed compared with an unemployment rate of 18.1% among younger adults with a similar level of education. Similarly, 9.5% of younger adults with an upper secondary or post-secondary non-tertiary education are unemployed, compared to 6.4% of older adults with a similar education. The gap between the two age groups is smallest among tertiary-educated adults: 6.8% of younger adults in this group are unemployed compared to 4.0% of older adults. This indicates the growing importance of attaining a tertiary education. The fact that younger adults have both higher unemployment rates and higher employment rates than older adults is largely due to higher inactivity rates among older adults (Table A5.4a).

Box A5.1. How unemployment rates vary by field of study

The indicators in *Education at a Glance* describe the employment advantages associated with the completion of higher levels of education. Lower unemployment rates for those who complete tertiary education have been consistently observed both across countries and over time. While these lower unemployment rates for tertiary-educated workers compared to workers with less than a tertiary education have been well documented, this does not mean that all tertiary-educated individuals enjoy this advantage, or that the lower unemployment rates are consistently observed for graduates from all types of tertiary programmes. In the United States and other countries, a considerable range of employment outcomes has been observed for workers who completed ISCED 5A first degrees in various tertiary programmes. For example, in the United States, the earnings data for 25-29 year-olds show relatively high earnings for graduates in engineering and computer fields, and lower earnings for graduates in education and social services. However, the US unemployment rate data did not show consistently low unemployment rates that might be associated with high-demand, highly paid fields of study. For example, the unemployment rate for graduates from the high-paying field of computer and information systems (5.3%) was higher than the unemployment rates for graduates of the relatively low-paying secondary teaching programmes (2.4%), which had one of the lowest unemployment figures of any programme. Graduates in some fields of study faced both below-average salaries and higher-than-average (for tertiary graduates) unemployment rates (8.6% for history graduates and 7.8% for philosophy and religious study graduates). Other programmes, such as those in mechanical engineering and nursing, had both relatively high salaries and low unemployment rates (3.1% for each). A relatively wide range in unemployment rates by field of study has been observed in other OECD countries as well. A study of 2005 tertiary graduates in Canada found that the 2007 unemployment rates for ISCED 5A graduates ranged from 3% for those in agriculture, health, and engineering, to 8% for those in education. These findings illustrate the complexity and diversity in outcomes for tertiary graduates entering the labour force.

Unemployment by gender

Gender differences in unemployment rates are, on average, less pronounced than they are in employment rates. Among adults with below upper secondary education, unemployment rates are lower among women than men (12.2% for women and 12.9% for men). Among adults who have an upper secondary or post-secondary non-tertiary education, unemployment rates are higher among women than among men (8.0% for women and 6.9% for men). This is true, too, among tertiary-educated adults, where the unemployment rate is 4.5% among men and 5.1% among women (Tables A5.4c and d, available on line).

Gender differences in unemployment rates are particularly large in Greece and Turkey. For instance, in Turkey, 10.9% of tertiary-educated women (ISCED 5A/6 level) were unemployed in 2011 compared to only 5.9% of tertiary-educated men. These differences were even more pronounced among adults with an upper secondary education: 18.2% of women at ISCED 3A level were unemployed compared with 7.2% of men (Table A5.2b).

The effect of the global economic crisis on labour-market outcomes

Trends in labour-market outcomes between 2008 and 2011

During the economic crisis, unemployment levels increased in almost all OECD countries. Spain and Greece recorded the steepest rises in unemployment, but unemployment rates also climbed substantially in Estonia, Hungary, Ireland, Portugal, the Slovak Republic, Slovenia and the United States among workers with all levels of education. Germany was the only country where unemployment rates fell among workers at all levels of educational attainment between 2008 and 2011.

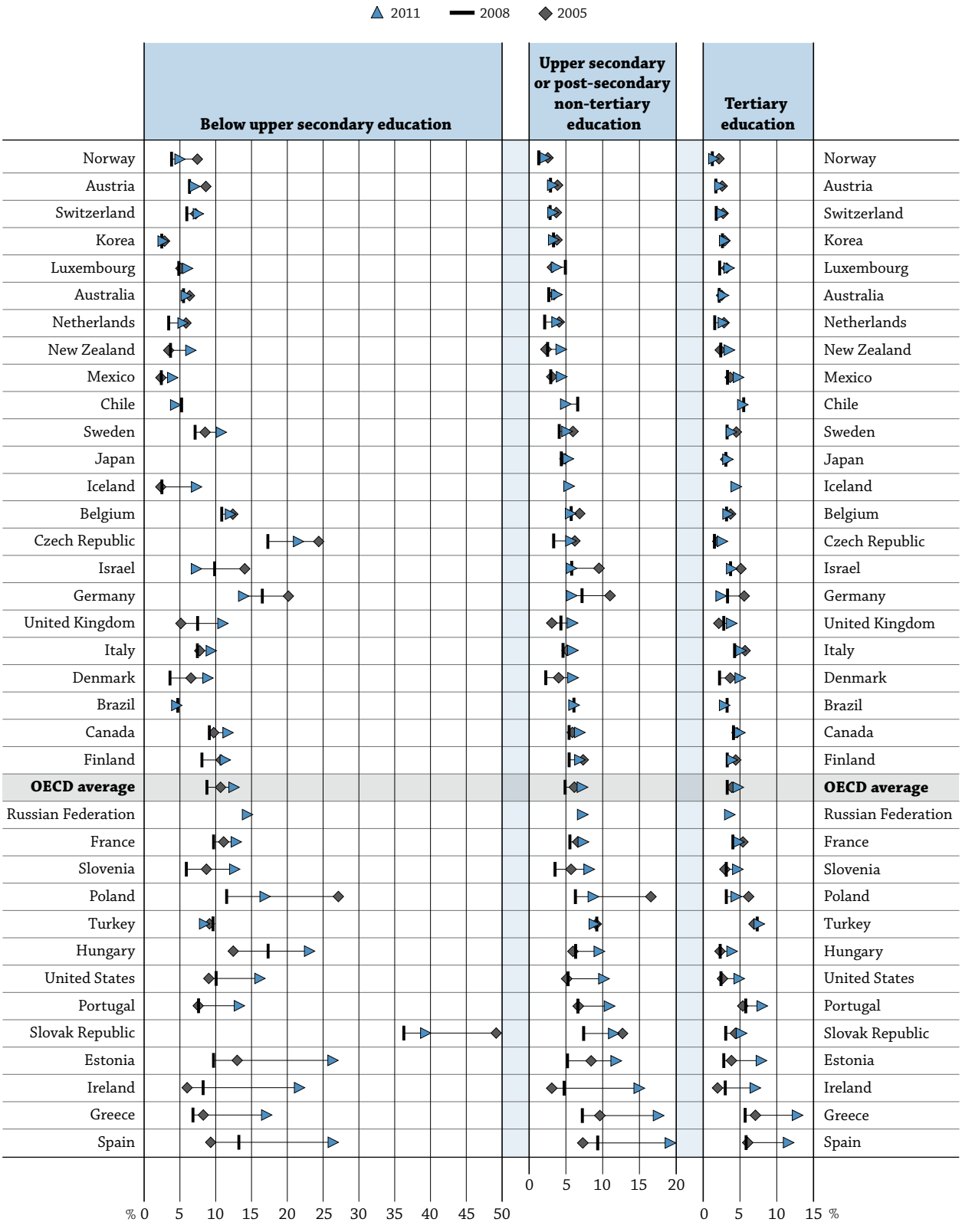
The horizontal lines in Chart A5.2 indicate changes in unemployment rates over a period. The chart shows that individuals without an upper secondary education have been most affected by unemployment. In the period 2008 to 2011, unemployment rates among adults who had not attained an upper secondary education rose from 8.8% to 12.6%. But even those with an upper secondary or post-secondary non-tertiary education were not spared: the unemployment rate among this group increased from 4.9% in 2008 to 7.3% in 2011 across all OECD countries. Only in Belgium, Brazil, Chile, Germany, Luxembourg and Turkey, unemployment rates of 25-64 year-olds with an upper secondary or post-secondary education remained unchanged or dropped within this period. Unemployment rates among tertiary-educated adults also increased during the period, but by a much smaller margin: from 3.3% in 2008 to 4.8% in 2011. Brazil, Chile and Germany were exception; the unemployment rates decreased among tertiary-educated adults between 2008 and 2011 (Table A5.4a).

Among adults who had not attained an upper secondary education, unemployment rates increased more among men (by 4.1 percentage points, from 8.8% to 12.9%) than among women (by 2.7 percentage points, from 9.5% to 12.2%) between 2008 and 2011. The Czech Republic, Estonia, Hungary, Spain and the United States also reported significant increases in unemployment rates between 2008 and 2009 among people without an upper secondary education and unemployment rates among this group of people continued to increase in 2010, but at a slower pace (Tables A5.4b, c and d, available on line).

Younger adults who had not attained an upper secondary education fared worse during the crisis than older adults with the same level of education. On average across OECD countries, the unemployment rate among the younger cohort increased by almost 5 percentage points between 2008 and 2011 (from 13.6% to 18.1%) compared to a rise of less than 3 percentage points among the older age group (from 6.2% to 8.8%). During the same period, the increase in unemployment rates among younger adults with an upper secondary or post-secondary non-tertiary education was also greater than that among older adults with a similar level of education. Unemployment rates climbed from 6.4% to 9.5% among younger adults while they rose from 4.2% to 6.4% among older adults. The same holds true for tertiary-educated adults. While the unemployment rate of 55-64 year-olds increased by 1 percentage point from 2.9% to 4.0%, it increased by more than 2 percentage points among 25-34 year-olds from 4.6% to 6.8% between 2008 and 2011 (Table A5.4a).

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Chart A5.2. Unemployment rates among 25-64 year-olds, by educational attainment (2005, 2008 and 2011)



Countries are ranked in ascending order of 2011 unemployment rates among 25-64 year-olds with upper secondary or post-secondary non-tertiary education.

Source: OECD. Table A5.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Changes between 2010 and 2011

Between 2010 and 2011, the economic crisis continued to depress labour-market outcomes in some countries, while in other countries unemployment rates began to fall. In particular, among younger adults with below upper secondary education – those who were hardest hit by the crisis – unemployment rates dropped slightly, on average across OECD countries, from 19.0% in 2010 to 18.1% in 2011. This was due to a decrease in unemployment rates among younger men (1.1 percentage points, from 19.0% to 17.9%); among younger women, virtually no change was observed (0.1 percentage points, from 21.0% to 21.1%) (Tables A5.4b, c and d, available on line). The drop in unemployment rates among younger men with below upper secondary education was accompanied by an increase in the employment rate for this group, so that the decline in the unemployment rate is not solely a result of people dropping out of the labour market altogether.

Unemployment rates among adults with below upper secondary education decreased by 1.5 percentage points or more between 2010 and 2011 in Germany, Israel, the Slovak Republic and Turkey. By contrast, during the same period, unemployment rates continued to increase in Greece (by 5.2 percentage points), and in Ireland, Luxembourg, Portugal, Slovenia and Spain (by at least 1.5 percentage points) (Table A5.4b, available on line).

Across OECD countries, a slight decrease in unemployment rates between 2010 and 2011 was also observed among adults with an upper secondary education (7.6% to 7.3%).

While the unemployment rate among adults with a tertiary degree remained unchanged (0.1 percentage-point increase, from 4.7% to 4.8%), on average between 2010 and 2011, it decreased slightly among men with that level of education (from 4.7% to 4.5%), but increased slightly among women (from 4.9% to 5.1%). Similarly, the unemployment rate decreased among younger men (from 6.9% to 6.6%) but increased among younger women (from 6.9% to 7.3%). Among older tertiary-educated men, the unemployment rate dropped slightly from 4.9% to 4.5%, while among older tertiary-educated women, the unemployment rate dipped only 0.1 percentage point, from 3.5% in 2010 to 3.4% in 2011 (Tables A5.4b, c and d, available on line).

Labour-force status by programme orientation (vocational or general)

The International Standard Classification of Education (ISCED-97) defines vocational education and training (VET) as "education which is mainly designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade or class of occupations or trades. Successful completion of such programmes leads to a labour-market relevant vocational qualification recognised by the competent authorities in the country in which it is obtained" (UNESCO, 1997).

Vocational education and training is generally geared towards students with upper secondary or post-secondary non-tertiary education (ISCED levels 3 and 4). In some countries, reforms have it made easier for VET graduates to directly access tertiary education; in others, VET programmes are also offered at the tertiary level (ISCED level 5). Vocational programmes may also include apprenticeship or work-study programmes that can help to ensure a closer match between employers' needs for specific skills and the skills workers make available to the labour market (OECD, 2010). These programmes are often developed in close co-operation with employers, reducing the need for extensive initial on-the-job training and increasing the immediate and long-term productivity of new hires (see Box A1.1). Research has shown that VET can yield good economic returns on public investment, and some countries with strong VET systems, like Germany, have been relatively successful in tackling the problem of youth unemployment (CEDEFOP, 2011). A potential drawback is that the skills that individuals acquire through VET might be of limited relevance in a rapidly changing labour market.

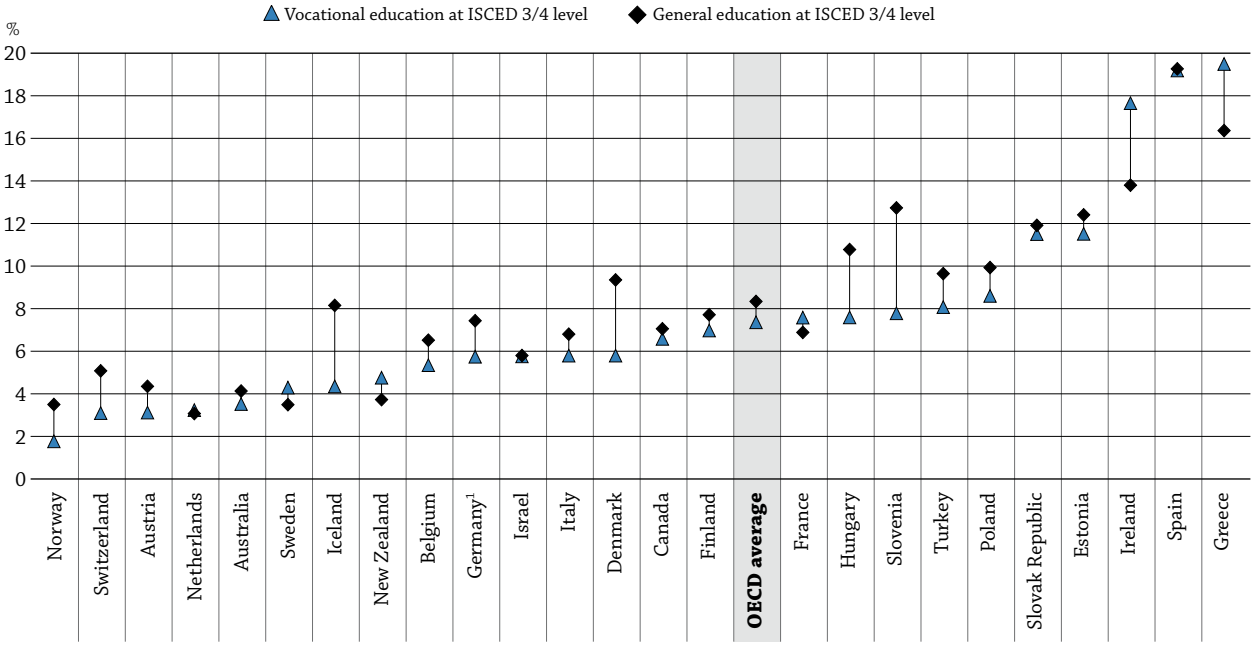
Since VET systems vary widely among countries, cross-country comparability is somewhat more limited than in other areas of the ISCED classification. Therefore, it is more difficult to compare VET participation and outcomes across different OECD countries.

Table A5.5a provides a breakdown of labour-market outcomes by vocational and general orientation at the upper secondary or post-secondary non-tertiary (ISCED levels 3 and 4) and tertiary (ISCED level 5) levels of education. Data on vocational and general programmes at ISCED 3/4 level are available for 27 OECD countries; similar data at ISCED 5 level are available for eleven countries.

Across OECD countries for which data are available, 76% of individuals with a vocational upper secondary or post-secondary non-tertiary qualification are employed – a rate that is 5 percentage points higher than that among individuals with a general upper secondary education as their highest qualification.

Unemployment rates are lower among individuals with vocational upper secondary or post-secondary non-tertiary education: 7.4% compared with 8.4% among adults with a general upper secondary education. In Denmark, Hungary, Iceland and Slovenia, unemployment rates among individuals with vocational upper secondary or post-secondary non-tertiary education are at least 3 percentage points lower than those of individuals with a general upper secondary or post-secondary non-tertiary degree. The opposite pattern is observed in the five countries for which data is available, namely France, Greece, Ireland, New Zealand and Sweden (Chart A5.3).

Chart A5.3. Unemployment rates among 25-64 year-olds with vocational or general upper secondary or post-secondary non-tertiary education (2011)



Notes: Upper secondary or post-secondary non-tertiary is the equivalent of ISCED 3/4.
This chart includes only countries for which the programme orientation is specified.
1. Persons with attainment ISCED 4A in Germany have successfully completed both a general and a vocational programme. In this chart they have been allocated to vocational.
Countries are ranked in ascending order of the unemployment rate of 25-64 year-olds with vocational education at ISCED 3/4 level.
Source: OECD. Table A5.5a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
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The stronger labour-market outcomes among adults with a vocationally oriented upper secondary education as their highest qualification compared with adults with a general upper secondary education may be because the former group learns specific skills that are immediately needed in the labour market. In addition, these adults appear to use previous work experience to land their first job (CEDEFOP, 2012). By contrast, the skills learned in general upper secondary education tend to be less obviously associated with the labour market. They are usually designed to prepare individuals to pursue more specific fields of education at the tertiary level. Thus, finding a job might be more difficult for those with a general upper secondary degree than for those with a vocational qualification. In addition, the inactivity rate among individuals with a vocational upper secondary education is about 5 percentage points lower, on average across OECD countries with comparable data, than that of individuals with a general upper secondary education (Table A5.5a).

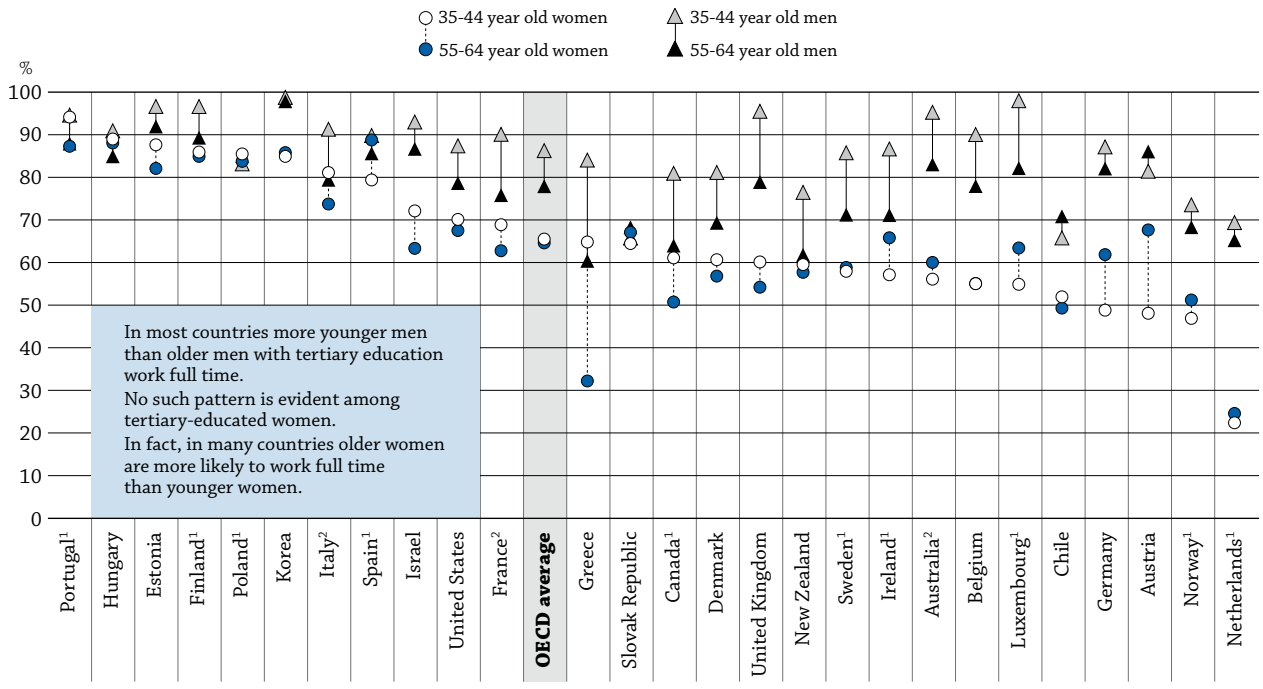
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Full-time earners among tertiary-educated adults

Not only does the likelihood of being employed rise with educational attainment, so does the likelihood of being employed full time. Across OECD countries, 71% of earners at all education levels work full time (some countries include self-employed individuals, in others they are not considered). Among employed adults, 71% of those with an upper secondary education work full time, compared with 75% of those with a tertiary degree. Some 64% of those without an upper secondary education are employed full time (Table A5.6). The definition of full time varies among countries: in some countries the term is defined by the respondent; in others, there is an official minimum number of hours. The minimum number of hours ranges from 30 hours per week in the Czech Republic, Greece and New Zealand to 44 hours per week in Chile. For further information on the specific definitions please see *Definitions* section in Indicator A6 and Annex 3 (*www.oecd.org/edu/eag.htm*).

Chart A5.4 shows the proportion of full-time earners among tertiary-educated men and women aged 35 to 44 and 55 to 64. The length of the black lines indicates the difference in the share of men from the two age groups who work full time; the length of the dashed lines indicates the difference in the share of women from the two age groups who work full time.

Chart A5.4. Proportion of full-time, full-year earners among tertiary-educated adults with income from employment, by gender and age group (2011)



1. Year of reference 2010.
2. Year of reference 2009.

Countries are ranked in descending order of the proportion of full-time earners among 35-44 year-old women.

Source: OECD. Table A5.6. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846538

In almost all OECD countries, the share of 35-44 year-old men who work full time is considerably larger than the share of 55-64 year-old men who do so. No such pattern is evident among women. In fact, in many countries, the share of tertiary-educated 55-64 year-old women working full time is larger than that of 35-44 year-old women with the same level of education. These differences may be associated with countries' childcare policies. However, Chart A5.4 shows the share of full-time workers among all earners, including part-time workers; so mothers who have left the labour force entirely are not considered here. Many women

aged 35 to 44 have young children and often work part time. In Austria, Germany and Luxembourg, for example, the share of tertiary-educated older women who work full time is larger than the share of tertiary-educated younger women who do so. In other countries, like France, a larger share of younger women than older women works full time. The difference between the two age groups in the share of women who work full time is minimal in the Nordic countries (Denmark, Norway and Sweden) and in Belgium, Chile, the Netherlands and New Zealand.

Still, in all OECD countries, the proportion of tertiary-educated women who work full time is considerably smaller than the share of men with the same level of education who do so, although in Estonia, Finland, Hungary, Korea, Poland and Portugal, more than 80% of tertiary-educated women and men of both age groups work full time.

Definitions

Under the auspices of the International Labour Organization (ILO) and their conferences of labour statisticians, concepts and definitions for measuring labour-force participation were established and are now used as a common reference (ILO, 1982).

Active population (labour force) is the total number of employed and unemployed persons, in accordance with the definition in the Labour Force Survey.

Age groups: Adults refers to the 25-64 year-old population; **younger adults** refers to 25-34 year-olds; and **older adults** refers to 55-64 year-olds. The **working-age population** is the total population aged 25-64.

Employed individuals are those who, during the survey reference week: *i)* work for pay (employees) or profit (self-employed and unpaid family workers) for at least one hour; or *ii)* have a job but are temporarily not at work (through injury, illness, holiday, strike or lock-out, educational or training leave, maternity or parental leave, etc.).

The **employment rate** refers to the number of persons in employment as a percentage of the working-age population (the number of employed people is divided by the number of all working-age people). Employment rates by gender, age, educational attainment, programme orientation and age groups are calculated within each of these categories; for example the employment rate among women is calculated by dividing the number of employed women by the total number of working-age women.

Full-time basis refers to people who have worked all year long and at least 30 hours per week. The length of the reference period varies from one week to one year. Self-employed people are excluded in some countries. For national definitions of full-time employment, see *Definitions* section in Indicator A6 and Annex 3 (*www.oecd.org/edu/eag.htm*).

Inactive individuals are those who are, during the survey reference week, neither employed nor unemployed, *i.e.* individuals who are not looking for a job. The number of inactive individuals is calculated by subtracting the number of active people (labour force) from the number of all working-age people.

The **inactive rate** refers to inactive persons as a percentage of the population (i.e. the number of inactive people is divided by the number of all working-age people). Inactive rates by gender, age, educational attainment, programme orientation and age groups are calculated within each of these categories; for example, the inactive rate among individuals with a tertiary education degree is calculated by dividing the number of inactive individuals with tertiary education by the total number of working-age people with tertiary education.

Levels of education: Below upper secondary education level corresponds to ISCED levels 0, 1, 2 and 3C short programmes. **Upper secondary or post-secondary non-tertiary** education level corresponds to ISCED levels 3C long programmes, 3B, 3A and 4. **Tertiary education** corresponds to ISCED levels 5B, 5A and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

The **unemployment rate** refers to unemployed persons as a percentage of the labour force (i.e. the number of unemployed people is divided by the sum of employed and unemployed people). Unemployment rates by gender, age, educational attainment, programme orientation and age groups are calculated within each of these categories; for example, the unemployment rate among women is calculated by dividing the number of unemployed women by the total number of women who are active in the labour force.

Unemployed individuals are those who are, during the survey reference week, without work (i.e. neither had a job nor were at work for one hour or more in paid employment or self-employment), actively seeking employment (i.e. had taken specific steps during the four weeks prior to the reference week to seek paid employment or self-employment), and currently available to start work (i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week).

Methodology

Data on population, labour-market status and educational attainment are taken from OECD and Eurostat databases, which are compiled from National Labour Force Surveys. Data on earnings are taken from a special data collection carried out by the OECD LSO (labour market, economic and social outcomes of learning) Network on the earnings of those working full-time and full-year. For national definitions of full-time employment, see *Definitions* section in Indicator A6 and Annex 3 (*www.oecd.org/edu/eag.htm*).

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator A5 Tables

Table A5.1a	**Employment rates among 25-64 year-olds, by educational attainment (2011)**	StatLink http://dx.doi.org/10.1787/888932848552
Table A5.1b	**Employment rates among 25-64 year-olds, by educational attainment and gender (2011)**	StatLink http://dx.doi.org/10.1787/888932848571
Table A5.2a	**Unemployment rates among 25-64 year olds, by educational attainment (2011)**	StatLink http://dx.doi.org/10.1787/888932848590
Table A5.2b	**Unemployment rates among 25-64 year-olds, by educational attainment and gender (2011)**	StatLink http://dx.doi.org/10.1787/888932848609

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	Table A5.3a	Employment rates, by educational attainment and age group (2000, 2005, 2008 and 2011) StatLink http://dx.doi.org/10.1787/888932848628
WEB	Table A5.3b	Trends in employment rates, by educational attainment and age group (2000, 2005-11) StatLink http://dx.doi.org/10.1787/888932848647
WEB	Table A5.3c	Trends in employment rates among men, by educational attainment and age group (2000, 2005-11) StatLink http://dx.doi.org/10.1787/888932848666
WEB	Table A5.3d	Trends in employment rates among women, by educational attainment and age group (2000, 2005-11) StatLink http://dx.doi.org/10.1787/888932848685
	Table A5.4a	Unemployment rates, by educational attainment and age group (2000, 2005, 2008 and 2011) StatLink http://dx.doi.org/10.1787/888932848704
WEB	Table A5.4b	Trends in unemployment rates, by educational attainment and age group (2000, 2005-11) StatLink http://dx.doi.org/10.1787/888932848723
WEB	Table A5.4c	Trends in unemployment rates among men, by educational attainment and age group (2000, 2005-11) StatLink http://dx.doi.org/10.1787/888932848742
WEB	Table A5.4d	Trends in unemployment rates among women, by educational attainment and age group (2000, 2005-11) StatLink http://dx.doi.org/10.1787/888932848761
	Table A5.5a	Labour market status among 25-64 year-olds, by educational attainment and programme orientation (2011) StatLink http://dx.doi.org/10.1787/888932848780
WEB	Table A5.5b	Labour market status among 25-64 year-olds, by educational attainment, programme orientation and gender (2011) StatLink http://dx.doi.org/10.1787/888932848799
WEB	Table A5.5c	Labour market status among 25-34 year-olds and 35-44 year-olds, by educational attainment and programme orientation (2011) StatLink http://dx.doi.org/10.1787/888932848818
	Table A5.6	Proportion of full-time, full-year earners among all earners, by educational attainment and age group (2011) StatLink http://dx.doi.org/10.1787/888932848837

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Table A5.1a. Employment rates among 25-64 year-olds, by educational attainment (2011)

Number of employed 25-64 year-olds as a percentage of all 25-64 year-olds

		Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A and advanced research programmes	All levels of education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	52	70	a	84	77	85	81	86	78
	Austria	x(2)	55	69	77	76	85	85	88	76
	Belgium	37	56	a	73	73	83	83	85	70
	Canada	43	60	a	x(5)	72	79	81	82	76
	Chile	59	68	a	x(5)	73	a	80	79	72
	Czech Republic	c	43	a	73	78	x(5)	x(8)	83	74
	Denmark	45	62	74	80	76	c	82	86	78
	Estonia	c	51	a	74	73	77	77	81	73
	Finland	44	63	a	a	74	90	83	85	75
	France	41	64	a	73	75	c	85	83	72
	Germany	47	60	a	78	61	84	88	88	78
	Greece	48	61	x(4)	70	60	66	72	76	63
	Hungary	13	40	a	65	68	71	81	79	64
	Iceland	74	c	80	86	76	90	92	88	83
	Ireland	35	53	61	x(5)	65	64	77	83	66
	Israel	37	58	a	76	69	a	78	85	72
	Italy	29	58	61	70	72	75	70	79	64
	Japan	x(5)	x(5)	x(5)	x(5)	73	a	73	84	76
	Korea	61	68	a	x(5)	71	a	74	78	72
	Luxembourg	61	62	65	69	71	75	83	86	74
	Mexico	59	68	a	66	73	a	76	79	67
	Netherlands	52	66	x(4)	76	82	81	80	88	77
	New Zealand	x(2)	64	79	78	81	88	82	86	79
	Norway	c	68	a	82	79	85	90	90	83
	Poland	x(2)	40	a	63	69	69	x(8)	85	68
	Portugal	62	74	x(5)	x(5)	79	79	x(8)	83	71
	Slovak Republic	c	32	x(4)	66	74	x(5)	81	82	69
	Slovenia	22	49	a	67	73	a	83	89	71
	Spain	40	60	a	68	67	c	75	80	64
	Sweden	49	72	a	x(5)	83	84	85	90	83
	Switzerland	66	69	69	83	76	87	92	87	83
	Turkey	49	60	a	65	59	a	x(8)	76	56
	United Kingdom	21	43	66	78	78	c	82	84	75
	United States	52	51	x(5)	x(5)	67	x(5)	76	81	71
	OECD average	46	58	m	74	73	80	81	84	73
	EU21 average	40	55	m	72	73	77	81	84	72
Other G20	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	65	72	x(5)	x(5)	70	a	x(8)	85	70
	China	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m
	Russian Federation	27	52	x(4)	78	68	x(4)	79	86	77
	Saudi Arabia	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A5.1b. [1/2] Employment rates among 25-64 year-olds, by educational attainment and gender (2011)

Number of employed 25-64 year-olds as a percentage of all 25-64 year-olds

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A and advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	Men	67	80	a	90	87	91	88	91	86
		Women	37	62	a	70	68	79	75	81	70
	Austria	Men	x(2)	65	80	81	80	87	88	91	82
		Women	x(2)	50	65	71	72	83	80	84	70
	Belgium	Men	46	66	a	81	80	88	86	88	76
		Women	28	44	a	65	66	77	81	83	64
	Canada	Men	53	68	a	x(5)	78	81	85	85	80
		Women	31	50	a	x(5)	67	73	78	80	72
	Chile	Men	79	88	a	x(5)	89	a	91	86	87
		Women	41	50	a	x(5)	57	a	71	71	58
	Czech Republic	Men	c	53	a	81	88	x(5)	x(8)	92	83
		Women	c	38	a	61	70	x(5)	x(8)	74	65
	Denmark	Men	c	70	76	82	79	c	85	89	81
		Women	45	54	73	77	73	c	79	85	74
	Estonia	Men	c	57	a	77	78	82	82	86	76
		Women	c	43	a	69	68	74	75	79	70
	Finland	Men	48	69	a	a	77	92	83	89	77
		Women	40	55	a	a	71	89	83	82	73
	France	Men	47	71	a	78	80	c	89	86	76
		Women	36	58	a	68	72	c	83	80	67
	Germany	Men	59	69	a	83	66	87	90	91	83
		Women	36	53	a	73	55	81	85	84	72
	Greece	Men	63	75	x(4)	77	74	78	77	81	74
		Women	35	44	x(4)	48	48	55	67	71	51
	Hungary	Men	18	49	a	69	76	78	80	85	70
		Women	10	33	a	57	62	65	82	75	58
	Iceland	Men	81	c	c	88	81	90	94	90	86
		Women	68	c	73	84	72	89	91	87	79
	Ireland	Men	42	62	67	x(5)	74	69	82	86	71
		Women	26	41	56	x(5)	58	59	73	81	61
	Israel	Men	54	67	a	82	75	a	83	88	78
		Women	22	42	a	68	64	a	74	83	67
	Italy	Men	48	73	73	81	81	83	76	85	76
		Women	16	40	55	59	63	70	66	75	52
	Japan	Men	x(5)	x(5)	x(5)	x(5)	85	a	92	92	88
		Women	x(5)	x(5)	x(5)	x(5)	61	a	66	68	63
	Korea	Men	72	81	a	x(5)	84	a	90	90	86
		Women	56	59	a	x(5)	58	a	58	62	59
	Luxembourg	Men	70	77	82	79	79	78	87	91	82
		Women	53	49	51	56	65	70	79	80	65
	Mexico	Men	85	91	a	89	90	a	85	87	88
		Women	39	47	a	57	54	a	71	70	49
	Netherlands	Men	65	78	x(4)	82	87	84	85	90	84
		Women	40	55	x(4)	70	78	78	76	86	71
	New Zealand	Men	x(2)	73	87	87	89	91	88	92	86
		Women	x(2)	56	73	71	74	76	78	82	73
	Norway	Men	c	73	a	86	83	88	91	92	85
		Women	c	63	a	78	75	79	89	89	80

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

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Table A5.1b. [2/2] Employment rates among 25-64 year-olds, by educational attainment and gender (2011)

Number of employed 25-64 year-olds as a percentage of all 25-64 year-olds

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A and advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Poland	Men	x(2)	49	a	71	80	83	x(8)	89	75
		Women	x(2)	31	a	50	59	64	x(8)	82	60
	Portugal	Men	69	80	x(5)	x(5)	81	86	x(8)	83	76
		Women	54	68	x(5)	x(5)	78	71	x(8)	83	67
	Slovak Republic	Men	c	38	x(4)	73	83	x(5)	82	88	76
		Women	c	28	x(4)	55	67	x(5)	81	77	61
	Slovenia	Men	27[r]	59	a	71	77	a	84	90	74
		Women	17[r]	42	a	60	69	a	83	88	67
	Spain	Men	49	69	a	76	73	c	80	83	71
		Women	31	50	a	60	61	c	69	78	57
	Sweden	Men	61	79	a	x(5)	87	87	86	91	86
		Women	37	62	a	x(5)	80	80	83	89	80
	Switzerland	Men	75	79	82	89	83	91	96	93	90
		Women	58	62	66	77	72	83	86	80	76
	Turkey	Men	74	79	a	83	80	a	x(8)	84	78
		Women	26	23	a	32	28	a	x(8)	64	31
	United Kingdom	Men	c	55	75	83	82	c	87	88	81
		Women	c	34	58	73	73	c	77	79	69
	United States	Men	66	58	x(5)	x(5)	72	x(5)	79	86	76
		Women	37	41	x(5)	x(5)	62	x(5)	74	76	66
	OECD average	Men	59	69	m	81	80	85	86	88	80
		Women	37	48	m	64	65	75	77	79	65
	EU21 average	Men	52	66	m	79	79	84	84	88	78
		Women	35	47	m	64	67	73	78	81	66
Other G20	Argentina		m	m	m	m	m	m	m	m	m
	Brazil	Men	83	87	x(5)	x(5)	89	a	x(8)	92	86
		Women	48	57	x(5)	x(5)	54	a	x(8)	81	55
	China		m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m
	Russian Federation	Men	33	60	x(4)	82	76	x(4)	86	90	82
		Women	c	43	x(4)	71	60	x(4)	75	83	72
	Saudi Arabia		m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes (*www.oecd.org/edu/eag htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888932848571

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Table A5.2a. Unemployment rates among 25-64 year-olds, by educational attainment (2011)

Number of unemployed 25-64 year-olds as a percentage of all 25-64 year-olds in the labour force

		Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A and advanced research programmes	All levels of education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	8.2	5.3	a	3.3	4.1	4.3	3.1	2.7	3.8
	Austria	x(2)	7.6	c	3.3	4.4	2.3	1.1 r	2.9	3.5
	Belgium	15.0	10.5	a	6.4	5.7	3.5 r	2.8	4.0	6.1
	Canada	14.6	10.9	a	x(5)	7.1	6.6	5.3	4.7	6.3
	Chile	4.3	4.5	a	x(5)	5.0	a	4.7	5.9	5.0
	Czech Republic	c	21.4	a	7.1	4.2	x(8)	x(8)	2.6	5.9
	Denmark	c	9.0	c	5.9	6.3	c	7.0	4.7	6.2
	Estonia	c	25.5	a	13.3	11.8	9.4	9.3	7.3	11.6
	Finland	10.0	11.9	a	a	7.0	c	3.6	4.1	6.2
	France	14.1	12.4	a	7.6	6.9	6.7	4.2	5.3	7.8
	Germany	17.8	12.9	a	6.1	7.4	3.9	2.3	2.6	5.7
	Greece	16.6	17.9	x(4)	19.4	16.4	19.6	16.2	11.4	16.0
	Hungary	50.0	22.1	a	11.5	7.7	8.8	c	3.8	9.9
	Iceland	7.8	c	a	4.7	7.6	c	c	4.9	5.6
	Ireland	23.4	21.0	c	x(5)	13.4	17.7	8.8	6.1	12.9
	Israel	8.0	6.7	a	6.2	5.7	a	4.3	3.7	5.0
	Italy	12.4	8.8	12.5	5.9	5.9	9.2	7.0	5.1	7.0
	Japan	x(5)	x(5)	x(5)	x(5)	5.3	a	3.9	3.0	4.4
	Korea	2.2	3.0	a	x(5)	3.4	a	3.8	2.6	3.1
	Luxembourg	6.5 r	6.3 r	c	4.2 r	3.7 r	c	2.7 r	3.9	4.1
	Mexico	3.9	4.1	a	3.5	4.8	a	2.7	4.9	4.3
	Netherlands	5.0	4.2	x(4)	4.3	3.0	0.0	0.0	2.7	3.2
	New Zealand	x(2)	7.5	4.2	6.1	3.4	3.3	4.9	2.7	4.5
	Norway	c	5.0	a	1.7	3.5	c	c	1.5	2.3
	Poland	x(2)	16.9	a	10.0	7.7	8.0	x(8)	4.5	8.1
	Portugal	13.0	13.9	x(5)	x(5)	10.9	c	x(8)	8.0	11.8
	Slovak Republic	2.5	38.5	x(4)	15.3	8.4	a	c	5.2	11.8
	Slovenia	25.8 r	11.9	a	9.1	7.5	a	4.8	4.7	7.6
	Spain	30.6	24.5	a	19.2	19.3	c	14.6	10.4	19.5
	Sweden	18.7	8.2	a	x(5)	5.1	5.4	4.8	3.5	5.3
	Switzerland	8.2	7.5	7.0 r	3.2	4.9	2.6	1.7	3.0	3.5
	Turkey	8.1	9.8	a	8.1	9.6	x(8)	x(8)	7.6	8.4
	United Kingdom	c	14.6	9.0	6.2	4.6	c	3.7	3.9	6.0
	United States	13.2	17.9	x(5)	x(5)	10.2	x(5)	6.5	4.4	8.3
	OECD average	13.6	12.6	m	7.7	7.1	6.9	5.1	4.7	7.1
	EU21 average	17.4	15.2	m	9.1	8.0	7.9	5.8	5.1	8.4
Other G20	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	4.2	5.5	x(5)	m	6.1	a	x(8)	2.9	4.8
	China	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m
	Russian Federation	c	14.0	x(4)	6.1	8.5	x(4)	4.4	2.9	5.5
	Saudi Arabia	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Table A5.2b. [1/2] Unemployment rates among 25-64 year-olds, by educational attainment and gender (2011)

Number of unemployed 25-64 year-olds as a percentage of all 25-64 year-olds in the labour force

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A and advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	Men	7.8	5.3	a	2.3	3.9	3.9[r]	2.5	2.4	3.5
		Women	9.0	5.3	a	6.0	4.4	4.6	3.6	2.9	4.2
	Austria	Men	x(2)	8.8	c	3.2	4.6[r]	2.4[r]	c	2.5	3.5
		Women	x(2)	6.6	c	3.4	4.1[r]	2.3[r]	c	3.4	3.6
	Belgium	Men	16.2	9.8	a	5.7	4.8	c	3.2	3.7	6.1
		Women	13.2	11.6	a	7.2	6.8	c	2.5	4.4	6.1
	Canada	Men	13.5	10.5	a	x(5)	7.3	6.8	5.1	4.8	6.5
		Women	16.8	11.4	a	x(5)	6.7	6.0	5.4	4.7	6.0
	Chile	Men	3.8	3.0	a	x(5)	4.0	a	3.8	5.2	4.0
		Women	5.2	6.8	a	x(5)	6.4	a	5.7	6.8	6.3
	Czech Republic	Men	c	23.5	a	5.5	3.1	x(8)	x(8)	2.4	4.9
		Women	c	20.0	a	10.2	5.1	x(8)	x(8)	2.9	7.3
	Denmark	Men	c	9.0	c	6.0	5.8	n	6.5	4.3	6.2
		Women	c	9.0	c	5.8	6.9	c	7.6	5.0	6.2
	Estonia	Men	c	27.0	a	11.6	11.4	9.7[r]	7.6[r]	6.6	12.0
		Women	c	22.7	a	16.6	12.2	9.2	10.0	7.7	11.2
	Finland	Men	9.9	11.9	a	a	7.4	c	4.8	4.1	6.8
		Women	10.0[r]	12.0	a	a	6.5	c	2.9	4.2	5.5
	France	Men	14.4	11.7	a	6.5	6.8	c	4.3	4.9	7.4
		Women	13.8	13.2	a	9.1	6.9	c	4.2	5.7	8.3
	Germany	Men	18.1	14.9	a	6.4	7.3	4.4	2.1	2.4	5.9
		Women	17.4	11.0	a	5.7	7.7	3.5	2.4	2.9	5.4
	Greece	Men	16.8	15.9	x(4)	15.3	13.0	14.5	12.9	8.9	13.7
		Women	16.4	22.0	x(4)	34.8	20.3	24.7	20.3	14.0	19.3
	Hungary	Men	43.5	22.0	a	11.2	6.8	7.1	c	3.8	9.8
		Women	56.0	22.2	a	12.1	8.5	10.8	c	3.9	10.0
	Iceland	Men	7.9	c	c	c	c	c	c	5.5	5.9
		Women	7.6	c	c	c	c	c	c	4.5	5.3
	Ireland	Men	27.2	24.2	23.6	x(5)	15.6	21.5	10.3	6.6	16.0
		Women	14.8	14.0	c	x(5)	10.6	12.2	7.5	5.6	9.2
	Israel	Men	8.7	7.1	a	5.7	5.6	a	3.8	3.5	5.0
		Women	6.2	5.7	a	7.0	5.7	a	4.7	3.9	4.9
	Italy	Men	12.0	7.8	12.0	5.1	5.0	8.8	8.7	3.8	6.3
		Women	13.3	10.9	12.9	7.0	7.1	9.4	5.5	6.3	8.1
	Japan	Men	x(5)	x(5)	x(5)	x(5)	5.8	a	4.1	3.1	4.6
		Women	x(5)	x(5)	x(5)	x(5)	4.7	a	3.8	2.9	4.1
	Korea	Men	3.2	3.9	a	x(5)	3.7	a	3.6	2.6	3.3
		Women	1.4	2.0	a	x(5)	2.9	a	4.0	2.5	2.7
	Luxembourg	Men	5.5[r]	c	c	2.6[r]	3.8[r]	c	c	3.2	3.3
		Women	7.6[r]	8.6[r]	c	6.9[r]	3.6[r]	c	3.5[r]	5.0	5.2
	Mexico	Men	4.4	3.9	a	3.4	4.5	a	4.0	4.8	4.3
		Women	3.2	4.4	a	3.6	5.3	a	1.8	5.2	4.2
	Netherlands	Men	6.6	3.9	x(4)	4.5	3.3	c	c	2.9	3.5
		Women	2.6	4.5	x(4)	4.0	2.7	c	c	2.5	3.0
	New Zealand	Men	x(2)	7.3	3.5	5.4	3.2	3.0	4.2	2.4	4.1
		Women	x(2)	7.6	4.9	6.7	3.6	4.7	5.4	3.0	5.0
	Norway	Men	c	5.5	a	1.7	c	c	c	1.5	2.5
		Women	c	4.4	a	c	c	c	c	1.5	2.2

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

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Table A5.2b. [2/2] Unemployment rates among 25-64 year-olds, by educational attainment and gender (2011)

Number of unemployed 25-64 year-olds as a percentage of all 25-64 year-olds in the labour force

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A and advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Poland	Men	x(2)	16.3	a	9.0	6.3	5.4[r]	x(8)	3.9	7.5
		Women	x(2)	17.8	a	12.1	9.3	9.2	x(8)	5.0	8.8
	Portugal	Men	13.3	11.9	x(5)	x(5)	10.1	c	x(8)	9.1	11.7
		Women	12.6	16.2	x(5)	x(5)	11.6	c	x(8)	7.3	11.9
	Slovak Republic	Men	c	42.9	x(4)	13.9	8.0	a	c	4.6	11.5
		Women	c	34.4	x(4)	17.8	8.9	a	c	5.8	12.1
	Slovenia	Men	28.0[r]	12.6	a	8.2	7.1	a	5.7[r]	4.1	7.6
		Women	c	11.1	a	11.0	7.9	a	4.1[r]	5.0	7.6
	Spain	Men	30.7	23.1	a	17.1	17.9	c	12.5	9.7	18.9
		Women	30.4	26.5	a	21.6	20.9	c	17.5	11.0	20.1
	Sweden	Men	15.9	7.3	a	x(5)	5.0	4.8	5.6	3.7	5.3
		Women	23.0	9.7	a	x(5)	5.3	6.3	4.2	3.4	5.3
	Switzerland	Men	7.3[r]	7.1	9.3[r]	3.3	2.1[r]	1.3[r]	2.5[r]	2.5	3.2
		Women	9.0	7.9	6.1[r]	3.0	3.2	2.6[r]	3.7[r]	3.7	3.9
	Turkey	Men	8.6	8.9	a	6.1	7.2	x(8)	x(8)	5.9	7.8
		Women	6.8	15.7	a	16.3	18.2	x(8)	x(8)	10.9	10.0
	United Kingdom	Men	c	15.1	10.4	6.1	4.5	c	4.3	3.9	6.2
		Women	c	13.9	7.5	6.3	4.7	c	3.2	4.0	5.7
	United States	Men	12.6	19.1	x(5)	x(5)	11.3	x(5)	6.9	4.6	9.2
		Women	14.2	15.7	x(5)	x(5)	8.8	x(5)	6.1	4.3	7.2
	OECD average	Men	14.0	13.0	m	6.9	6.8	6.7	5.6	4.3	7.0
		Women	13.5	12.6	m	10.2	7.7	8.1	5.8	5.0	7.2
	EU21 average	Men	17.7	15.6	m	7.9	7.3	7.3	6.5	4.6	8.1
		Women	17.2	14.8	m	10.8	8.2	9.0	6.6	5.4	8.4
Other G20	Argentina		m	m	m	m	m	m	m	m	m
	Brazil	Men	3.0	3.6	x(5)	x(5)	3.5	a	x(8)	2.0	3.1
		Women	6.1	8.1	x(5)	x(5)	9.6	a	x(8)	3.7	7.1
	China		m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m
	Russian Federation	Men	c	14.4	x(4)	6.1	8.4	x(4)	4.5	3.1	5.9
		Women	c	13.4	x(4)	6.2	8.6	x(4)	4.3	2.8	5.2
	Saudi Arabia		m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Table A5.3a. [1/2] Employment rates, by educational attainment and age group (2000, 2005, 2008 and 2011)

Number of employed 25-64 year-olds/25-34 year-olds/55-64 year-olds as a percentage of all 25-64 year-olds/25-34 year-olds/55-64 year-olds

			25-64 year-olds					25-34 year-olds					55-64 year-olds				
		Educational attainment	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	Below upper secondary	61	63	62	66	**4.3**	64	64	64	65	**0.8**	39	46	41	55	**14.1**
		Upper secondary or post-secondary non-tertiary	77	80	81	81	**-0.1**	80	81	82	82	**-0.6**	53	62	64	71	**6.6**
		Tertiary education	83	84	83	84	**1.0**	84	85	86	85	**-0.9**	65	69	67	74	**6.7**
	Austria	Below upper secondary	54	53	57	56	**-0.8**	70	61	62	64	**2.0**	19	24	31	30	**-0.8**
		Upper secondary or post-secondary non-tertiary	75	74	78	78	**-0.2**	84	84	85	85	**0.0**	29	31	41	41	**-0.1**
		Tertiary education	87	85	86	87	**0.1**	92	87	90	88	**-1.8**	59	54	61	64	**3.2**
	Belgium	Below upper secondary	51	49	49	48	**-1.7**	64	57	59	55	**-4.5**	19	21	24	27	**3.3**
		Upper secondary or post-secondary non-tertiary	75	74	75	74	**-0.7**	84	81	83	79	**-3.4**	31	38	39	42	**3.2**
		Tertiary education	85	84	85	84	**-0.5**	92	90	91	89	**-1.9**	46	49	52	56	**3.3**
	Canada	Below upper secondary	55	56	58	55	**-2.7**	60	62	61	59	**-1.7**	37	41	44	43	**-1.2**
		Upper secondary or post-secondary non-tertiary	76	76	76	74	**-2.2**	79	80	80	78	**-2.7**	52	57	58	59	**0.7**
		Tertiary education	83	82	83	82	**-0.9**	86	85	85	84	**-1.5**	57	62	64	65	**1.1**
	Chile	Below upper secondary	m	m	59	63	**4.5**	m	m	59	62	**3.4**	m	m	51	55	**3.8**
		Upper secondary or post-secondary non-tertiary	m	m	70	73	**2.7**	m	m	71	75	**4.4**	m	m	59	61	**2.5**
		Tertiary education	m	m	79	79	**-0.1**	m	m	75	76	**1.6**	m	m	76	70	**-5.7**
	Czech Republic	Below upper secondary	47	41	47	42	**-4.3**	51	43	50	46	**-3.5**	17	20	28	25	**-2.3**
		Upper secondary or post-secondary non-tertiary	76	75	77	75	**-1.3**	77	78	79	78	**-0.7**	39	47	48	48	**-0.4**
		Tertiary education	87	86	85	83	**-2.0**	83	81	79	76	**-3.5**	66	69	73	73	**-0.5**
	Denmark[1]	Below upper secondary	62	62	68	63	**-5.7**	70	64	75	62	**-13.8**	41	42	45	47	**2.7**
		Upper secondary or post-secondary non-tertiary	81	80	83	79	**-3.7**	85	83	88	80	**-7.7**	57	61	61	61	**0.1**
		Tertiary education	88	86	88	86	**-2.7**	88	87	90	85	**-4.9**	73	73	73	72	**-1.3**
	Estonia[1]	Below upper secondary	42	50	58	48	**-10.0**	53	60	72	58	**-13.3**	24	36	38	31	**-7.9**
		Upper secondary or post-secondary non-tertiary	70	74	80	74	**-5.7**	74	77	84	76	**-8.1**	46	53	61	57	**-3.8**
		Tertiary education	83	84	86	80	**-5.8**	85	84	82	79	**-3.2**	62	74	78	67	**-10.6**
	Finland	Below upper secondary	60	58	59	56	**-3.7**	69	63	69	56	**-12.6**	33	43	45	44	**-1.1**
		Upper secondary or post-secondary non-tertiary	75	75	77	75	**-2.5**	76	77	79	78	**-1.6**	42	53	57	56	**-0.7**
		Tertiary education	84	84	86	84	**-1.3**	84	86	87	83	**-4.0**	60	66	70	70	**0.4**
	France	Below upper secondary	56	59	57	56	**-1.7**	61	63	62	56	**-5.9**	24	32	30	34	**3.8**
		Upper secondary or post-secondary non-tertiary	75	76	76	74	**-2.1**	80	80	82	78	**-3.8**	31	40	39	42	**3.2**
		Tertiary education	83	83	85	84	**-0.7**	85	86	89	87	**-1.9**	50	56	57	57	**0.0**
	Germany	Below upper secondary	51	52	55	57	**1.3**	60	52	55	56	**0.8**	26	32	38	42	**3.9**
		Upper secondary or post-secondary non-tertiary	70	71	75	78	**2.3**	79	74	78	80	**2.7**	37	43	52	58	**5.7**
		Tertiary education	83	83	86	88	**2.0**	89	85	88	89	**1.3**	58	63	69	75	**6.2**
	Greece	Below upper secondary	58	59	60	53	**-7.7**	67	72	72	57	**-14.4**	39	39	40	37	**-3.2**
		Upper secondary or post-secondary non-tertiary	65	69	70	63	**-7.2**	69	73	75	65	**-10.2**	31	38	38	36	**-2.5**
		Tertiary education	81	82	83	75	**-7.8**	79	79	80	69	**-11.3**	50	59	60	52	**-7.7**
	Hungary	Below upper secondary	36	38	39	38	**-0.9**	50	49	47	41	**-5.7**	12	16	17	21	**4.3**
		Upper secondary or post-secondary non-tertiary	72	70	69	66	**-2.4**	75	75	75	72	**-2.8**	29	39	34	36	**2.3**
		Tertiary education	82	83	80	79	**-0.6**	83	83	82	80	**-2.8**	52	60	49	56	**6.7**
	Iceland	Below upper secondary	89	83	83	74	**-8.7**	89	81	83	72	**-10.5**	83	82	79	71	**-8.5**
		Upper secondary or post-secondary non-tertiary	89	88	86	83	**-2.9**	82	81	80	74	**-6.1**	89	86	84	84	**-0.5**
		Tertiary education	97	92	91	89	**-2.2**	96	92	89	85	**-3.4**	92	89	89	85	**-3.8**
	Ireland	Below upper secondary	56	58	57	46	**-11.1**	68	64	57	41	**-16.7**	39	45	46	40	**-6.5**
		Upper secondary or post-secondary non-tertiary	77	77	76	65	**-10.4**	85	83	79	65	**-14.5**	48	56	59	55	**-3.9**
		Tertiary education	88	87	85	81	**-4.4**	91	89	88	82	**-5.4**	67	70	68	65	**-3.1**
	Israel	Below upper secondary	m	41	45	46	**0.8**	m	43	47	46	**-0.8**	m	32	37	41	**3.7**
		Upper secondary or post-secondary non-tertiary	m	67	70	71	**0.9**	m	65	68	68	**-0.6**	m	52	58	63	**4.3**
		Tertiary education	m	80	83	83	**0.0**	m	80	84	82	**-2.3**	m	68	71	72	**0.4**
	Italy	Below upper secondary	49	52	52	51	**-1.7**	60	65	63	58	**-5.7**	23	24	25	27	**1.7**
		Upper secondary or post-secondary non-tertiary	71	74	74	72	**-2.4**	68	72	74	69	**-5.1**	40	44	46	49	**3.4**
		Tertiary education	82	80	81	79	**-1.6**	73	69	72	68	**-4.1**	58	67	66	67	**1.9**
	Japan	Below upper secondary	67	m	m	m	**m**	70	m	m	m	**m**	59	m	m	m	**m**
		Upper secondary or post-secondary non-tertiary	74	72	74	73	**-1.6**	74	76	77	75	**-2.0**	61	62	65	63	**-2.4**
		Tertiary education	79	79	80	80	**-0.2**	78	78	80	81	**1.3**	72	72	72	69	**-2.7**
	Korea	Below upper secondary	68	66	66	65	**-0.9**	65	62	63	58	**-4.5**	59	58	60	60	**0.5**
		Upper secondary or post-secondary non-tertiary	69	70	71	71	**0.1**	64	64	63	63	**0.2**	53	59	62	64	**2.4**
		Tertiary education	75	77	77	77	**-0.2**	74	74	74	75	**0.3**	57	61	63	66	**2.9**
	Luxembourg	Below upper secondary	58	62	61	62	**0.9**	78	79	75	77	**2.1**	15	22	23	25	**2.1**
		Upper secondary or post-secondary non-tertiary	73	72	71	70	**-0.4**	85	82	78	81	**2.5**	32	30	32	34	**2.0**
		Tertiary education	84	84	85	85	**0.3**	83	87	85	89	**3.4**	65	60	63	62	**-1.0**

1. Figures for 2011 for Denmark, Estonia and the Netherlands in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Estonia, Finland, France (for 2000 only), Iceland, Ireland, Italy (for 2000 only), Luxembourg, the Netherlands and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Table A5.3a. [2/2] Employment rates, by educational attainment and age group (2000, 2005, 2008 and 2011)

Number of employed 25-64 year-olds/25-34 year-olds/55-64 year-olds as a percentage of all 25-64 year-olds/25-34 year-olds/55-64 year-olds

			25-64 year-olds					25-34 year-olds					55-64 year-olds				
		Educational attainment	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Mexico	Below upper secondary	61	62	64	62	**-1.1**	63	63	64	63	**-1.1**	51	52	53	52	**-0.9**
		Upper secondary or post-secondary non-tertiary	71	71	73	71	**-1.7**	71	71	73	72	**-0.4**	48	46	53	51	**-2.3**
		Tertiary education	82	82	83	79	**-3.5**	80	79	82	78	**-3.9**	68	68	69	63	**-6.2**
	Netherlands[1]	Below upper secondary	58	60	64	62	**-1.6**	73	70	75	71	**-4.1**	27	35	41	44	**3.7**
		Upper secondary or post-secondary non-tertiary	79	78	81	80	**-1.4**	88	86	90	86	**-4.1**	43	49	55	59	**3.7**
		Tertiary education	86	86	88	87	**-0.9**	94	92	94	92	**-2.4**	54	62	68	71	**2.6**
	New Zealand	Below upper secondary	65	70	71	68	**-2.5**	63	68	68	62	**-6.0**	49	61	61	64	**2.4**
		Upper secondary or post-secondary non-tertiary	80	84	83	82	**-1.3**	78	82	81	78	**-2.5**	65	75	77	79	**1.7**
		Tertiary education	82	84	85	84	**-0.2**	82	81	83	83	**-0.4**	67	78	80	82	**1.8**
	Norway	Below upper secondary	65	64	66	68	**1.9**	67	66	70	69	**-0.5**	53	48	49	55	**5.3**
		Upper secondary or post-secondary non-tertiary	83	82	84	82	**-2.8**	84	84	89	83	**-5.4**	68	70	70	68	**-1.4**
		Tertiary education	90	89	91	90	**-0.1**	87	86	89	89	**-0.3**	86	85	83	85	**1.2**
	Poland	Below upper secondary	43	38	43	40	**-3.2**	50	45	55	49	**-6.2**	24	21	23	23	**-0.1**
		Upper secondary or post-secondary non-tertiary	67	62	67	66	**-1.1**	71	68	76	73	**-3.3**	28	28	30	37	**6.4**
		Tertiary education	85	83	85	85	**-0.4**	87	83	88	85	**-2.3**	51	55	54	59	**4.2**
	Portugal	Below upper secondary	73	71	72	66	**-5.8**	83	81	81	74	**-6.8**	50	50	50	46	**-3.8**
		Upper secondary or post-secondary non-tertiary	83	79	81	79	**-1.1**	83	78	80	80	**-0.3**	51	48	51	52	**1.5**
		Tertiary education	91	87	87	83	**-3.4**	91	87	87	82	**-4.7**	69	61	62	59	**-3.1**
	Slovak Republic	Below upper secondary	31	26	32	30	**-2.1**	29	16	30	27	**-2.3**	7	9	18	21	**2.5**
		Upper secondary or post-secondary non-tertiary	71	71	75	70	**-4.6**	72	73	78	71	**-6.6**	27	34	41	41	**0.3**
		Tertiary education	86	84	86	82	**-3.9**	83	84	82	77	**-5.4**	54	54	66	66	**0.2**
	Slovenia	Below upper secondary	53	56	55	47	**-8.3**	75	70	70	64	**-6.4**	20	27	26	24	**-2.2**
		Upper secondary or post-secondary non-tertiary	74	75	76	71	**-5.9**	86	84	87	79	**-7.9**	18	27	30	28	**-2.0**
		Tertiary education	86	87	88	86	**-1.4**	92	91	91	89	**-2.5**	48	51	54	54	**-0.1**
	Spain	Below upper secondary	54	59	59	52	**-7.0**	65	71	69	57	**-11.7**	33	38	39	37	**-2.2**
		Upper secondary or post-secondary non-tertiary	72	75	75	67	**-7.7**	73	77	78	66	**-11.2**	51	51	53	52	**-1.5**
		Tertiary education	80	82	84	79	**-4.8**	75	81	84	76	**-7.2**	64	65	67	64	**-2.6**
	Sweden	Below upper secondary	68	66	66	65	**-1.0**	67	65	65	60	**-4.8**	56	59	60	61	**1.2**
		Upper secondary or post-secondary non-tertiary	82	81	83	84	**0.3**	83	81	84	83	**-1.3**	66	69	70	72	**2.3**
		Tertiary education	87	87	89	89	**-0.5**	82	84	88	86	**-1.8**	79	83	82	82	**0.5**
	Switzerland	Below upper secondary	64	65	68	68	**0.8**	68	68	71	70	**-0.6**	47	51	53	54	**1.3**
		Upper secondary or post-secondary non-tertiary	81	80	82	83	**0.5**	84	83	85	86	**1.2**	66	65	68	69	**1.5**
		Tertiary education	90	90	90	89	**-1.7**	91	91	92	88	**-4.2**	78	79	80	82	**1.7**
	Turkey	Below upper secondary	53	47	47	51	**4.0**	55	49	49	53	**4.1**	38	30	29	33	**3.7**
		Upper secondary or post-secondary non-tertiary	64	62	61	62	**1.0**	67	64	65	66	**0.5**	20	24	21	27	**6.0**
		Tertiary education	78	75	75	76	**1.5**	83	79	79	77	**-1.6**	37	34	36	40	**3.7**
	United Kingdom	Below upper secondary	65	65	59	56	**-3.3**	66	64	60	56	**-4.4**	51	56	45	42	**-3.2**
		Upper secondary or post-secondary non-tertiary	81	82	80	78	**-1.9**	83	81	81	78	**-3.2**	65	69	65	64	**-1.2**
		Tertiary education	88	88	85	83	**-1.8**	91	90	88	86	**-2.2**	67	72	67	64	**-3.0**
	United States	Below upper secondary	58	57	56	51	**-5.1**	64	62	60	54	**-6.2**	40	39	41	39	**-1.6**
		Upper secondary or post-secondary non-tertiary	77	73	73	67	**-5.7**	80	74	75	67	**-7.1**	58	58	60	56	**-3.4**
		Tertiary education	85	82	83	80	**-3.2**	87	83	86	82	**-3.5**	70	72	73	70	**-2.8**
	OECD average	Below upper secondary	57	57	58	55	**-2.6**	64	61	63	58	**-4.9**	36	38	40	41	**0.6**
		Upper secondary or post-secondary non-tertiary	75	75	76	74	**-2.2**	78	77	79	76	**-3.3**	46	50	53	54	**1.0**
		Tertiary education	85	84	84	83	**-1.5**	85	84	85	82	**-2.6**	63	66	67	67	**-0.2**
	OECD average for countries with data available for all reference years	Below upper secondary	57	57	58	56		64	62	64	58		35	39	40	40	
		Upper secondary or post-secondary non-tertiary	75	75	76	74		78	78	80	76		46	50	52	53	
		Tertiary education	85	84	85	83		86	85	85	83		62	65	67	67	
	EU21 average	Below upper secondary	53	54	56	52	**-3.8**	63	61	63	56	**-6.6**	29	33	35	35	**-0.2**
		Upper secondary or post-secondary non-tertiary	74	74	76	73	**-2.9**	79	78	81	76	**-4.3**	40	45	48	49	**0.9**
		Tertiary education	85	85	85	83	**-2.0**	86	85	86	83	**-3.3**	60	63	65	65	**-0.2**
Other G20	Argentina		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	Brazil	Below upper secondary	m	m	69	67	**-2.3**	m	m	73	71	**-2.0**	m	m	54	51	**-3.1**
		Upper secondary or post-secondary non-tertiary	m	m	78	70	**-7.6**	m	m	80	64	**-16.0**	m	m	54	53	**-0.9**
		Tertiary education	m	m	86	85	**-0.7**	m	m	89	88	**-1.1**	m	m	65	65	**-0.5**
	China		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	India		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	Indonesia		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	Russian Federation	Below upper secondary	m	m	m	49	**m**	m	m	m	57	**m**	m	m	m	28	**m**
		Upper secondary or post-secondary non-tertiary	m	m	m	73	**m**	m	m	m	79	**m**	m	m	m	44	**m**
		Tertiary education	m	m	m	83	**m**	m	m	m	88	**m**	m	m	m	54	**m**
	Saudi Arabia		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	South Africa		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	G20 average		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**

1. Figures for 2011 for Denmark, Estonia and the Netherlands in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Estonia, Finland, France (for 2000 only), Iceland, Ireland, Italy (for 2000 only), Luxembourg, the Netherlands and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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A5

Table A5.4a. [1/2] Unemployment rates, by educational attainment and age group (2000, 2005, 2008 and 2011)

Number of unemployed 25-64 year-olds/25-34 year-olds/55-64 year-olds as a percentage of all 25-64 year-olds/25-34 year-olds/55-64 year-olds in the labour force

			25-64 year-olds					25-34 year-olds					55-64 year-olds				
		Educational attainment	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	Below upper secondary	7.5	6.3	5.5	5.9	**0.4**	11.4	12.3	8.5	9.5	**1.0**	4.9	3.7	3.2	3.6	**0.5**
		Upper secondary or post-secondary non-tertiary	4.5	3.4	2.7	3.8	**1.1**	5.3	4.0	3.3	4.1	**0.7**	4.1	3.4	2.5	3.2	**0.7**
		Tertiary education	3.6	2.5	2.2	2.8	**0.6**	3.8	2.8	2.2	3.4	**1.2**	3.5[r]	2.6[r]	2.1[r]	2.6	**0.4**
	Austria	Below upper secondary	6.2	8.6	6.3	7.1	**0.8**	8.1	14.9	13.4	10.1	**-3.3**	c	c	c	4.7[r]	**m**
		Upper secondary or post-secondary non-tertiary	2.9	3.9	2.9	3.2	**0.3**	2.7	4.5	3.4	4.2	**0.7**	6.0	3.8	2.4[r]	3.5	**1.0**
		Tertiary education	1.5	2.6	1.7	2.3	**0.6**	c	3.9	2.1[r]	3.3	**1.2**	c	c	c	c	**m**
	Belgium	Below upper secondary	9.8	12.4	10.8	12.1	**1.2**	17.5	23.0	20.0	21.4	**1.4**	3.8[r]	6.1[r]	6.2[r]	6.3	**0.2**
		Upper secondary or post-secondary non-tertiary	5.3	6.9	5.7	5.7	**-0.1**	6.7	9.4	8.1	9.0	**0.9**	3.5[r]	4.1[r]	3.9[r]	3.6[r]	**-0.3**
		Tertiary education	2.7	3.7	3.2	3.4	**0.2**	3.3	4.9	4.3	4.4	**0.1**	c	c	c	c	**m**
	Canada	Below upper secondary	10.2	9.7	9.1	11.7	**2.6**	15.0	13.3	12.9	15.5	**2.6**	7.2	7.9	7.2	11.0	**3.8**
		Upper secondary or post-secondary non-tertiary	5.9	5.9	5.4	6.9	**1.5**	6.8	6.7	6.2	8.1	**2.0**	5.5	5.3	5.8	6.8	**0.9**
		Tertiary education	4.1	4.6	4.1	5.0	**0.9**	4.5	5.2	4.3	5.4	**1.1**	4.0	4.2	4.4	5.4	**0.9**
	Chile	Below upper secondary	m	m	5.2	4.4	**-0.8**	m	m	9.6	6.0	**-3.6**	m	m	3.4	3.6	**0.2**
		Upper secondary or post-secondary non-tertiary	m	m	6.6	5.0	**-1.6**	m	m	9.4	7.0	**-2.4**	m	m	5.2	4.0	**-1.1**
		Tertiary education	m	m	5.5	5.4	**-0.1**	m	m	8.7	8.2	**-0.6**	m	m	2.6	2.6	**0.0**
	Czech Republic	Below upper secondary	19.3	24.4	17.3	21.6	**4.3**	28.3	35.5	23.9	29.9	**6.0**	8.1	13.7	10.6	13.6	**3.0**
		Upper secondary or post-secondary non-tertiary	6.7	6.2	3.3	5.7	**2.4**	8.7	7.0	3.7	6.5	**2.8**	5.3	4.9	3.6	5.8	**2.2**
		Tertiary education	2.5	2.0	1.5	2.6	**1.1**	3.4	2.4	2.5	3.6	**1.1**	2.2	c	c	2.4	**m**
	Denmark[1]	Below upper secondary	6.3	6.5	3.6	8.9	**5.3**	10.6	9.7	6.2	15.0	**8.9**	3.1[r]	6.5	3.3	6.7	**3.5**
		Upper secondary or post-secondary non-tertiary	3.9	4.0	2.3	6.0	**3.7**	3.9	4.3	2.6	9.0	**6.4**	4.9	5.7	2.6	6.6	**4.0**
		Tertiary education	2.6	3.7	2.2	5.0	**2.8**	4.2	5.0	3.1	7.4	**4.3**	2.9[r]	3.6	2.0[r]	3.7	**1.7**
	Estonia[1]	Below upper secondary	21.8	13.0	9.7	26.4	**16.7**	29.0	17.0	9.1	26.8	**17.6**	23.4	c	c	16.9[r]	**m**
		Upper secondary or post-secondary non-tertiary	14.5	8.4	5.2	11.9	**6.6**	15.4	7.2	5.0	13.3	**8.3**	3.9	5.9	4.3[r]	10.9	**6.7**
		Tertiary education	4.6	3.8	2.8	7.9	**5.1**	4.1	3.1[r]	2.6[r]	7.6	**5.0**	3.7	c	c	11.4	**m**
	Finland	Below upper secondary	11.9	10.7	8.1	11.3	**3.3**	16.4	17.4	11.5	18.1	**6.6**	11.5	9.0	7.2	8.6	**1.4**
		Upper secondary or post-secondary non-tertiary	8.8	7.4	5.4	6.9	**1.5**	10.4	8.0	6.5	7.6	**1.2**	9.7	7.0	5.7	7.5	**1.8**
		Tertiary education	4.9	4.4	3.3	4.0	**0.7**	6.7	4.8	3.7	5.3	**1.6**	6.5	4.6	3.6	4.0	**0.4**
	France	Below upper secondary	13.8	11.1	9.7	12.9	**3.2**	21.7	18.8	16.9	23.3	**6.4**	8.5	6.3	5.8	8.7	**2.9**
		Upper secondary or post-secondary non-tertiary	8.0	6.6	5.5	7.4	**1.8**	10.3	9.3	8.3	11.4	**3.1**	7.7	4.6	4.2	6.0	**1.8**
		Tertiary education	5.1	5.4	4.0	4.9	**0.8**	6.6	6.4	4.5	6.1	**1.6**	4.3	4.3	3.5	4.3	**0.8**
	Germany	Below upper secondary	13.7	20.2	16.5	13.9	**-2.6**	14.6	25.6	21.6	19.6	**-2.1**	15.8	18.3	14.7	11.8	**-3.0**
		Upper secondary or post-secondary non-tertiary	7.8	11.0	7.2	5.8	**-1.4**	6.2	10.9	7.3	6.1	**-1.2**	13.7	13.9	8.9	7.1	**-1.7**
		Tertiary education	4.0	5.6	3.3	2.4	**-0.9**	2.7	5.9	3.6	2.7	**-0.9**	7.5	7.8	4.9	3.4	**-1.5**
	Greece	Below upper secondary	8.2	8.3	6.8	17.1	**10.3**	14.0	11.1	10.0	25.1	**15.0**	4.0	4.5	4.0	9.7	**5.6**
		Upper secondary or post-secondary non-tertiary	11.2	9.6	7.2	17.6	**10.4**	15.6	13.1	10.4	23.4	**13.0**	5.0	c	c	10.4	**m**
		Tertiary education	7.5	7.1	5.7	12.8	**7.1**	13.7	13.3	12.0	25.6	**13.6**	c	c	c	c	**m**
	Hungary	Below upper secondary	9.9	12.4	17.3	23.1	**5.8**	14.1	16.7	22.4	28.5	**6.2**	3.9	6.4	10.4	16.2	**5.8**
		Upper secondary or post-secondary non-tertiary	5.3	6.0	6.3	9.6	**3.2**	6.8	7.3	7.7	10.9	**3.2**	3.6	4.0	5.1	8.7	**3.6**
		Tertiary education	1.3	2.3	2.3	3.9	**1.6**	1.6	3.1	3.2	5.4	**2.2**	c	c	c	3.7	**m**
	Iceland	Below upper secondary	2.0	2.3	2.5	7.3	**4.8**	c	c	c	11.6	**m**	c	c	c	c	**m**
		Upper secondary or post-secondary non-tertiary	c	c	c	5.4	**m**	c	c	c	9.1	**m**	c	c	c	c	**m**
		Tertiary education	c	c	c	4.5	**m**	c	c	c	c	**m**	n	c	c	c	**m**
	Ireland	Below upper secondary	7.1	6.0	8.2	21.7	**13.5**	9.8	10.4	15.5	37.0	**21.5**	3.0	3.1	4.1	12.4	**8.3**
		Upper secondary or post-secondary non-tertiary	2.6	3.1	4.8	15.0	**10.2**	2.7	3.7	6.4	20.6	**14.2**	c	c	c	9.6	**m**
		Tertiary education	1.6	2.0	3.0	7.1	**4.1**	2.0	2.4	3.5	8.7	**5.2**	c	c	c	5.4	**m**
	Israel	Below upper secondary	m	14.0	9.8	7.3	**-2.5**	m	14.2	10.9	10.1	**-0.9**	m	10.3	8.3	5.9	**-2.5**
		Upper secondary or post-secondary non-tertiary	m	9.5	5.8	5.8	**0.0**	m	10.9	6.8	7.7	**0.9**	m	10.0	4.0	4.3	**0.3**
		Tertiary education	m	5.1	3.7	3.9	**0.2**	m	5.7	4.1	5.1	**0.9**	m	5.1	3.4	3.6	**0.3**
	Italy	Below upper secondary	9.8	7.8	7.4	9.4	**1.9**	15.1	11.8	11.3	14.8	**3.6**	5.8	4.8	4.9	6.3	**1.3**
		Upper secondary or post-secondary non-tertiary	7.4	5.2	4.6	6.0	**1.3**	12.3	8.1	7.2	10.2	**2.9**	1.8	2.4	1.8	2.5	**0.7**
		Tertiary education	5.9	5.7	4.3	5.2	**0.9**	15.5	13.8	9.4	11.5	**2.1**	0.7	1.0	0.6	1.1	**0.5**
	Japan	Below upper secondary	6.6	m	m	m	**m**	9.6	m	m	m	**m**	6.5	m	m	m	**m**
		Upper secondary or post-secondary non-tertiary	5.0	5.4	4.7	5.3	**0.7**	6.6	7.0	6.3	7.5	**1.2**	5.5	4.5	3.8	5.5	**1.7**
		Tertiary education	3.1	2.7	2.8	3.4	**0.5**	4.4	4.6	4.2	4.5	**0.2**	4.8	2.4	2.9	3.9	**1.0**
	Korea	Below upper secondary	3.7	2.9	2.5	2.7	**0.2**	7.3	8.1	8.6	7.0	**-1.6**	2.7	2.3	2.0	2.5	**0.4**
		Upper secondary or post-secondary non-tertiary	4.1	3.8	3.3	3.4	**0.0**	5.0	5.7	5.9	6.2	**0.3**	3.7	3.3	1.9	2.9	**1.0**
		Tertiary education	3.6	2.9	2.6	2.9	**0.3**	4.6	4.2	4.0	4.6	**0.6**	3.1	1.8	1.8	1.4	**-0.3**
	Luxembourg	Below upper secondary	3.1	5.1	4.8	6.1	**1.2**	5.4[r]	8.1[r]	8.4[r]	7.4[r]	**-1.0**	c	c	c	c	**m**
		Upper secondary or post-secondary non-tertiary	1.6[r]	3.2	4.9	3.7	**-1.2**	2.2[r]	4.0[r]	8.2	4.5[r]	**-3.7**	c	c	c	c	**m**
		Tertiary education	c	3.2	2.2[r]	3.5	**1.3**	c	2.7[r]	2.4[r]	4.3[r]	**1.9**	c	c	c	c	**m**

1. Figures for 2011 for Denmark, Estonia and the Netherlands in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Estonia, Finland, France (for 2000 only), Iceland, Ireland, Italy (for 2000 only), Luxembourg, the Netherlands and Slovenia. See Annex 3 for notes for notes *(www.oecd.org/edu/eag.htm)*.

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Table A5.4a. [2/2] Unemployment rates, by educational attainment and age group (2000, 2005, 2008 and 2011)

Number of unemployed 25-64 year-olds/25-34 year-olds/55-64 year-olds as a percentage of all 25-64 year-olds/25-34 year-olds/55-64 year-olds in the labour force

			25-64 year-olds					25-34 year-olds					55-64 year-olds				
		Educational attainment	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)	2000	2005	2008	2011	Percentage points change (2011-2008)
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Mexico	Below upper secondary	1.5	2.3	2.4	4.0	**1.6**	1.8	2.8	3.1	5.4	**2.3**	1.2	1.9	1.9	2.9	**1.0**
		Upper secondary or post-secondary non-tertiary	2.2	3.1	2.9	4.4	**1.5**	2.5	4.1	4.4	5.8	**1.4**	2.6	2.4	0.9	3.4	**2.5**
		Tertiary education	2.4	3.7	3.3	4.8	**1.5**	3.5	5.5	5.1	7.2	**2.1**	2.1	3.1	2.3	3.1	**0.7**
	Netherlands[1]	Below upper secondary	3.4	5.8	3.4	5.4	**2.0**	4.5	8.7	4.5	8.1	**3.5**	1.8	4.5	3.6	4.2	**0.6**
		Upper secondary or post-secondary non-tertiary	1.9	4.1	2.1	3.8	**1.7**	1.6	3.9	1.9	4.2	**2.3**	1.9	4.6	3.5	4.6	**1.2**
		Tertiary education	1.7	2.8	1.6	2.8	**1.2**	1.5	2.6	1.2	2.6	**1.4**	1.9	3.1	2.6	3.6	**1.0**
	New Zealand	Below upper secondary	6.6	3.4	3.7	6.5	**2.8**	9.0	5.5	6.6	10.4	**3.7**	5.4	1.8	2.1	3.9	**1.8**
		Upper secondary or post-secondary non-tertiary	3.9	2.3	2.5	4.4	**1.9**	4.7	3.0	3.9	5.8	**1.9**	3.8	1.7	1.8	3.3	**1.5**
		Tertiary education	3.3	2.3	2.4	3.6	**1.2**	3.6	3.3	3.4	4.5	**1.1**	3.9	1.9	2.0	2.8	**0.8**
	Norway[2]	Below upper secondary	2.2	7.4	3.8	5.0	**1.2**	c	14.4	c	9.2	**m**	c	c	c	c	**m**
		Upper secondary or post-secondary non-tertiary	2.6	2.6	1.3	2.2	**0.9**	3.7	4.1	c	3.7	**m**	c	c	c	c	**m**
		Tertiary education	1.9	2.1	1.2	1.5	**0.2**	2.7	3.1	2.2	2.4	**0.2**	c	c	c	c	**m**
	Poland	Below upper secondary	20.6	27.1	11.5	16.9	**5.4**	32.4	38.3	15.4	22.4	**7.0**	7.7	13.6	7.1	11.3	**4.1**
		Upper secondary or post-secondary non-tertiary	13.9	16.6	6.3	8.8	**2.5**	16.8	19.9	7.4	11.5	**4.2**	11.6	13.0	6.0	7.4	**1.5**
		Tertiary education	4.3	6.2	3.1	4.5	**1.4**	7.4	9.8	5.2	7.0	**1.8**	6.7[r]	4.5[r]	c	2.1[r]	**m**
	Portugal	Below upper secondary	3.6	7.5	7.6	13.3	**5.7**	4.2	9.0	9.2	16.1	**6.9**	3.3	6.4	7.1	11.7	**4.6**
		Upper secondary or post-secondary non-tertiary	3.5	6.7	6.6	10.9	**4.3**	3.5	8.3	7.5	12.2	**4.7**	c	c	c	9.7	**m**
		Tertiary education	2.7	5.4	5.8	8.0	**2.2**	4.3	9.2	9.0	12.7	**3.7**	c	c	c	6.2	**m**
	Slovak Republic	Below upper secondary	36.3	49.2	36.3	39.3	**3.1**	55.7	73.8	51.4	54.1	**2.6**	30.6	36.5	18.9	21.9	**3.0**
		Upper secondary or post-secondary non-tertiary	14.3	12.7	7.4	11.5	**4.1**	17.7	13.8	8.8	14.8	**6.0**	10.1	11.6	5.7	10.5	**4.9**
		Tertiary education	4.6	4.4	3.1	5.2	**2.2**	7.0	5.3	4.7	8.3	**3.5**	c	7.7	c	c	**m**
	Slovenia	Below upper secondary	9.8	8.7	5.9	12.7	**6.8**	11.3	16.1[r]	10.1[r]	18.3[r]	**8.3**	c	2.9[r]	4.4[r]	5.3[r]	**0.9**
		Upper secondary or post-secondary non-tertiary	5.7	5.7	3.5	8.2	**4.7**	5.8	6.7	4.2	11.7	**7.5**	10.9	6.3[r]	4.6[r]	7.2[r]	**2.6**
		Tertiary education	2.1	3.0	3.1	4.7	**1.6**	3.8	5.1[r]	5.6	7.4	**1.7**	c	c	2.7[r]	5.2[r]	**2.6**
	Spain	Below upper secondary	13.7	9.3	13.2	26.4	**13.2**	17.8	11.4	17.4	33.4	**16.0**	10.8	6.9	9.1	18.7	**9.6**
		Upper secondary or post-secondary non-tertiary	10.9	7.3	9.3	19.2	**9.9**	12.9	9.0	11.2	24.0	**12.8**	6.4	6.6	6.3	13.5	**7.2**
		Tertiary education	9.5	6.1	5.8	11.6	**5.8**	14.5	8.5	8.0	16.2	**8.2**	4.1	3.5	3.0	7.1	**4.1**
	Sweden	Below upper secondary	8.0	8.5	7.1	10.8	**3.7**	13.1	17.8	14.7	20.1	**5.4**	8.1	5.2	4.0	6.4	**2.4**
		Upper secondary or post-secondary non-tertiary	5.3	6.0	4.1	5.2	**1.1**	5.6	8.5	5.4	7.0	**1.5**	6.6	5.4	4.2	5.2	**1.1**
		Tertiary education	3.0	4.5	3.3	3.8	**0.6**	3.2	7.1	4.2	5.1	**0.8**	2.9	2.3	3.0	2.8	**-0.2**
	Switzerland	Below upper secondary	4.8	7.2	6.0	7.6	**1.6**	c	11.8	8.9	13.3	**4.5**	7.0[r]	6.0	c	6.0[r]	**m**
		Upper secondary or post-secondary non-tertiary	2.2	3.7	2.9	3.3	**0.4**	2.8	4.7	3.1	3.8	**0.6**	1.8[r]	3.7	3.1	3.1	**0.0**
		Tertiary education	1.4	2.7	1.8	2.6	**0.8**	c	3.4	2.0	3.3	**1.3**	c	c	c	2.1[r]	**m**
	Turkey	Below upper secondary	4.6	9.1	9.6	8.4	**-1.2**	5.7	11.3	12.1	10.4	**-1.7**	2.4	4.2	5.3	5.3	**0.0**
		Upper secondary or post-secondary non-tertiary	5.5	9.1	9.2	8.9	**-0.3**	7.1	11.9	11.1	10.1	**-1.0**	n	4.5	7.6	8.1	**0.5**
		Tertiary education	3.9	6.9	7.3	7.6	**0.3**	6.5	10.9	10.8	11.4	**0.6**	3.3	4.3	4.4	3.9	**-0.5**
	United Kingdom	Below upper secondary	6.6	5.1	7.5	11.0	**3.5**	9.1	7.8	12.0	18.9	**6.9**	5.6	3.2	4.3	7.4	**3.1**
		Upper secondary or post-secondary non-tertiary	4.0	3.1	4.3	5.9	**1.6**	4.7	4.2	5.9	8.2	**2.3**	4.0	2.4	3.9	4.9	**1.0**
		Tertiary education	2.1	2.1	2.8	3.9	**1.1**	2.0	2.4	3.2	4.7	**1.5**	3.7	2.8	3.2	3.9	**0.7**
	United States	Below upper secondary	7.9	9.0	10.1	16.2	**6.1**	10.3	11.7	14.2	19.7	**5.5**	5.2	7.5	5.6	10.0	**4.3**
		Upper secondary or post-secondary non-tertiary	3.6	5.1	5.3	10.2	**4.9**	4.4	6.9	7.4	13.3	**5.9**	3.1	4.2	3.7	8.0	**4.3**
		Tertiary education	1.8	2.6	2.4	4.9	**2.5**	2.0	3.0	2.6	5.0	**2.4**	c	2.3	2.5	5.4	**2.9**
	OECD average	Below upper secondary	9.4	10.7	8.8	12.6	**3.8**	14.6	16.4	13.6	18.1	**4.5**	7.5	7.5	6.2	8.8	**2.5**
		Upper secondary or post-secondary non-tertiary	6.0	6.2	4.9	7.3	**2.4**	7.1	7.5	6.4	9.5	**3.1**	5.4	5.5	4.2	6.4	**2.2**
		Tertiary education	3.4	3.9	3.3	4.8	**1.5**	5.1	5.4	4.6	6.8	**2.2**	3.6	3.7	2.9	4.0	**1.1**
	OECD average for countries with data available for all reference years	Below upper secondary	9.5	10.6	8.8	13.0		14.7	16.5	13.8	18.7		7.5	7.4	6.3	9.1	
		Upper secondary or post-secondary non-tertiary	6.0	6.1	4.8	7.4		7.2	7.4	6.3	9.7		5.4	5.4	4.2	6.6	
		Tertiary education	3.4	3.9	3.2	4.8		5.1	5.4	4.5	6.9		3.5	3.6	2.9	4.0	
	EU21 average	Below upper secondary	11.6	12.8	10.4	15.6	**5.1**	16.8	19.2	15.5	22.3	**6.8**	8.8	8.8	7.2	10.4	**3.2**
		Upper secondary or post-secondary non-tertiary	6.9	6.8	5.2	8.5	**3.3**	8.2	8.1	6.5	11.0	**4.4**	6.5	6.3	4.5	7.3	**2.8**
		Tertiary education	3.7	4.1	3.2	5.2	**2.0**	5.7	5.8	4.7	7.6	**2.9**	3.9	4.1	2.9	4.4	**1.5**
Other G20	Argentina		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	Brazil	Below upper secondary	m	m	4.7	4.6	**-0.1**	m	m	7.0	7.2	**0.1**	m	m	2.4	2.4	**0.0**
		Upper secondary or post-secondary non-tertiary	m	m	6.1	6.1	**0.0**	m	m	8.2	9.0	**0.8**	m	m	3.0	2.5	**-0.4**
		Tertiary education	m	m	3.3	2.9	**-0.3**	m	m	5.1	4.3	**-0.8**	m	m	1.9	1.7	**-0.2**
	China		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	India		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	Indonesia		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	Russian Federation	Below upper secondary	m	m	m	14.4	**m**	m	m	m	17.9	**m**	m	m	m	c	**m**
		Upper secondary or post-secondary non-tertiary	m	m	m	7.3	**m**	m	m	m	8.7	**m**	m	m	m	5.5	**m**
		Tertiary education	m	m	m	3.6	**m**	m	m	m	4.5	**m**	m	m	m	3.4	**m**
	Saudi Arabia		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	South Africa		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**
	G20 average		m	m	m	m	**m**	m	m	m	m	**m**	m	m	m	m	**m**

1. Figures for 2011 for Denmark, Estonia and the Netherlands in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network Labour Force Survey (LFS) for most countries; and European Union LFS (EU-LFS) for Denmark, Estonia, Finland, France (for 2000 only), Iceland, Ireland, Italy (for 2000 only), Luxembourg, the Netherlands and Slovenia. See Annex 3 for notes for notes *(www.oecd.org/edu/eag.htm)*.

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Table A5.5a. Labour market status among 25-64 year-olds, by educational attainment and programme orientation (2011)

		Employment rate (%)						Unemployment rate (%)						Inactivity rate (%)					
		Vocational		General		Total[1]		Vocational		General		Total[1]		Vocational		General		Total[1]	
		ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]	ISCED 3/4	ISCED 5[2]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD	Australia	84	81	77	85	81	84	3.5	3.1	4.1	2.7	3.8	2.8	13	17	20	12	16	13
	Austria	78	x(6)	76	x(6)	78	87	3.1	x(12)	4.4	x(12)	3.2	2.3	19	x(18)	21	x(18)	20	11
	Belgium	76	x(6)	69	x(6)	74	84	5.3	x(12)	6.5	x(12)	5.7	3.3	20	x(18)	26	x(18)	22	13
	Canada	79	81	72	82	74	82	6.6	5.4	7.1	4.7	6.9	5.0	16	14	22	14	20	14
	Chile	x(5)	x(6)	x(5)	x(6)	73	79	x(11)	x(12)	x(11)	x(12)	5.0	5.4	x(17)	x(18)	x(17)	x(18)	23	16
	Czech Republic[3]	75	x(6)	72	x(6)	75	83	5.7	x(12)	c	x(12)	5.7	2.6	20	x(18)	c	x(18)	20	15
	Denmark	79	x(6)	65	x(6)	79	86	5.8	x(12)	9.4	x(12)	6.0	5.1	16	x(18)	28	x(18)	16	10
	Estonia	75	77	72	81	74	80	11.5	9.3	12.4	7.4	11.9	8.0	15	15	17	12	16	13
	Finland	74	x(6)	73	x(6)	75	84	7.0	x(12)	7.7	x(12)	6.9	4.0	20	x(18)	20	x(18)	20	12
	France	73	x(6)	75	x(6)	74	84	7.6	x(12)	6.9	x(12)	7.4	4.9	21	x(18)	20	x(18)	20	12
	Germany[4]	78	88	61	87	78	88	5.7	x(12)	7.4	x(12)	5.8	2.5	17	x(18)	34	x(18)	18	10
	Greece	68	72	60	75	63	75	19.5	16.2	16.4	11.6	17.6	13.0	16	14	29	16	24	14
	Hungary	70	x(6)	64	x(6)	66	79	7.6	x(12)	10.8	x(12)	9.6	3.9	24	x(18)	28	x(18)	27	18
	Iceland	86	x(6)	74	x(6)	83	89	4.4	x(12)	8.2	x(12)	5.4	5.0	10	x(18)	19	x(18)	12	7
	Ireland	65	x(6)	65	x(6)	65	81	17.7	x(12)	13.8	x(12)	15.0	7.2	21	x(18)	24	x(18)	23	13
	Israel	78	x(6)	68	x(6)	71	83	5.8	x(12)	5.8	x(12)	5.8	3.9	18	x(18)	28	x(18)	25	14
	Italy	74	x(6)	64	x(6)	72	79	5.8	x(12)	6.8	x(12)	6.0	5.2	21	x(18)	31	x(18)	24	17
	Japan	x(5)	x(6)	x(5)	x(6)	73	79	x(11)	x(12)	x(11)	x(12)	5.3	3.5	x(17)	x(18)	x(17)	x(18)	23	18
	Korea	x(5)	74	x(5)	78	71	77	x(11)	3.8	x(11)	2.6	3.4	2.9	x(17)	23	x(17)	20	27	21
	Luxembourg	70	x(6)	63	x(6)	70	85	4.0	x(12)	c	x(12)	3.7	3.6	27	x(18)	34	x(18)	27	12
	Mexico	x(5)	x(6)	x(5)	x(6)	71	79	x(11)	x(12)	x(11)	x(12)	4.4	4.8	x(17)	x(18)	x(17)	x(18)	26	17
	Netherlands	81	x(6)	77	x(6)	80	87	3.2	x(12)	3.1	x(12)	3.8	2.6	17	x(18)	20	x(18)	17	10
	New Zealand	83	82	80	86	82	84	4.8	4.9	3.7	2.7	4.4	3.6	13	14	17	11	14	13
	Norway	83	90	79	90	82	90	1.8	c	3.5	1.6	2.2	1.6	16	9	18	8	16	8
	Poland[3]	66	x(6)	62	x(6)	66	85	8.6	x(12)	9.9	x(12)	8.8	4.5	27	x(18)	31	x(18)	28	11
	Portugal[3]	x(5)	x(6)	x(5)	x(6)	79	83	x(11)	x(12)	x(11)	x(12)	10.9	8.3	x(17)	x(18)	x(17)	x(18)	11	9
	Slovak Republic	71	x(6)	66	x(6)	70	82	11.5	c	11.9	x(12)	11.5	5.2	20	x(18)	25	x(18)	21	14
	Slovenia	71	x(6)	66	x(6)	71	86	7.8	x(12)	12.7	x(12)	8.2	5.0	23	x(18)	24	x(18)	23	10
	Spain	68	x(6)	67	x(6)	67	79	19.2	x(12)	19.3	x(12)	19.2	11.8	16	x(18)	17	x(18)	16	11
	Sweden	85	x(6)	88	x(6)	84	89	4.3	x(12)	3.5	x(12)	5.2	3.9	11	x(18)	9	x(18)	12	8
	Switzerland	83	92	77	87	83	89	3.1	1.7	5.1	3.1	3.3	2.7	15	6	19	11	15	9
	Turkey[3]	65	x(6)	59	x(6)	62	76	8.1	x(12)	9.6	x(12)	8.9	7.6	29	x(18)	35	x(18)	32	18
	United Kingdom	x(5)	82	x(5)	83	78	83	x(11)	3.7	x(11)	4.0	5.9	3.9	x(17)	15	x(17)	13	17	14
	United States	x(5)	77	x(5)	80	67	80	x(11)	6.3	x(11)	4.8	10.2	5.0	x(17)	18	x(17)	16	25	16
	OECD average	76	m	70	m	74	83	7.4	m	8.4	m	7.3	4.8	18	m	24	m	20	13
	EU21 average	76	m	70	m	74	83	8.1	m	9.1	m	8.2	5.3	17	m	23	m	19	12
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil[3]	x(5)	x(6)	x(5)	x(6)	70	85	x(11)	x(12)	x(11)	x(12)	6.1	2.9	x(17)	x(18)	x(17)	x(18)	25	12
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	x(5)	x(6)	x(5)	x(6)	73	83	x(11)	x(12)	x(11)	x(12)	7.3	3.6	x(17)	x(18)	x(17)	x(18)	21	14
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. "Total" refers to the weighted averages of the employment/unemployment/inactivity rate of individuals at ISCED 3/4 level and ISCED 5 level (types A and B).

2. This table includes only ISCED 5A and 5B data for tertiary education given that most data for ISCED 6 cannot be classified by programme orientation.

3. ISCED 5B does not apply; figures refer to programmes at ISCED 5A level only.

4. Individuals with ISCED 4A attainment in Germany have successfully completed both a general and a vocational programme. In this table they have been allocated to vocational.

Source: OECD, LSO (Labour market, economic and social outcomes of learning) Network special data collection on vocational education, Learning and Labour Transitions Working Group for most countries; and European Union LFS (EU-LFS) and LFS with information on fields of education (EULFS_VET) for Denmark, Estonia, Finland, Iceland, Ireland, Luxembourg and Slovenia. See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932848780

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Table A5.6. [1/2] Proportion of full-time, full-year earners among all earners, by educational attainment and age group (2011)[1]

How to read this table: In Australia, 89% of 25-64 year-old men with below upper secondary education that have earnings from employment work full time. Among 25-64 year-olds women, 47% of those that have income from employment work full time.

				Below upper secondary education			Upper secondary and post-secondary non-tertiary education			Tertiary education			All levels of education		
				25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2009	Men	**89**	94	79	**91**	93	85	**92**	95	83	**91**	94	83
			Women	**47**	43	42	**53**	51	52	**65**	56	60	**57**	52	51
			M+W	**69**	69	61	**77**	77	74	**77**	75	72	**75**	75	69
	Austria	2011	Men	**63**	64	68	**76**	77	81	**80**	81	86	**76**	77	80
			Women	**37**	38	38	**41**	34	48	**55**	48	68	**43**	37	49
			M+W	**48**	49	51	**60**	56	69	**69**	66	79	**60**	57	68
	Belgium	2011	Men	**77**	100	69	**64**	64	60	**86**	90	78	**83**	88	73
			Women	**32**	c	c	**57**	55	55	**58**	55	55	**49**	45	46
			M+W	**59**	66	55	**65**	65	60	**72**	72	69	**67**	68	62
	Canada	2010	Men	**70**	73	65	**73**	75	67	**74**	81	64	**73**	77	65
			Women	**52**	56	49	**54**	57	54	**59**	61	51	**57**	59	52
			M+W	**63**	66	58	**64**	67	61	**66**	71	58	**65**	69	59
	Chile	2011	Men	**55**	52	60	**64**	69	70	**65**	66	71	**61**	62	65
			Women	**38**	34	43	**51**	49	53	**53**	52	49	**47**	45	48
			M+W	**49**	46	55	**58**	60	63	**59**	59	62	**55**	55	59
	Czech Republic			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Denmark	2011	Men	**50**	50	50	**59**	62	55	**74**	81	69	**61**	66	58
			Women	**44**	42	44	**51**	53	46	**58**	61	57	**52**	55	49
			M+W	**47**	47	47	**55**	58	51	**65**	70	63	**57**	61	54
	Estonia	2011	Men	**94**	97	80	**98**	100	95	**95**	97	92	**97**	98	92
			Women	**83**	74	82	**88**	88	84	**87**	88	82	**87**	87	83
			M+W	**90**	88	80	**93**	94	89	**90**	91	85	**92**	92	87
	Finland	2010	Men	**92**	94	89	**93**	95	90	**95**	97	89	**94**	96	90
			Women	**79**	80	77	**82**	83	80	**88**	86	85	**85**	85	81
			M+W	**86**	89	82	**88**	90	84	**91**	90	87	**89**	90	85
	France	2009	Men	**73**	76	61	**80**	86	61	**87**	90	76	**80**	85	65
			Women	**50**	55	45	**61**	63	59	**70**	69	63	**62**	64	54
			M+W	**62**	66	52	**72**	75	60	**78**	79	70	**72**	75	59
	Germany	2011	Men	**85**	90	88	**82**	85	81	**83**	87	82	**82**	86	82
			Women	**43**	36	36	**45**	39	41	**56**	49	62	**48**	42	46
			M+W	**64**	60	59	**63**	62	61	**71**	70	74	**66**	65	65
	Greece	2011	Men	**54**	64	40	**67**	78	37	**73**	84	60	**65**	76	44
			Women	**25**	31	16	**36**	41	19	**62**	65	32	**40**	46	20
			M+W	**39**	49	26	**52**	59	28	**67**	74	49	**53**	61	31
	Hungary	2011	Men	**76**	78	74	**85**	87	82	**89**	91	85	**85**	87	81
			Women	**74**	76	68	**82**	83	79	**89**	89	88	**83**	84	79
			M+W	**75**	77	70	**84**	85	81	**89**	90	87	**84**	85	80
	Iceland			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Ireland	2010	Men	**63**	69	56	**69**	74	56	**82**	87	71	**72**	77	60
			Women	**25**	21	16	**46**	49	47	**61**	57	66	**50**	48	45
			M+W	**49**	51	45	**58**	61	51	**71**	73	69	**62**	64	54
	Israel	2011	Men	**89**	90	87	**92**	93	87	**88**	93	87	**90**	93	87
			Women	**55**	64	40	**68**	70	59	**69**	72	63	**68**	71	60
			M+W	**78**	84	69	**82**	83	74	**78**	83	76	**79**	83	75
	Italy	2009	Men	**80**	82	71	**86**	90	78	**87**	91	79	**84**	86	75
			Women	**55**	56	54	**66**	64	67	**78**	81	74	**65**	65	62
			M+W	**71**	73	65	**77**	78	74	**82**	86	77	**76**	77	70
	Japan			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Korea	2011	Men	**92**	93	90	**97**	98	96	**98**	99	98	**97**	98	94
			Women	**81**	81	76	**85**	86	82	**90**	85	86	**86**	85	79
			M+W	**86**	87	83	**92**	92	91	**95**	94	95	**93**	93	88
	Luxembourg	2010	Men	**88**	91	80	**91**	93	75	**91**	98	82	**90**	94	79
			Women	**43**	50	27	**53**	46	41	**65**	55	63	**54**	51	40
			M+W	**67**	71	54	**76**	75	64	**78**	76	76	**74**	74	64

Note: The length of the reference period varies from one week to one year. Self-employed individuals are excluded in some countries.
1. Full-time basis refers to people who have worked all year long and at least 30 hours per week. See Indicator A6 and Annex 3 for details.
Source: OECD, LSO Network special data collection on full-time, full-year earnings, Economic Working Group. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table A5.6. [2/2] Proportion of full-time, full-year earners among all earners, by educational attainment and age group (2011)[1]

How to read this table: In Australia, 89% of 25-64 year-old men with below upper secondary education that have earnings from employment work full time. Among 25-64 year-olds women, 47% of those that have income from employment work full time.

				Below upper secondary education			Upper secondary and post-secondary non-tertiary education			Tertiary education			All levels of education		
				25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Mexico			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Netherlands	2010	Men	**71**	72	70	**70**	73	69	**68**	69	65	**70**	71	68
			Women	**15**	14	11	**19**	15	17	**29**	22	25	**22**	17	17
			M+W	**46**	46	42	**45**	43	48	**49**	46	50	**47**	45	47
	New Zealand	2011	Men	**73**	78	63	**72**	73	64	**74**	76	62	**73**	75	63
			Women	**59**	57	54	**55**	52	48	**64**	60	58	**60**	57	54
			M+W	**66**	68	58	**66**	65	58	**69**	68	60	**67**	67	59
	Norway	2010	Men	**51**	54	48	**65**	69	59	**69**	74	68	**63**	67	60
			Women	**28**	28	25	**36**	37	34	**46**	47	51	**39**	40	38
			M+W	**41**	42	37	**53**	55	47	**57**	59	60	**52**	54	49
	Poland	2010	Men	**85**	87	86	**88**	90	86	**82**	83	85	**86**	88	86
			Women	**79**	78	77	**85**	86	84	**82**	85	84	**84**	85	83
			M+W	**82**	83	83	**87**	88	85	**82**	85	84	**85**	86	85
	Portugal	2010	Men	**98**	98	98	**96**	98	96	**93**	95	88	**97**	98	97
			Women	**90**	91	85	**94**	95	93	**93**	94	87	**92**	93	86
			M+W	**95**	95	93	**95**	96	95	**93**	94	88	**95**	95	93
	Slovak Republic	2011	Men	**50**	49	55	**63**	65	62	**65**	66	68	**61**	63	62
			Women	**47**	42	49	**57**	58	60	**62**	64	67	**57**	58	59
			M+W	**48**	45	51	**60**	61	61	**63**	65	68	**59**	61	60
	Slovenia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Spain	2010	Men	**78**	78	82	**85**	86	92	**86**	90	86	**83**	84	85
			Women	**55**	45	62	**68**	69	82	**78**	79	89	**68**	67	74
			M+W	**70**	66	74	**78**	79	88	**82**	85	87	**76**	77	80
	Sweden	2010	Men	**74**	77	69	**79**	84	63	**79**	86	71	**78**	84	67
			Women	**37**	46	30	**48**	49	43	**60**	58	59	**52**	53	47
			M+W	**60**	65	55	**65**	69	53	**68**	70	64	**66**	69	57
	Switzerland			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Turkey			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	United Kingdom	2011	Men	**85**	84	83	**93**	95	85	**92**	95	79	**92**	94	83
			Women	**44**	43	40	**54**	51	49	**66**	60	54	**59**	55	49
			M+W	**67**	69	61	**75**	74	69	**79**	79	68	**76**	76	68
	United States	2011	Men	**66**	68	67	**76**	78	76	**83**	87	79	**78**	81	77
			Women	**51**	53	53	**65**	66	64	**70**	70	68	**66**	67	65
			M+W	**61**	63	61	**71**	73	70	**77**	79	73	**73**	75	71
	OECD average		Men	**75**	78	71	**80**	83	74	**83**	86	78	**80**	83	75
			Women	**51**	51	48	**59**	59	57	**67**	66	65	**60**	60	56
			M+W	**64**	66	60	**71**	72	67	**75**	76	72	**71**	72	66
	EU21 average		Men	**76**	79	72	**80**	83	74	**83**	87	79	**81**	84	75
			Women	**50**	51	48	**60**	59	57	**68**	67	66	**61**	60	56
			M+W	**65**	66	60	**71**	72	67	**76**	77	73	**71**	73	67
Other G20	Argentina			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Brazil			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	China			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	India			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Indonesia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Russian Federation			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Saudi Arabia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	South Africa			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	G20 average			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m

Note: The length of the reference period varies from one week to one year. Self-employed individuals are excluded in some countries.

1. Full-time basis refers to people who have worked all year long and at least 30 hours per week. See Indicator A6 and Annex 3 for details.

Source: OECD, LSO Network special data collection on full-time, full-year earnings, Economic Working Group. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

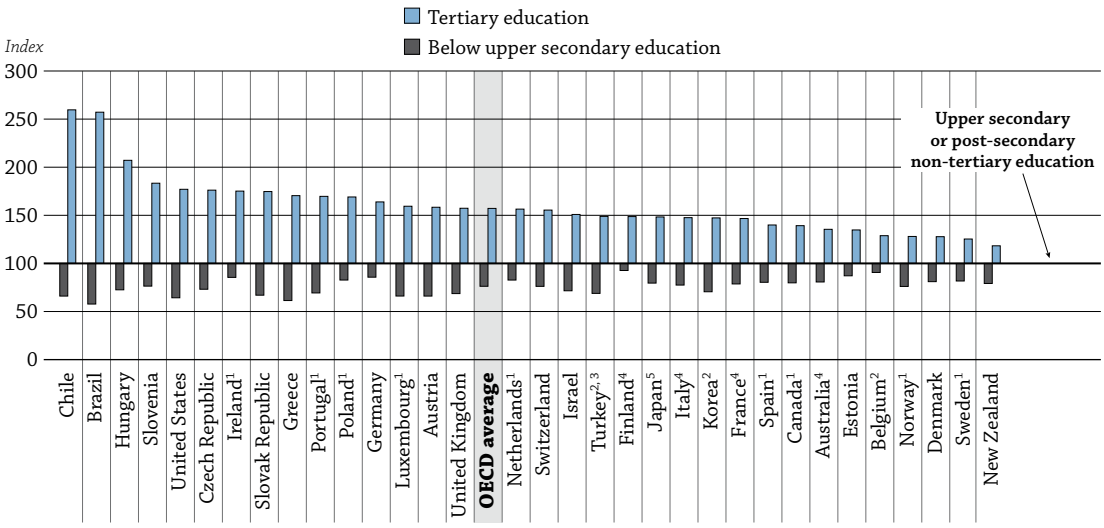
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WHAT ARE THE EARNINGS PREMIUMS FROM EDUCATION?

- In all OECD countries, adults with tertiary education earn more than adults with upper secondary or post-secondary non-tertiary education, who, in turn, earn more than adults with a below upper secondary education.
- In Brazil, Greece and the United States, people with below upper secondary education generally earn less than 65% of what people with upper secondary or post-secondary non-tertiary education earn.
- On average across OECD countries, the difference in earnings between younger and older workers increases with educational attainment, benefitting more educated older workers. The earnings premium for tertiary-educated 55-64 year-olds is generally larger than that for all tertiary educated workers: on average, the earnings differential increases by 16 percentage points.
- The gender gap in earnings persists, regardless of the level of education. Among OECD countries, the largest gap between men and women is among individuals with tertiary education.
- In many countries, more than half the 15-24 year-old students have earnings from employment. In Belgium, Chile, Estonia, Israel, Italy, Spain and Switzerland, less than 20% of students in this age group have earnings from employment.

Chart A6.1. Relative earnings of 25-64 year-old workers, by educational attainment (2011)

Upper secondary or post-secondary non-tertiary education = 100



1. Year of reference 2010.
2. Earnings net of income tax.
3. Year of reference 2005.
4. Year of reference 2009.
5. Year of reference 2007.

Countries are ranked in descending order of the relative earnings of 25-64 year-olds with tertiary education.

Source: OECD. Table A6.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Context

Higher levels of skills usually translate into better chances of employment (see Indicator A5) and higher earnings. In fact, in all OECD countries for which information is available, the higher the level of education, the greater the relative earnings.

The potential to earn more and see those earnings increase over time, along with other social benefits, is an incentive for individuals to pursue education and training. This was true in most OECD and G20 countries even in 2011, when the effects of the global economic crisis were still widely felt, and even though the economic rewards vary depending on the chosen field of education (Carnevale, 2012, and Box A6.1). While relative earnings for individuals with higher educational attainment tend to increase with age, relative earnings for people with below upper secondary education tend to decrease with age.

Many factors may influence an individual's choice to pursue education and training. In some countries, this decision may be related to the cost of education and training, particularly after compulsory education. That cost also entails the consequences of delaying entry into the labour market, including the loss of potential wages (see Indicator A7).

Variations in relative earnings among countries reflect a number of factors, including the demand for skills in the labour market, minimum wage laws, the strength of labour unions, the coverage of collective-bargaining agreements, the supply of workers at various levels of educational attainment, and the relative incidence of part-time and seasonal work.

Other findings

- **In Austria, Belgium, Finland, New Zealand, Slovenia and Spain, tertiary-educated women earn about 75% or more of what tertiary-educated men earn;** in Brazil, Chile and Estonia, they earn 65% or less of what similarly educated men earn.
- **As they age, women with an upper secondary or post-secondary non-tertiary education enjoy a smaller difference in earnings relative to men with similar age and level of education**. These women can expect to earn 79% of a man's earnings when they are 55 to 64 years old.
- Individuals with below upper secondary education during their entire working life face large earnings disadvantages in all countries. **On average across OECD countries, only 3% of people with below upper secondary education earn twice the national median income.**
- **On average, 67% of all 25-29 year-old students have earnings from employment**, although 78% of all 25-29 year-olds, both students and those not in education, have such earnings. Among 25-29 year-olds, 85% of men who are not students have earnings from employment compared with 76% of women.

Trends

In all OECD countries, adults with tertiary education earn considerably more than adults with below upper secondary education. Indeed, between 2000 and 2011, only in a few countries for which information is available for both years – Germany, Hungary and Switzerland – the earnings of adults with below upper secondary education have undergone some increase when compared with earnings of adults with upper secondary or post-secondary non-tertiary education.

On the other hand, in most OECD countries, including Belgium, Germany, Hungary, Switzerland and the United States, earnings for tertiary-educated adults relative to earnings of adults with upper secondary or post-secondary non-tertiary education, have increased in the same period.

These differences suggest that the demand for higher-level and updated skills could have been increasing during the decade – and that individuals with lower levels of skills are more vulnerable today.

Analysis

Educational attainment and relative earnings

The higher the educational attainment, the larger the relative earnings; and upper secondary education appears to be the gateway to the largest wage increases. Earnings differentials between adults with tertiary education and those with upper secondary education are generally more pronounced than the differentials between upper secondary and lower secondary education or below. Since private investment costs beyond upper secondary education rise considerably in most countries, a high earnings premium helps to ensure that there will be an adequate supply of individuals willing to invest time and money in further education.

In all OECD countries, adults with tertiary education earn more than adults with upper secondary or post-secondary non-tertiary education, who, in turn, earn more than adults with below upper secondary education. In many countries, upper secondary education is the level beyond which further education and training implies high relative earnings. As such, upper secondary education can be considered the benchmark against which earnings related to educational attainment can be measured.

Tertiary-educated adults earn more than adults with lower levels of education in all countries. The relative earnings for tertiary-educated adults is over 1.5 times that for adults with upper secondary or post-secondary non-tertiary education, on average, and, in Brazil, Chile and Hungary, more than twice the earnings of adults with that lower level of education (Table A6.1).

Differences between adults with below upper secondary education and those who have attained an upper secondary or post-secondary non-tertiary education vary. In Belgium, Estonia, Finland, Germany and Ireland, differences are relatively small: the less-educated group earns over 85% of what the more-educated group earns. In Brazil, Greece and the United States, however, people with below upper secondary education generally earn less than 65% of what people with an upper secondary or post-secondary non-tertiary education earn (Chart A6.1).

Relative earnings as related to gender and age

Across OECD countries, relative earnings are affected by educational attainment to various degrees. For example, relative earnings for men with a tertiary-type A or advanced research programme degree compared with those for men with upper secondary or post-secondary non-tertiary education exceeds 100% in Brazil, Chile, Hungary, Ireland and Slovenia. This is also true for women with the same level of education in Brazil, Chile, Greece and Ireland (Table A6.1).

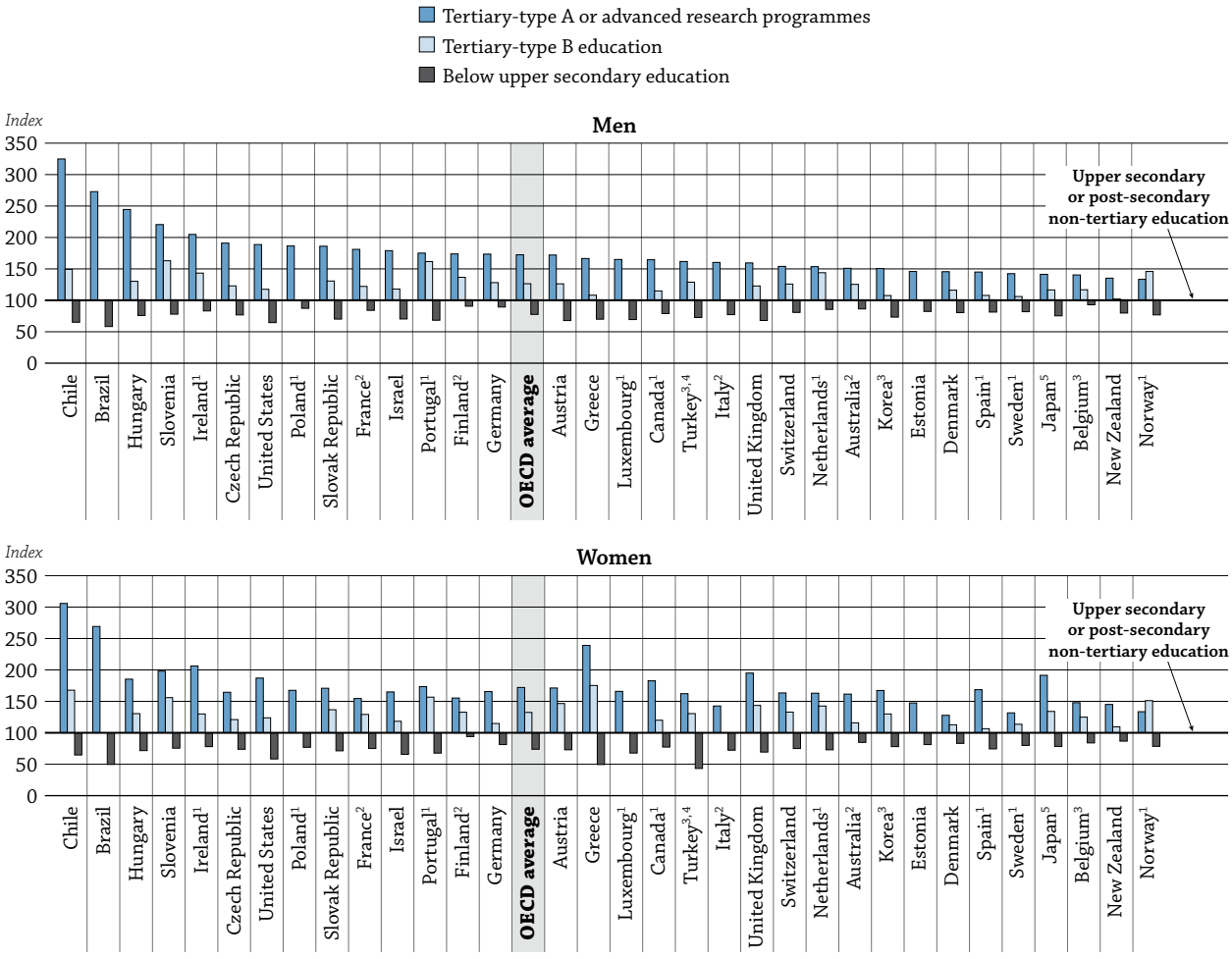
Both men and women with a tertiary-type B education earn more than individuals with an upper secondary or post-secondary non-tertiary education. Men in OECD countries with the higher level of education earn an average of 26% more than men with the lower level of education (in Portugal and Slovenia, the former group earns more than 60% more than the latter group), while women with the higher level of education earn 32% more than women with the lower level of education (in Chile and Greece, the former group earns more than 60% more than the latter group).

On average, men with below upper secondary education earn 77% of what men with an upper secondary or post-secondary non-tertiary education earn, ranging from less than 60% in Brazil to 90% or more in Belgium and Finland. Women with the lower level of education earn an average of 74% of what women with the higher level of education earn, ranging from 50% or less in Brazil, Greece and Turkey to more than 90% in Finland (Chart A6.2).

Higher educational attainment is associated with higher earnings during his or her working life. On average across OECD countries, earnings increase with the level of educational attainment but this increase is especially large for older workers. People with higher levels of education are more likely to be employed, and remain employed, and have more opportunities to gain experience on the job.

Chart A6.2. Relative earnings of 25-64 year-old workers, by educational attainment and gender (2011)

Upper secondary or post-secondary non-tertiary education = 100



1. Year of reference 2010.
2. Year of reference 2009.
3. Earnings net of income tax.
4. Year of reference 2005.
5. Year of reference 2007.

Countries are ranked in descending order of the relative earnings of 25-64 year-old men with tertiary-type A (including advanced research programmes) education.

Source: OECD. Table A6.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846576

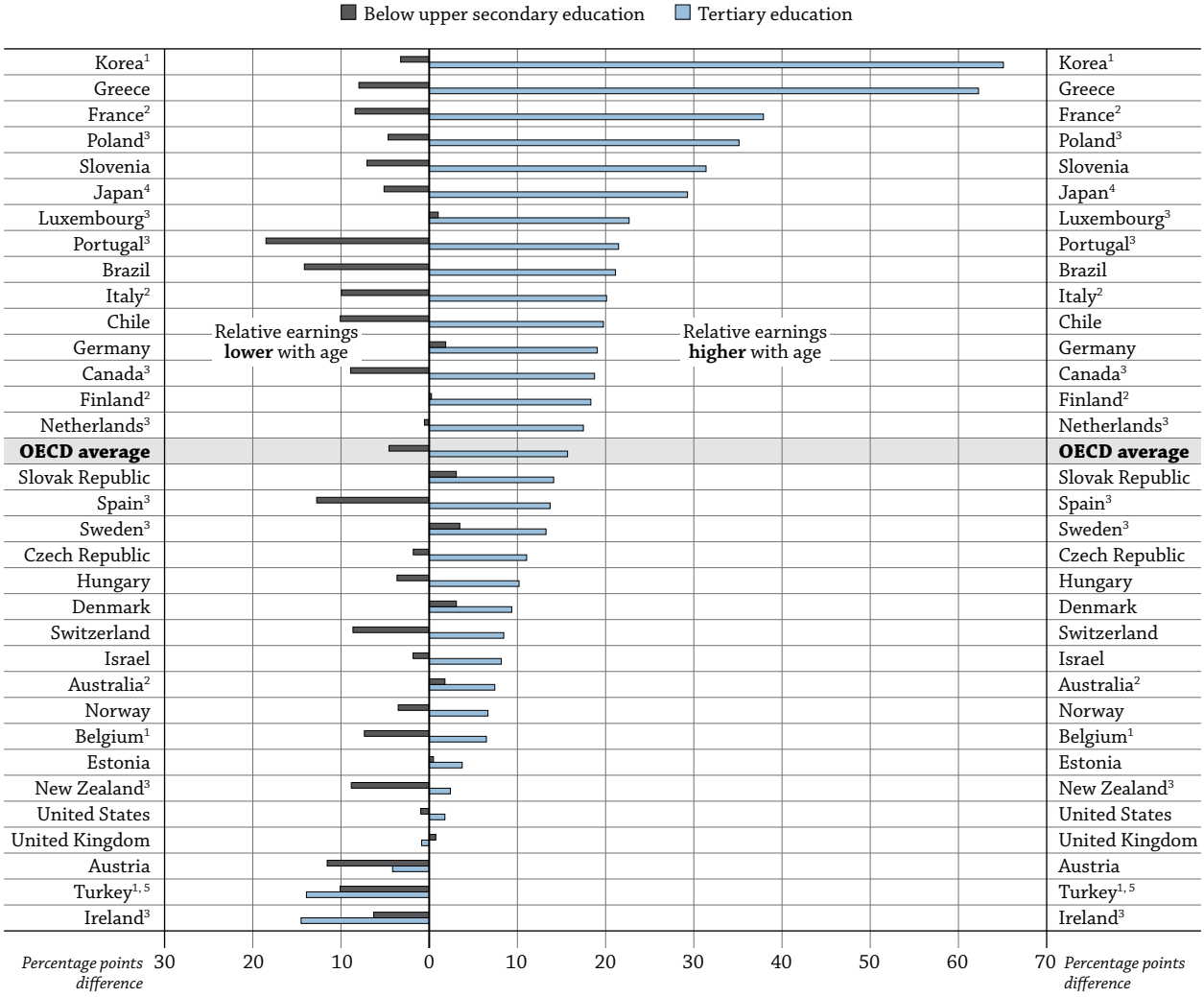
The relative earnings for tertiary-educated 55-64 year-olds are higher than those of all tertiary-educated adults (25-64 year-olds) in all countries with the exceptions of Austria, Ireland, Turkey and the United Kingdom. On average, the differential between the two groups is up to nearly 16 percentage points. For those with only below upper secondary education, the relative earnings disadvantage increases for older workers in all countries except Australia, Denmark, Estonia, Finland, Germany, Luxembourg, Norway, the Slovak Republic, Sweden and the United Kingdom. The increase in this disadvantage is not as marked as the increase in the earnings advantage for those with a tertiary education – an indication that tertiary education is key to higher earnings at older ages (Table A6.1).

In Chart A6.3, the difference in relative earnings of 25-64 year-old workers is subtracted from the difference in relative earnings of older workers (in both cases, the differences are relative to the earnings of members of the same age group with upper secondary or post-secondary non-tertiary education). The result is the

percentage-point difference in relative earnings between the two age groups. Taking the OECD average as an example, the difference in relative earnings between all adults with below upper secondary education and all adults with upper secondary or post-secondary non-tertiary education is, on average, 24%, meaning that the former group earns 24% less than adults with upper secondary or post-secondary non-tertiary education. Older adults with below upper secondary education earn an average of 28% less than adults of the same age group who have upper secondary or post-secondary non-tertiary education. The difference in relative earnings between the two age groups is about five percentage points (as shown in the chart). For tertiary-educated workers, the difference in relative earnings between the two age groups is calculated the same way, and averages around 16 percentage points.

Chart A6.3. Differences in relative earnings between older workers and all workers, by educational attainment (2011)

Percentage points difference, earnings relative to upper secondary or post-secondary non-tertiary



1. Earnings net of income tax.
2. Year of reference 2009.
3. Year of reference 2010.
4. Year of reference 2007.
5. Year of reference 2005.

Countries are ranked in descending order of the difference in relative earnings among 55-64 year-olds and the total population (25-64 year-olds) at the tertiary level of education.

Source: OECD. Table A6.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846595

Across OECD countries, relative earnings differences between older and younger workers favour the latter among people whose highest level of attainment is below upper secondary education. Older workers with this level of attainment earn eight percentage points less than younger workers (Table A6.1).

On average, the earnings of 25-34 year-olds with below upper secondary education are 80% of what people the same age who have an upper secondary education earn, while the earnings of 55-64 year-olds with a below upper secondary education are 72% of what people the same age who have an upper secondary education earn. These differences are larger among women (76% and 68%, respectively) and smaller among men (80% and 75%, respectively) (Table A6.1).

For those with below upper secondary education, the earnings disadvantage increases for older workers in all countries except Australia, Denmark, Estonia, Finland, Germany, Ireland, Norway, the Slovak Republic and Sweden. In most countries, then, tertiary education not only improves the prospect of being employed at an older age, but is also associated with greater earnings and productivity differentials throughout a person's working life. Therefore, in most OECD countries, the highest potential for gaining employment, remaining in work, and increasing earnings throughout a working life is found among tertiary-educated adults (Table A6.1).

Trends in relative earnings by educational attainment

Between 2000 and 2011, the relative earnings of adults with below upper secondary education decreased in most OECD countries with a few exceptions. In Germany, Hungary and Switzerland, the relative earnings of adults with below upper secondary education increased through the years. In addition to these countries, the relative earnings of adult women with below upper secondary education also increased in Belgium since the year 2000. Only in Germany and Switzerland relative earnings increased for men with this level of attainment during the same period (Tables A6.2a, b and c).

In most countries relative earnings for tertiary-educated adults have increased between 2000 and 2011. Nonetheless, in several contexts they seem to have undergone important fluctuations. Whereas in Belgium, Germany, Hungary, Switzerland and the United States data available shows fluctuations toward some increase, in New Zealand and the United Kingdom, tertiary-educated workers seem to have experienced some decline in their relative earnings with respect to the year 2000 (Table A6.2a).

Data on earnings' trends are relative to the variations undergone in earnings of people with upper secondary or post-secondary non-tertiary qualifications in each context. For this reason it is difficult to assess the average evolution of relative earnings for different levels of education throughout the years (see *Methodology* section for further information).

Educational attainment and disparities in earnings related to gender

Regardless of the level of education, the gender gap in earnings persists. The available data show that the largest gender gap in earnings is among workers with tertiary education. Only in Austria, Belgium, Finland, New Zealand, Slovenia and Spain do the earnings of tertiary-educated women amount to 75% or more of men's earnings. In Brazil, Chile and Estonia, women with a tertiary degree earn 65% or less of what tertiary-educated men earn (Table A6.3a).

On average, only women with an upper secondary or post-secondary non-tertiary education show an increase in earnings, relative to men, as they grow older. Women with tertiary education and women with below upper secondary education show no increase in earnings, relative to men's earnings, as they age. Tertiary-educated women aged 55-64 can expect to earn 72% of what men of a similar age and education level earn, while women that age who have no upper secondary education can expect to earn 74% of what men of the same age and education level earn (Table A6.3a).

Distribution of earnings within levels of educational attainment

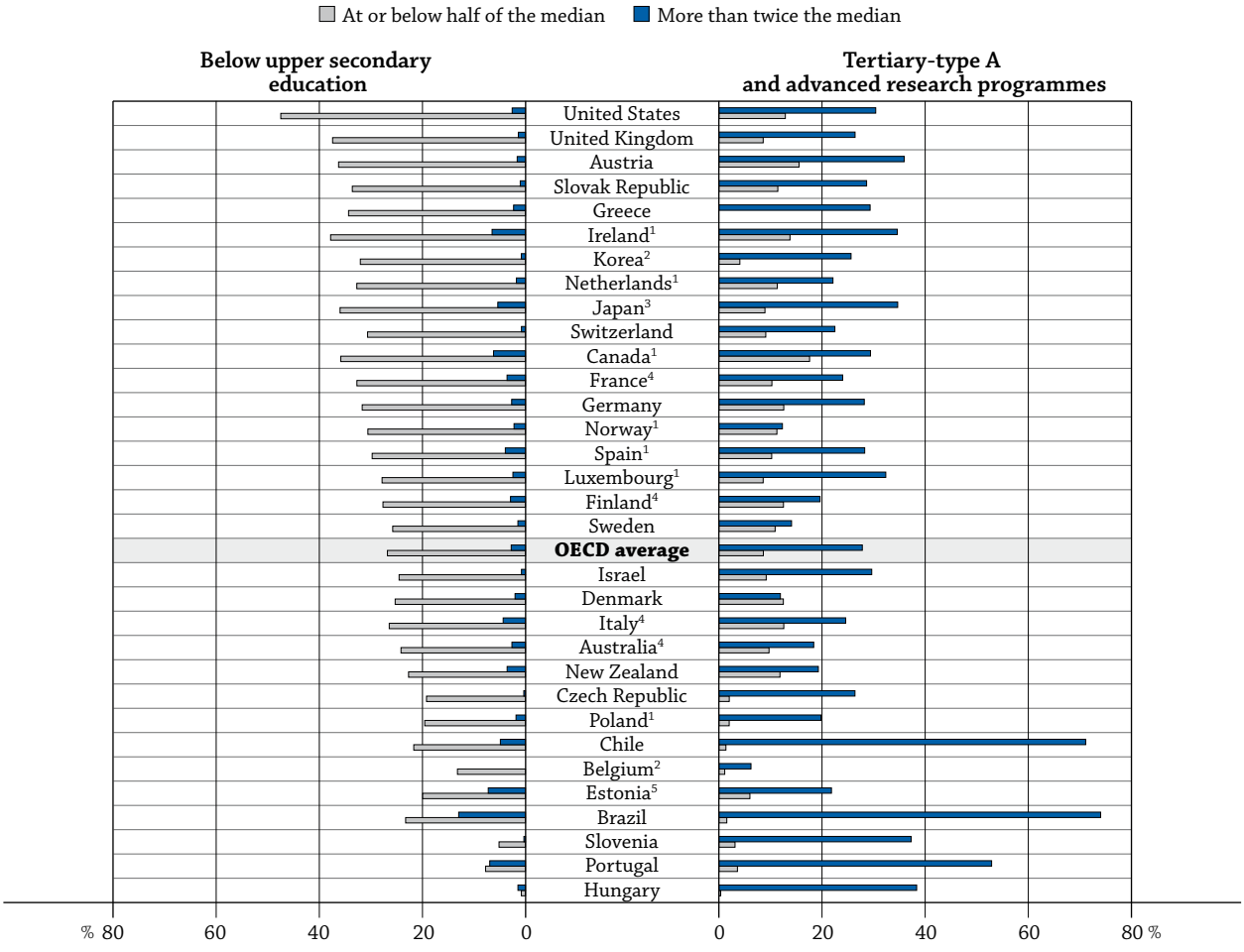
Since this indicator includes earnings from all employed individuals (except in Table A6.3a, which only includes the earnings from those working full-time, full-year), the hours worked influences earnings, in general, and

the distribution of earnings, in particular. Data on the distribution of earnings among groups with different levels of education can show how tightly earnings centre around the country median. In addition to providing information on equity in earnings, these data indicate the risks associated with investing in education, as risk is typically measured by the variation in outcomes.

Tables A6.4a, b and c (available on line) and Chart A6.4 show the distribution of earnings among workers according to their level of educational attainment. In the tables, distributions are provided for the entire adult population and are also broken down for women and men. For people with wages from work, the five earnings categories reported range from "At or below half the median" income to "More than twice the median" income, while the proportion of people without earnings from work is reported in a separate column.

Chart A6.4. Differences in relative earnings distribution of 25-64 year-old workers, by educational attainment (2011)

Proportion of 25-64 year-olds at or below half the median and the proportion of the population earning more than twice the median, for below upper secondary education and tertiary-type A or advanced research programmes



1. Year of reference 2010.
2. Earnings net of income tax.
3. Year of reference 2007.
4. Year of reference 2009.
5. Tertiary-all types and advanced research programmes.

Countries are ranked in descending order of the difference in the proportion of 25-64 year-olds at or below half the median and the proportion of the population earning more than twice the median, at below upper secondary education.

Source: OECD. Table A6.4a, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846614

Chart A6.4 contrasts the results for those with below upper secondary education with those who have completed a tertiary-type A or an advanced research programme by comparing the proportion of wage-earners at or below one-half of the median to those at more than twice the median. As expected, there is a large difference between these two educational categories. On average, tertiary-educated individuals are substantially more likely to earn twice as much as the median worker and are substantially less likely to be in the low-earnings category than those with below upper secondary education.

There are, however, some notable differences in how well tertiary-educated individuals fare in different countries. In Brazil, Chile and Portugal, 50% or more of those with a tertiary-type A or advanced research programme degree earn twice as much as the median worker; in Austria and Canada, over 15% of those with such a degree are found in the lowest-earnings category (at or below half of the median); and in Denmark and Norway, an individual with such a degree is roughly as likely to fall into the lowest as the highest earnings category (Chart A6.4).

Box A6.1. How earnings premiums vary by field of study

The earnings indicators in *Education at a Glance* clearly document the earnings premiums associated with completing higher levels of education. Higher average earnings for those who complete tertiary education have been consistently observed both across countries and over time. While the earnings premium for tertiary education has been documented at the aggregate level, this does not mean that all individuals have enjoyed this premium or that the advantages are consistently observed for all types of tertiary education or all tertiary programmes. For example, in the United States in 2011, the average annual salary for 25-29 year-olds who had completed an ISCED 5A first degree was USD 44 800. However, this average ranged from USD 34 750 for those who had completed a degree in social work to USD 75 700 for those who had completed a degree in computer engineering. Other fields with relatively low earnings were theology and religious vocations (USD 35 530), fine arts (USD 35 600), and ISCED 1 teacher education (USD 37 500). Other fields with annual earnings averages over USD 60 000 included several other engineering specialties, computer and information systems, and management-information systems and statistics.

While there was some tendency for the highest-paying fields of study to be associated with programmes that had high proportions of male graduates and for the lower-paying fields of study to be associated with programmes that had high proportions of women, there were some exceptions. For example, earnings in the field of nursing (USD 53 650), which is dominated by women, were substantially above average for tertiary graduates. Large differences in earnings by field of study have also been observed in other countries, although internationally comparable data on field-of-study earnings do not yet exist. In Canada, the median salaries in 2007 for 2005 ISCED 5A graduates who studied engineering were about 64% higher than the salaries of graduates who had majored in visual and performing arts. In Sweden, the average 2010 salary for 25-29 year-old graduates in engineering was 90% higher than the average for students who had majored in arts and humanities. A year after graduation, the median salaries of young adults in New Zealand who had majored in health and had graduated in 2010 from ISCED 5A programmes were 58% higher than the median salaries of graduates in creative arts fields; while, one year after graduation, the salaries of those who had majored in engineering were 45% higher than the salaries of those in creative arts. The average earnings premiums presented in Education at a Glance show essential structures of the economic systems, but the actual earnings of individuals are affected by their knowledge, skills and experience. Data from the forthcoming OECD Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC), will deepen our understanding of how these factors affect earnings in different OECD countries.

In all countries, individuals who remain with low qualifications through their working life (below upper secondary education) usually face large earnings disadvantages. On average across OECD countries, only 3% of those with below upper secondary education earn twice the national median. In Brazil, Canada, Estonia, Ireland, Japan and Portugal, this proportion is larger than 5%; only in Brazil does it exceed 10%. On average, more than 27% of those with below upper secondary education earn less than half the national median (Chart A6.4).

Students' earnings

In OECD countries, 53% of 15-24 year-olds have income from employment. In this age group, the majority of the non-students (70%) have earnings from employment, while less than half of those studying do (42%). New data on students' earnings (i.e. people who work while they study) show that female students at this age are more likely to work than their male counterparts. The proportion of female students with earnings from employment is higher than that for male students by 3 percentage points (43% and 40%, respectively). By contrast, the proportion of 15-24 year-old non-student men with earnings from employment is higher than that for non-student women by 4 percentage points (72% and 68%, respectively) (Table A6.5b).

The earnings of 15-24 year-old students are generally lower than earnings of non-students for all levels of education, except in Chile (for both men and men plus women), for women in Estonia and for men in Israel (Table A6.5a).

Students typically have lower earnings from work than non-students with the same age and level of attainment. This is especially true in countries where a high rate of the students have earnings from work, which is the case in Austria, Canada, Denmark, France, Korea, Norway and Sweden. This suggests that students mainly work part-time and during school holidays and possibly in jobs that do not reflect their level of education. It should be noted that in countries with a long reference period for the earnings data (for instance, annual data), it is more frequent that the earnings of students include earnings during school holidays (Tables A6.5a and b).

On average, among all students with income from employment, tertiary-educated students receive the highest earnings. Likewise, students who have attained upper secondary or post-secondary non-tertiary education have higher earnings than students with below upper secondary attainment who have earnings from employment. However, this tendency is not observed in all countries individually. Only in Australia, Belgium, Estonia, France, Israel, New Zealand, the United Kingdom and the United States do the relative earnings of 15-24 year-old students increase with educational attainment and do tertiary-educated students have the highest earnings (Table A6.5a).

However, the distribution of earnings is by no means homogeneous. In Australia, Canada, Finland, France, Germany, Italy, Korea, New Zealand, Norway, Switzerland and the United States, students earn between 40% and 50% of what non-student workers of the same age earn, regardless of their levels of education. In Belgium, Brazil, Chile, Estonia, Israel and the United Kingdom, some students earn 80% of what non-students workers of the same age earn, and in Brazil, Chile and Estonia, they earn more than non-students (Table A6.5a).

In many countries more than half the 15-24 year-old students have earnings from employment. Among those countries where this is not the case, in Belgium, Chile, Estonia, Israel, Italy, Spain and Switzerland, less than 20% of 15-24 year-old students have earnings from employment (Table A6.5b). Nonetheless, it is important to consider that, in some countries (for instance, in Switzerland) a proportion of students enrolled in upper secondary education has earnings based on apprenticeship contracts, and are not included in these calculations.

These findings support the widespread notion that schooling beyond compulsory education implies a loss of income while studying (even when combining studying and working), in addition to possible tuition fees and repayment of loans, which may discourage some individuals from pursuing further education and training.

Definitions

Age groups: adults refers to the 25-64 year-old population; **younger adults** refers to 25-34 year-olds; **older adults** refers to 55-64 year-olds. The **working-age population** is the total population aged 25-64.

For the definition of **full-time earnings**, countries were asked whether they had applied a self-designated full-time status or a threshold value of typical number of hours worked per week. Belgium, France, Italy, Luxembourg, Portugal, Spain, Sweden and the United Kingdom reported self-designated full-time status; the other countries defined the full-time status by the number of working hours per week. The threshold was 44/45 hours per week in Chile, 37 hours per week in the Slovak Republic, 36 hours per week in Hungary and Slovenia, 35 hours in Australia, Canada, Estonia, Germany, Israel, Korea, Norway and the United States, and 30 hours in the Czech Republic, Greece and New Zealand. Other participating countries did not report a minimum normal number of working hours for full-time work.

For some countries, data on **full-time, full-year earnings** are based on the European Survey on Income and Living Conditions (EU-SILC), which uses a self-designated approach in establishing full-time status.

The **length of the reference period for earnings** also differed. Australia, New Zealand and the United Kingdom reported data on weekly earnings; Belgium, Brazil, Chile, Estonia, Finland, Israel (three months), Korea, Portugal and Switzerland reported monthly data; and all other countries reported annual data. France reported annual data from 2008 onwards, and monthly data up to and including 2007.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED levels 3A, 3B, 3C long programmes, and 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

Methodology

The indicator is based on two different data collections. One is the regular data collection that takes account of earnings from work for all individuals during the reference period, even if the individual has worked part-time or part-year; this database contains for the first time data on students versus non-students earnings. The second data collection gathers information on the earnings of those working full-time and full-year.

Full-time and full-year data collection supplies the data for Table A6.3a (gender differences in full-time earnings) and Table A5.6 (differences in full-time earnings by educational attainment). The regular data collection is used for all other tables in this indicator.

Earnings data in Tables A6.1 and A6.2, Table A6.4 (available on line) and Table A6.5 (regular earnings data collection) are based on an annual, monthly or weekly reference period depending on the country (see length of the reference period in the *Definitions* section). Data on earnings are before income tax, except for Belgium, Korea and Turkey, where earnings reported are net of income tax. Data on earnings for individuals in part-time work are excluded in the regular data collection for the Czech Republic, Hungary, Portugal, Slovenia, and data on part-year earnings are excluded for the Czech Republic, Hungary and Portugal.

Since earnings data differ across countries in a number of ways, the results should be interpreted with caution. For example, in countries reporting annual earnings, differences in the incidence of seasonal work among individuals with different levels of educational attainment will have an effect on relative earnings that is not similarly reflected in the data for countries reporting weekly or monthly earnings. In addition, it should be noted that data available in Tables A6.2a, b and c, regards relative earnings and therefore should be used with caution to assess the evolution of relative earnings for different levels of education. Finally, for Tables A6.5a and b, differences between countries could be the result of differences in data sources and in the length of the reference period. For further details, see Annex 3 (*www.oecd.org/edu/eag.htm*).

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

Carnevale, A. (2012), *Hard Times: College Majors, Unemployment and Earnings: Not All College Degrees Are Created Equal*, Center on Education and the Workforce, Washington, D.C.

Indicator A6 Tables

Table A6.1	Relative earnings of adults with income from employment, by educational attainment, gender and age group (2011)	StatLink http://dx.doi.org/10.1787/888932848875
Table A6.2a	Trends in relative earnings of 25-64 year-olds with income from employment, by educational attainment (2000-11)	StatLink http://dx.doi.org/10.1787/888932848894
Table A6.2b	Trends in relative earnings of 25-64 year-old men with income from employment, by educational attainment (2000-11)	StatLink http://dx.doi.org/10.1787/888932848913
Table A6.2c	Trends in relative earnings of 25-64 year-old women with income from employment, by educational attainment (2000-11)	StatLink http://dx.doi.org/10.1787/888932848932
Table A6.3a	Differences in earnings between women and men, by educational attainment and age group (2011)	StatLink http://dx.doi.org/10.1787/888932848951
Table A6.3b	Trends in the differences in earnings between 25-64 year-old women and men, by educational attainment (2000-11)	StatLink http://dx.doi.org/10.1787/888932848970
WEB Table A6.4a	Distribution of 25-64 year-olds, by educational attainment and level of earnings relative to median earnings (2011)	StatLink http://dx.doi.org/10.1787/888932848989
WEB Table A6.4b	Distribution of 25-64 year-old men, by educational attainment and level of earnings relative to median earnings (2011)	StatLink http://dx.doi.org/10.1787/888932849008
WEB Table A6.4c	Distribution of 25-64 year-old women, by educational attainment and level of earnings relative to median earnings (2011)	StatLink http://dx.doi.org/10.1787/888932849027
Table A6.5a	Relative earnings of 15-24 year-old students, by educational attainment and gender (2011)	StatLink http://dx.doi.org/10.1787/888932849046
Table A6.5b	Share of young adults with income from employment among all young adults, by gender, age group and student status (2011)	StatLink http://dx.doi.org/10.1787/888932849065

A6

Table A6.1. [1/2] Relative earnings of adults with income from employment, by educational attainment, gender and age group (2011)

Upper secondary or post-secondary non-tertiary education = 100

				Below upper secondary education			Post-secondary non-tertiary education			Tertiary-type B education			Tertiary-type A and advanced research programmes			All tertiary education		
				25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	2009	Men	85	78	88	103	110	100	125	100	131	151	122	163	144	117	155
			Women	85	75	88	95	107	94	116	105	118	162	151	169	148	141	150
			M+W	81	77	82	93	103	95	111	96	113	145	126	157	135	119	143
	Austria	2011	Men	67	76	59	133	115	183	126	125	114	172	145	175	154	139	151
			Women	73	67	59	124	120	143	147	108	154	171	167	178	163	153	167
			M+W	66	73	54	123	113	164	135	119	124	171	149	176	158	141	154
	Belgium[1]	2011	Men	92	93	87	97	101	94	116	112	116	140	129	145	129	122	133
			Women	84	88	77	95	103	83	125	123	125	148	141	156	134	132	137
			M+W	91	92	83	96	101	89	116	113	118	143	132	153	129	123	135
	Canada	2010	Men	78	90	69	108	113	100	114	113	123	165	126	195	140	120	164
			Women	77	104	70	105	117	95	120	126	115	183	184	178	151	160	143
			M+W	80	97	71	109	113	101	111	110	117	166	136	197	139	124	158
	Chile	2011	Men	64	69	58	a	a	a	149	134	145	325	267	343	271	229	300
			Women	65	70	48	a	a	a	168	141	147	306	275	274	262	241	239
			M+W	66	70	56	a	a	a	151	133	143	309	261	323	260	227	279
	Czech Republic	2011	Men	76	78	77	m	m	m	122	121	127	191	162	195	187	158	193
			Women	74	76	70	m	m	m	121	118	117	164	150	176	160	144	172
			M+W	73	78	71	m	m	m	117	114	118	181	154	190	176	149	187
	Denmark	2011	Men	79	76	85	68	44	101	115	115	113	146	113	161	138	113	151
			Women	83	76	87	42	44	66	113	120	107	128	123	134	126	123	130
			M+W	81	78	84	62	45	108	115	116	110	130	111	143	128	112	137
	Estonia	2011	Men	81	78	85	m	m	m	m	m	m	146	112	151	146	112	151
			Women	81	78	76	m	m	m	m	m	m	148	136	142	148	136	142
			M+W	87	83	88	m	m	m	m	m	m	135	112	139	135	112	139
	Finland	2009	Men	90	89	92	m	m	m	136	132	135	174	138	211	162	137	179
			Women	94	89	93	m	m	m	133	128	126	155	142	191	146	141	154
			M+W	93	92	93	m	m	m	128	120	128	161	130	206	149	129	167
	France	2009	Men	83	84	79	m	m	m	121	117	149	181	150	240	157	135	215
			Women	75	74	62	m	m	m	129	135	111	155	150	164	145	145	147
			M+W	79	80	70	m	m	m	122	121	130	163	142	208	147	134	185
	Germany	2011	Men	88	76	94	121	130	114	127	128	117	173	136	187	161	135	169
			Women	81	74	84	121	121	113	115	119	108	166	151	200	155	145	183
			M+W	86	78	88	116	117	111	132	121	126	174	142	200	164	139	183
	Greece	2011	Men	69	93	62	98	102	87	107	109	99	167	142	224	151	131	200
			Women	50	62	43	118	116	155	175	174	79	239	193	323	222	187	260
			M+W	61	86	53	102	104	104	126	132	96	186	157	271	170	149	233
	Hungary	2011	Men	75	76	76	123	117	126	130	127	133	245	203	248	243	202	247
			Women	72	75	65	114	108	115	130	132	138	185	170	194	185	170	193
			M+W	73	76	69	118	112	120	127	127	135	208	182	218	207	182	217
	Iceland			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Ireland	2010	Men	82	77	70	86	99	76	143	119	152	205	208	162	180	177	158
			Women	78	77	68	99	90	102	130	162	141	206	252	165	178	223	155
			M+W	85	74	79	90	95	86	135	125	147	200	205	169	175	179	161
	Israel	2011	Men	69	72	70	106	110	92	117	108	123	179	151	192	159	139	166
			Women	66	73	59	125	161	110	118	106	131	165	143	167	151	134	153
			M+W	72	75	70	110	127	95	115	104	124	167	141	180	151	132	159
	Italy	2009	Men	76	90	68	m	m	m	m	m	m	160	120	183	160	120	183
			Women	72	80	67	m	m	m	m	m	m	143	136	151	143	136	151
			M+W	77	91	68	m	m	m	m	m	m	148	122	168	148	122	168
	Japan	2007	Men	74	88	71	m	m	m	116	111	126	141	126	157	139	125	154
			Women	78	73	77	m	m	m	134	134	146	191	171	225	161	155	178
			M+W	80	90	74	m	m	m	90	96	106	168	139	197	148	129	178
	Korea[1]	2011	Men	72	84	73	m	m	m	107	106	134	151	129	207	137	120	195
			Women	78	84	78	m	m	m	130	120	227	167	143	237	153	133	235
			M+W	71	85	67	m	m	m	116	110	154	164	132	225	147	123	212
	Luxembourg	2010	Men	68	68	83	105	99	74	m	m	m	165	143	188	165	143	188
			Women	68	61	49	113	61	91	m	m	m	166	167	150	166	167	150
			M+W	66	67	66	119	109	80	m	m	m	159	151	177	159	151	177
	Mexico			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Earnings net of income tax.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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A6

Table A6.1. [2/2] Relative earnings of adults with income from employment, by educational attainment, gender and age group (2011)

Upper secondary or post-secondary non-tertiary education = 100

				Below upper secondary education			Post-secondary non-tertiary education			Tertiary-type B education			Tertiary-type A and advanced research programmes			All tertiary education		
				25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Netherlands	2010	Men	85	90	82	m	m	m	143	133	139	154	134	155	153	134	154
			Women	73	77	68	m	m	m	143	138	129	163	148	164	162	148	162
			M+W	83	90	74	m	m	m	145	134	145	157	137	160	156	137	159
	New Zealand	2011	Men	79	85	77	101	102	99	101	90	99	135	115	153	123	106	133
			Women	87	88	85	88	102	73	110	111	120	145	146	164	131	136	140
			M+W	79	87	76	110	112	107	97	94	97	132	120	149	118	112	125
	Norway	2010	Men	76	73	77	121	119	127	145	136	146	133	106	154	134	107	153
			Women	78	75	79	116	108	125	151	149	150	134	127	148	134	128	148
			M+W	76	73	77	125	123	133	152	133	165	127	107	149	128	107	151
	Poland	2010	Men	86	85	84	110	106	113	m	m	m	186	160	223	186	160	223
			Women	77	87	66	118	110	118	m	m	m	168	155	182	168	155	182
			M+W	83	87	78	109	102	114	m	m	m	169	148	204	169	148	204
	Portugal	2010	Men	67	79	52	98	102	87	161	143	150	175	158	193	173	156	184
			Women	68	78	51	112	116	118	157	146	155	173	167	199	171	165	188
			M+W	69	81	51	104	108	96	159	144	154	171	159	201	170	158	191
	Slovak Republic	2011	Men	69	60	79	m	m	m	130	121	153	186	155	198	185	154	197
			Women	71	69	69	m	m	m	137	130	138	171	154	183	169	153	179
			M+W	67	63	70	m	m	m	123	116	135	177	148	192	175	147	189
	Slovenia	2011	Men	77	79	73	m	m	m	162	143	175	220	165	250	197	156	226
			Women	76	83	62	m	m	m	156	132	161	198	160	234	180	150	202
			M+W	76	83	69	m	m	m	155	130	167	203	151	243	183	143	215
	Spain	2010	Men	80	93	70	c	c	c	107	116	98	145	128	155	133	124	144
			Women	74	90	60	c	c	c	107	119	98	169	157	182	157	149	174
			M+W	80	94	68	c	c	c	108	117	102	150	136	162	140	131	154
	Sweden	2010	Men	81	79	83	122	79	127	105	96	111	142	118	159	133	113	147
			Women	80	75	84	108	85	125	114	95	121	132	130	148	127	124	138
			M+W	82	78	85	120	80	133	105	94	111	133	118	152	125	113	139
	Switzerland	2011	Men	80	86	75	99	102	104	125	124	122	154	132	167	144	130	150
			Women	75	72	68	116	110	116	133	129	134	163	145	164	155	142	155
			M+W	76	80	68	105	104	110	138	128	138	163	137	178	155	135	164
	Turkey[1]	2005	Men	72	77	60	m	m	m	128	154	121	162	178	133	153	171	129
			Women	43	37	49	m	m	m	131	93	m	162	150	307	154	133	307
			M+W	69	70	59	m	m	m	125	131	128	157	166	138	149	156	135
	United Kingdom	2011	Men	67	63	75	m	m	m	122	100	135	160	146	159	151	138	152
			Women	69	78	69	m	m	m	144	134	160	195	189	182	182	180	175
			M+W	69	70	69	m	m	m	125	106	138	168	153	164	157	145	156
	United States	2011	Men	64	69	66	m	m	m	117	125	109	189	168	181	182	164	175
			Women	58	61	55	m	m	m	124	143	122	187	188	192	181	184	184
			M+W	64	69	63	m	m	m	116	128	111	184	169	186	177	165	179
	OECD average		Men	77	80	75	106	103	106	126	120	128	172	146	188	162	140	176
			Women	74	76	68	107	105	108	132	127	132	172	161	188	161	154	174
			M+W	76	80	72	106	104	109	125	118	128	168	146	187	157	140	173
	EU21 average		Men	78	80	77	106	99	107	128	121	130	173	146	189	164	141	178
			Women	75	77	68	106	98	112	134	130	127	169	159	181	161	154	169
			M+W	77	81	73	105	99	110	128	121	129	166	145	186	158	140	174
Other G20	Argentina			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	2011	Men	57	61	44	m	m	m	m	m	m	273	241	286	273	241	286
			Women	50	48	37	m	m	m	m	m	m	269	266	281	269	266	281
			M+W	58	61	44	m	m	m	m	m	m	257	240	278	257	240	278
	China			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average			m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Earnings net of income tax.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Table A6.2a. [1/2] Trends in relative earnings of 25-64 year-olds with income from employment, by educational attainment (2000-11)

Upper secondary or post-secondary non-tertiary education = 100

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	Below upper secondary	m	77	m	m	m	82	m	m	m	81	m	**m**
		Tertiary	m	133	m	m	m	134	m	m	m	135	m	**m**
	Austria	Below upper secondary	m	m	m	m	m	71	66	67	68	65	66	**66**
		Tertiary	m	m	m	m	m	152	157	155	160	155	156	**158**
	Belgium[1]	Below upper secondary	92	m	91	89	90	89	m	m	m	91	91	**91**
		Tertiary	128	m	132	130	134	133	m	m	m	131	131	**129**
	Canada	Below upper secondary	82	79	79	81	81	78	78	84	82	80	80	**m**
		Tertiary	142	141	135	138	137	135	136	140	138	138	139	**m**
	Chile	Below upper secondary	m	m	m	m	m	m	m	m	m	m	m	**66**
		Tertiary	m	m	m	m	m	m	m	m	m	m	m	**260**
	Czech Republic	Below upper secondary	m	m	m	m	73	72	74	73	72	71	73	**73**
		Tertiary	m	m	m	m	182	181	183	183	183	188	182	**176**
	Denmark	Below upper secondary	m	87	88	82	82	82	83	82	83	81	81	**81**
		Tertiary	m	124	124	127	126	125	126	125	125	127	129	**128**
	Estonia	Below upper secondary	m	m	m	m	m	m	m	m	91	91	90	**87**
		Tertiary	m	m	m	m	m	m	m	m	129	137	136	**135**
	Finland	Below upper secondary	95	95	95	94	94	94	94	94	93	93	m	**m**
		Tertiary	153	150	150	148	149	149	149	148	147	149	m	**m**
	France[2]	Below upper secondary	m	m	84	84	85	86	85	84	79	79	m	**m**
		Tertiary	m	m	150	146	147	144	149	150	147	147	m	**m**
	Germany	Below upper secondary	75	m	77	87	88	88	90	91	90	87	85	**86**
		Tertiary	143	m	143	153	153	156	164	162	167	157	168	**164**
	Greece	Below upper secondary	m	m	m	m	m	m	m	m	m	76	m	**61**
		Tertiary	m	m	m	m	m	m	m	m	m	151	m	**170**
	Hungary	Below upper secondary	71	71	74	74	73	73	73	72	73	71	73	**73**
		Tertiary	194	194	205	219	217	215	219	211	210	211	210	**207**
	Iceland		m	m	m	m	m	m	m	m	m	m	m	**m**
	Ireland	Below upper secondary	89	m	76	m	79	78	83	77	74	83	85	**m**
		Tertiary	153	m	144	m	174	177	157	161	153	164	175	**m**
	Israel	Below upper secondary	m	m	m	m	m	79	78	83	75	80	71	**72**
		Tertiary	m	m	m	m	m	151	151	153	152	154	152	**151**
	Italy	Below upper secondary	78	m	78	m	79	m	76	m	79	77	m	**m**
		Tertiary	138	m	153	m	165	m	155	m	150	148	m	**m**
	Japan	Below upper secondary	m	m	m	m	m	m	m	80	m	m	m	**m**
		Tertiary	m	m	m	m	m	m	m	148	m	m	m	**m**
	Korea[1]	Below upper secondary	m	69	71	68	69	68	69	70	69	67	69	**71**
		Tertiary	m	144	143	145	144	149	147	150	150	157	151	**147**
	Luxembourg	Below upper secondary	m	m	78	m	m	m	74	m	m	66	66	**m**
		Tertiary	m	m	145	m	m	m	153	m	m	162	159	**m**
	Mexico		m	m	m	m	m	m	m	m	m	m	m	**m**
	Netherlands	Below upper secondary	m	m	84	m	m	m	85	m	81	m	83	**m**
		Tertiary	m	m	148	m	m	m	154	m	159	m	156	**m**
	New Zealand	Below upper secondary	79	78	81	77	75	77	82	76	82	79	79	**79**
		Tertiary	123	120	123	123	116	120	115	117	118	118	124	**118**
	Norway	Below upper secondary	79	79	79	78	78	78	78	79	78	77	76	**m**
		Tertiary	129	131	130	131	130	129	129	128	127	128	128	**m**
	Poland	Below upper secondary	m	81	81	m	82	m	84	m	83	m	83	**m**
		Tertiary	m	166	172	m	179	m	173	m	167	m	169	**m**
	Portugal	Below upper secondary	m	m	m	m	67	67	68	m	m	68	69	**m**
		Tertiary	m	m	m	m	178	177	177	m	m	169	170	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
3. OECD averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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A6

Table A6.2a. [2/2] Trends in relative earnings of 25-64 year-olds with income from employment, by educational attainment (2000-11)

Upper secondary or post-secondary non-tertiary education = 100

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Slovak Republic	Below upper secondary	m	m	m	m	m	m	m	m	69	66	67	**67**
		Tertiary	m	m	m	m	m	m	m	m	181	184	179	**175**
	Slovenia	Below upper secondary	m	m	m	m	73	m	74	74	m	73	75	**76**
		Tertiary	m	m	m	m	198	m	193	192	m	191	186	**183**
	Spain	Below upper secondary	m	78	m	79	82	80	m	81	78	78	80	**m**
		Tertiary	m	129	m	128	135	137	m	138	141	141	140	**m**
	Sweden	Below upper secondary	m	86	87	87	87	86	85	84	83	83	82	**m**
		Tertiary	m	131	130	128	127	126	126	126	126	126	125	**m**
	Switzerland	Below upper secondary	75	76	75	74	74	75	74	74	74	76	75	**76**
		Tertiary	152	156	155	157	157	155	156	160	155	154	153	**155**
	Turkey[1]	Below upper secondary	m	m	m	m	65	69	m	m	m	m	m	**m**
		Tertiary	m	m	m	m	141	149	m	m	m	m	m	**m**
	United Kingdom	Below upper secondary	69	70	68	69	69	71	71	70	71	70	67	**69**
		Tertiary	160	160	157	162	157	158	160	157	154	159	165	**157**
	United States	Below upper secondary	68	m	66	66	65	67	66	65	66	64	66	**64**
		Tertiary	176	m	172	172	172	175	176	172	177	179	177	**177**
	OECD average[3]	Below upper secondary	79	79	79	79	78	78	78	78	78	77	76	**74**
		Tertiary	149	145	148	147	155	151	157	154	153	154	157	**164**
	EU21 average	Below upper secondary	81	81	81	83	80	80	79	79	79	77	77	**75**
		Tertiary	153	151	150	149	161	156	162	159	156	158	161	**162**
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	**m**
	Brazil	Below upper secondary	m	m	m	m	m	m	m	51	52	53	m	**58**
		Tertiary	m	m	m	m	m	m	m	268	254	256	m	**257**
	China		m	m	m	m	m	m	m	m	m	m	m	**m**
	India		m	m	m	m	m	m	m	m	m	m	m	**m**
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	**m**
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	**m**
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	**m**
	South Africa		m	m	m	m	m	m	m	m	m	m	m	**m**
	G20 average		m	m	m	m	m	m	m	m	m	m	m	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
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Table A6.2b. [1/2] Trends in relative earnings of 25-64 year-old men with income from employment, by educational attainment (2000-11)

Upper secondary or post-secondary non-tertiary education = 100

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	Below upper secondary	m	84	m	m	m	88	m	m	m	85	m	**m**
		Tertiary	m	142	m	m	m	140	m	m	m	144	m	**m**
	Austria	Below upper secondary	m	m	m	m	m	76	72	72	71	68	69	**67**
		Tertiary	m	m	m	m	m	149	155	151	159	153	153	**154**
	Belgium[1]	Below upper secondary	93	m	91	90	91	91	m	m	m	93	92	**92**
		Tertiary	128	m	132	132	137	137	m	m	m	134	133	**129**
	Canada	Below upper secondary	83	79	81	81	81	78	78	85	82	78	78	**m**
		Tertiary	148	145	141	141	139	136	137	143	139	139	140	**m**
	Chile	Below upper secondary	m	m	m	m	m	m	m	m	m	m	m	**64**
		Tertiary	m	m	m	m	m	m	m	m	m	m	m	**271**
	Czech Republic	Below upper secondary	m	m	m	m	79	79	81	78	76	75	76	**76**
		Tertiary	m	m	m	m	193	190	194	192	193	201	195	**187**
	Denmark	Below upper secondary	m	87	87	82	82	82	82	81	82	80	80	**79**
		Tertiary	m	132	131	134	133	133	133	133	133	136	141	**138**
	Estonia	Below upper secondary	m	m	m	m	m	m	m	m	91	88	88	**81**
		Tertiary	m	m	m	m	m	m	m	m	135	142	149	**146**
	Finland	Below upper secondary	92	92	92	92	91	91	91	90	90	90	m	**m**
		Tertiary	169	163	163	160	161	162	162	161	159	162	m	**m**
	France[2]	Below upper secondary	m	m	88	88	89	90	89	87	84	83	m	**m**
		Tertiary	m	m	159	151	154	152	157	158	153	157	m	**m**
	Germany	Below upper secondary	80	m	84	90	91	93	92	90	97	91	95	**88**
		Tertiary	141	m	140	150	149	151	163	158	163	154	171	**161**
	Greece	Below upper secondary	m	m	m	m	m	m	m	m	m	80	m	**69**
		Tertiary	m	m	m	m	m	m	m	m	m	153	m	**151**
	Hungary	Below upper secondary	75	75	78	77	76	76	75	74	77	75	76	**75**
		Tertiary	232	232	245	255	253	253	259	247	248	247	244	**243**
	Iceland		m	m	m	m	m	m	m	m	m	m	m	**m**
	Ireland	Below upper secondary	84	m	71	m	78	78	82	71	71	80	82	**m**
		Tertiary	138	m	141	m	170	176	149	151	156	162	180	**m**
	Israel	Below upper secondary	m	m	m	m	m	74	76	80	72	77	68	**69**
		Tertiary	m	m	m	m	m	159	166	165	164	162	164	**159**
	Italy	Below upper secondary	71	m	74	m	78	m	73	m	78	76	m	**m**
		Tertiary	143	m	162	m	188	m	178	m	162	160	m	**m**
	Japan	Below upper secondary	m	m	m	m	m	m	m	74	m	m	m	**m**
		Tertiary	m	m	m	m	m	m	m	139	m	m	m	**m**
	Korea[1]	Below upper secondary	m	76	78	74	74	73	73	73	72	68	71	**72**
		Tertiary	m	135	135	136	134	139	140	141	142	148	143	**137**
	Luxembourg	Below upper secondary	m	m	79	m	m	m	74	m	m	69	68	**m**
		Tertiary	m	m	149	m	m	m	158	m	m	171	165	**m**
	Mexico		m	m	m	m	m	m	m	m	m	m	m	**m**
	Netherlands	Below upper secondary	m	m	84	m	m	m	87	m	82	m	85	**m**
		Tertiary	m	m	143	m	m	m	151	m	156	m	153	**m**
	New Zealand	Below upper secondary	82	81	84	80	77	83	85	78	87	82	81	**79**
		Tertiary	133	124	131	135	126	129	123	128	126	127	130	**123**
	Norway	Below upper secondary	80	80	80	79	79	78	79	79	78	76	76	**m**
		Tertiary	133	134	133	134	134	134	134	134	133	134	134	**m**
	Poland	Below upper secondary	m	85	84	m	86	m	86	m	87	m	86	**m**
		Tertiary	m	185	194	m	204	m	194	m	188	m	186	**m**
	Portugal	Below upper secondary	m	m	m	m	64	64	66	m	m	66	67	**m**
		Tertiary	m	m	m	m	183	183	183	m	m	172	173	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
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Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.2b. [2/2] Trends in relative earnings of 25-64 year-old men with income from employment, by educational attainment (2000-11)

Upper secondary or post-secondary non-tertiary education = 100

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Slovak Republic	Below upper secondary	m	m	m	m	m	m	m	m	72	70	70	**69**
		Tertiary	m	m	m	m	m	m	m	m	187	192	188	**185**
	Slovenia	Below upper secondary	m	m	m	m	74	m	75	75	m	73	75	**77**
		Tertiary	m	m	m	m	217	m	210	208	m	208	201	**197**
	Spain	Below upper secondary	m	79	m	81	84	80	m	83	80	79	80	**m**
		Tertiary	m	138	m	125	132	133	m	133	135	133	133	**m**
	Sweden	Below upper secondary	m	84	85	85	85	84	83	83	82	82	81	**m**
		Tertiary	m	141	139	137	135	135	135	135	134	134	133	**m**
	Switzerland	Below upper secondary	79	84	79	77	77	80	78	77	78	80	78	**80**
		Tertiary	135	141	138	140	140	141	139	145	139	141	143	**144**
	Turkey[1]	Below upper secondary	m	m	m	m	67	72	m	m	m	m	m	**m**
		Tertiary	m	m	m	m	139	153	m	m	m	m	m	**m**
	United Kingdom	Below upper secondary	74	73	72	71	70	72	73	69	68	69	64	**67**
		Tertiary	152	147	147	152	146	146	148	145	145	151	162	**151**
	United States	Below upper secondary	65	m	63	63	62	64	63	63	65	62	64	**64**
		Tertiary	181	m	178	177	179	183	183	180	188	190	184	**182**
	OECD average[3]	Below upper secondary	80	81	81	81	79	79	79	78	79	78	77	**75**
		Tertiary	150	151	151	149	160	154	162	156	157	158	162	**167**
	EU21 average	Below upper secondary	81	82	82	84	81	81	80	80	81	78	79	**77**
		Tertiary	158	163	157	155	170	162	171	164	163	164	168	**168**
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	**m**
	Brazil	Below upper secondary	m	m	m	m	m	m	m	51	52	53	m	**57**
		Tertiary	m	m	m	m	m	m	m	284	263	275	m	**273**
	China		m	m	m	m	m	m	m	m	m	m	m	**m**
	India		m	m	m	m	m	m	m	m	m	m	m	**m**
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	**m**
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	**m**
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	**m**
	South Africa		m	m	m	m	m	m	m	m	m	m	m	**m**
	G20 average		m	m	m	m	m	m	m	m	m	m	m	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
3. OECD averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.2c. [1/2] Trends in relative earnings of 25-64 year-old women with income from employment, by educational attainment (2000-11)

Upper secondary or post-secondary non-tertiary education = 100

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	Below upper secondary	m	84	m	m	m	88	m	m	m	85	m	**m**
		Tertiary	m	146	m	m	m	147	m	m	m	148	m	**m**
	Austria	Below upper secondary	m	m	m	m	m	74	71	73	74	70	71	**73**
		Tertiary	m	m	m	m	m	156	158	160	159	158	162	**163**
	Belgium[1]	Below upper secondary	82	m	83	81	82	81	m	m	m	84	86	**84**
		Tertiary	132	m	139	132	137	134	m	m	m	135	136	**134**
	Canada	Below upper secondary	72	70	67	73	70	70	68	72	73	77	77	**m**
		Tertiary	140	146	134	144	140	140	141	144	146	150	151	**m**
	Chile	Below upper secondary	m	m	m	m	m	m	m	m	m	m	m	**65**
		Tertiary	m	m	m	m	m	m	m	m	m	m	m	**262**
	Czech Republic	Below upper secondary	m	m	m	m	73	72	73	74	73	72	74	**74**
		Tertiary	m	m	m	m	160	161	163	165	164	166	163	**160**
	Denmark	Below upper secondary	m	90	90	85	85	84	84	83	84	83	83	**83**
		Tertiary	m	124	123	127	126	126	125	124	123	125	126	**126**
	Estonia	Below upper secondary	m	m	m	m	m	m	m	m	82	86	87	**81**
		Tertiary	m	m	m	m	m	m	m	m	146	162	154	**148**
	Finland	Below upper secondary	99	98	98	97	97	98	97	96	95	94	m	**m**
		Tertiary	146	146	146	146	146	145	146	146	145	146	m	**m**
	France[2]	Below upper secondary	m	m	81	81	82	81	82	82	75	75	m	**m**
		Tertiary	m	m	146	146	145	142	146	147	151	145	m	**m**
	Germany	Below upper secondary	72	m	73	81	81	77	83	84	80	79	74	**81**
		Tertiary	137	m	137	145	148	151	153	159	158	154	153	**155**
	Greece	Below upper secondary	m	m	m	m	m	m	m	m	m	65	m	**50**
		Tertiary	m	m	m	m	m	m	m	m	m	163	m	**222**
	Hungary	Below upper secondary	71	71	71	72	71	72	72	71	71	68	71	**72**
		Tertiary	164	164	176	192	190	188	189	185	183	185	187	**185**
	Iceland		m	m	m	m	m	m	m	m	m	m	m	**m**
	Ireland	Below upper secondary	65	m	60	m	63	61	63	67	65	73	78	**m**
		Tertiary	163	m	153	m	171	172	180	185	162	171	178	**m**
	Israel	Below upper secondary	m	m	m	m	m	72	67	67	67	70	63	**66**
		Tertiary	m	m	m	m	m	157	150	155	153	159	150	**151**
	Italy	Below upper secondary	84	m	78	m	73	m	74	m	70	72	m	**m**
		Tertiary	137	m	147	m	138	m	143	m	142	143	m	**m**
	Japan	Below upper secondary	m	m	m	m	m	m	m	78	m	m	m	**m**
		Tertiary	m	m	m	m	m	m	m	161	m	m	m	**m**
	Korea[1]	Below upper secondary	m	76	76	75	77	76	76	75	75	77	77	**78**
		Tertiary	m	158	151	157	158	160	156	155	154	160	155	**153**
	Luxembourg	Below upper secondary	m	m	74	m	m	m	73	m	m	65	68	**m**
		Tertiary	m	m	131	m	m	m	134	m	m	160	166	**m**
	Mexico		m	m	m	m	m	m	m	m	m	m	m	**m**
	Netherlands	Below upper secondary	m	m	72	m	m	m	75	m	73	m	73	**m**
		Tertiary	m	m	155	m	m	m	159	m	162	m	162	**m**
	New Zealand	Below upper secondary	86	82	86	84	83	79	89	85	83	82	85	**87**
		Tertiary	126	130	131	127	123	123	122	126	125	123	135	**131**
	Norway	Below upper secondary	81	81	81	81	81	81	81	81	80	80	78	**m**
		Tertiary	132	135	135	137	136	135	134	134	133	135	134	**m**
	Poland	Below upper secondary	m	74	73	m	74	m	76	m	75	m	77	**m**
		Tertiary	m	155	159	m	166	m	165	m	161	m	168	**m**
	Portugal	Below upper secondary	m	m	m	m	66	66	67	m	m	67	68	**m**
		Tertiary	m	m	m	m	173	173	173	m	m	171	171	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
3. OECD averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.2c. [2/2] Trends in relative earnings of 25-64 year-old women with income from employment, by educational attainment (2000-11)

Upper secondary or post-secondary non-tertiary education = 100

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Slovak Republic	Below upper secondary	m	m	m	m	m	m	m	m	72	70	71	**71**
		Tertiary	m	m	m	m	m	m	m	m	176	177	172	**169**
	Slovenia	Below upper secondary	m	m	m	m	71	m	72	72	m	72	74	**76**
		Tertiary	m	m	m	m	190	m	188	187	m	185	181	**180**
	Spain	Below upper secondary	m	64	m	69	71	73	m	70	69	71	74	**m**
		Tertiary	m	125	m	143	150	155	m	149	156	159	157	**m**
	Sweden	Below upper secondary	m	87	87	88	87	86	85	84	82	81	80	**m**
		Tertiary	m	129	129	128	127	126	126	127	126	127	127	**m**
	Switzerland	Below upper secondary	72	73	74	76	77	76	76	76	76	78	77	**75**
		Tertiary	144	148	148	152	153	149	160	157	157	152	148	**155**
	Turkey[1]	Below upper secondary	m	m	m	m	46	43	m	m	m	m	m	**m**
		Tertiary	m	m	m	m	164	154	m	m	m	m	m	**m**
	United Kingdom	Below upper secondary	69	73	69	69	72	71	70	70	73	68	69	**69**
		Tertiary	176	187	177	182	180	181	182	181	177	176	177	**182**
	United States	Below upper secondary	66	m	63	66	62	63	63	61	60	63	61	**58**
		Tertiary	169	m	165	167	166	167	170	167	171	173	175	**181**
	OECD average[3]	Below upper secondary	76	79	77	78	75	75	76	76	75	75	75	**73**
		Tertiary	147	145	146	148	154	152	155	156	154	156	158	**168**
	EU21 average	Below upper secondary	77	80	78	80	77	77	76	77	76	74	75	**74**
		Tertiary	151	147	148	149	157	155	158	160	156	158	161	**166**
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	**m**
	Brazil	Below upper secondary	m	m	m	m	m	m	m	44	46	47	m	**50**
		Tertiary	m	m	m	m	m	m	m	270	271	263	m	**269**
	China		m	m	m	m	m	m	m	m	m	m	m	**m**
	India		m	m	m	m	m	m	m	m	m	m	m	**m**
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	**m**
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	**m**
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	**m**
	South Africa		m	m	m	m	m	m	m	m	m	m	m	**m**
	G20 average		m	m	m	m	m	m	m	m	m	m	m	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
3. OECD averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Table A6.3a. Differences in earnings between women and men, by educational attainment and age group (2011)

Average annual full-time, full-year earnings of women as a percentage of men's earnings

			Below upper secondary education			Upper secondary and post-secondary non-tertiary education			Tertiary education			All levels of education		
			25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2009	76	76	83	73	68	75	72	70	73	77	74	80
	Austria	2011	81	77	86	77	75	83	75	74	79	76	74	81
	Belgium	2011	80	m	m	86	78	95	86	86	81	92	91	86
	Canada	2010	72	79	71	73	76	73	72	72	59	75	76	65
	Chile	2011	76	79	70	69	68	71	62	70	53	77	82	66
	Czech Republic	2011	79	78	80	80	74	87	70	64	85	75	68	80
	Denmark	2011	82	80	82	80	78	83	74	75	73	79	79	79
	Estonia	2011	63	57	64	65	62	77	65	55	73	71	65	80
	Finland	2010	79	76	79	78	76	79	75	74	74	80	78	77
	France	2009	75	70	80	81	75	95	73	75	68	79	77	79
	Germany	2011	73	74	74	80	86	77	69	76	68	74	79	72
	Greece	2011	61	62	59	74	70	58	74	74	87	76	75	67
	Hungary	2011	82	82	80	87	83	96	66	57	73	83	77	86
	Iceland		m	m	m	m	m	m	m	m	m	m	m	m
	Ireland	2010	87	82	87	79	87	78	73	75	58	84	82	78
	Israel	2011	75	67	66	75	78	72	68	70	63	74	76	69
	Italy	2009	80	78	86	80	80	81	66	75	60	82	85	80
	Japan		m	m	m	m	m	m	m	m	m	m	m	m
	Korea[1]	2011	66	72	65	62	61	62	68	68	75	63	61	54
	Luxembourg	2010	80	78	56	74	81	80	73	81	64	80	84	69
	Mexico		m	m	m	m	m	m	m	m	m	m	m	m
	Netherlands	2010	77	79	76	79	85	79	74	83	74	82	88	80
	New Zealand	2011	81	86	83	78	79	74	78	76	74	80	80	78
	Norway	2010	82	80	82	78	78	78	74	75	73	80	81	78
	Poland	2010	71	66	73	80	73	94	71	66	76	84	80	90
	Portugal	2010	75	75	74	72	72	70	69	74	69	79	80	69
	Slovak Republic	2011	72	72	72	74	70	82	66	58	74	73	67	78
	Slovenia	2011	85	84	83	86	83	99	79	79	89	92	91	103
	Spain	2010	76	85	71	79	77	74	88	89	85	90	94	84
	Sweden	2010	84	90	86	83	85	79	74	68	77	82	80	86
	Switzerland		m	m	m	m	m	m	m	m	m	m	m	m
	Turkey		m	m	m	m	m	m	m	m	m	m	m	m
	United Kingdom	2011	66	69	63	61	61	63	68	67	68	69	68	68
	United States	2011	67	69	54	70	69	67	69	71	67	72	74	67
	OECD average		76	76	74	77	76	79	72	72	72	79	78	77
	EU21 average		77	76	76	78	78	82	73	73	74	80	79	80
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	2011	65	66	60	63	64	61	61	59	60	77	76	73
	China		m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m

1. Earnings net of income tax.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on full-time, full-year earnings, Economic Working Group. See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.3b. [1/2] Trends in the differences in earnings between 25-64 year-old women and men, by educational attainment (2000-11)

Average annual earnings of women as a percentage of men's earnings

		Educational attainment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	Below upper secondary	m	62	m	m	m	61	m	m	m	59	m	**m**
		Upper secondary and post-secondary non-tertiary	m	62	m	m	m	61	m	m	m	59	m	**m**
		Tertiary	m	63	m	m	m	64	m	m	m	61	m	**m**
	Austria	Below upper secondary	m	m	m	m	m	57	58	60	61	62	61	**65**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	60	59	58	59	61	60	**59**
		Tertiary	m	m	m	m	m	62	60	62	59	63	63	**63**
	Belgium[1]	Below upper secondary	64	m	65	66	66	67	m	m	m	70	72	**70**
		Upper secondary and post-secondary non-tertiary	72	m	72	74	74	75	m	m	m	77	77	**77**
		Tertiary	74	m	76	74	74	73	m	m	m	78	79	**80**
	Canada	Below upper secondary	53	52	52	53	53	55	53	53	53	60	61	**m**
		Upper secondary and post-secondary non-tertiary	61	59	63	59	61	61	62	62	60	62	62	**m**
		Tertiary	57	60	60	60	61	62	63	63	63	67	67	**m**
	Chile	Below upper secondary	m	m	m	m	m	m	m	m	m	m	m	**76**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	m	m	m	m	m	m	**69**
		Tertiary	m	m	m	m	m	m	m	m	m	m	m	**62**
	Czech Republic	Below upper secondary	m	m	m	m	74	74	73	75	75	77	79	**79**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	80	80	80	79	78	80	82	**81**
		Tertiary	m	m	m	m	67	68	67	68	67	66	68	**69**
	Denmark	Below upper secondary	m	74	75	73	74	73	72	73	74	80	80	**78**
		Upper secondary and post-secondary non-tertiary	m	71	73	71	71	71	71	72	72	77	76	**75**
		Tertiary	m	67	68	67	67	67	67	67	67	71	68	**68**
	Estonia	Below upper secondary	m	m	m	m	m	m	m	m	54	57	59	**62**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	m	m	m	59	58	60	**62**
		Tertiary	m	m	m	m	m	m	m	m	64	67	62	**63**
	Finland	Below upper secondary	76	76	76	76	76	78	77	76	76	78	m	**m**
		Upper secondary and post-secondary non-tertiary	71	71	72	72	72	73	72	71	72	75	m	**m**
		Tertiary	61	63	64	66	65	65	64	65	66	68	m	**m**
	France[2]	Below upper secondary	m	m	70	68	68	68	68	70	62	66	m	**m**
		Upper secondary and post-secondary non-tertiary	m	m	77	75	74	75	74	75	69	73	m	**m**
		Tertiary	m	m	70	72	70	70	69	70	67	68	m	**m**
	Germany	Below upper secondary	56	m	53	54	54	52	56	55	49	51	49	**56**
		Upper secondary and post-secondary non-tertiary	63	m	61	60	60	62	62	59	60	59	62	**61**
		Tertiary	61	m	60	58	60	62	58	59	58	59	56	**59**
	Greece	Below upper secondary	m	m	m	m	m	m	m	m	m	55	m	**32**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	m	m	m	m	67	m	**44**
		Tertiary	m	m	m	m	m	m	m	m	m	71	m	**65**
	Hungary	Below upper secondary	83	83	85	89	89	88	93	87	85	84	83	**84**
		Upper secondary and post-secondary non-tertiary	88	88	93	95	96	93	96	91	93	91	89	**88**
		Tertiary	62	62	67	71	72	69	70	68	69	68	68	**67**
	Iceland		m	m	m	m	m	m	m	m	m	m	m	**m**
	Ireland	Below upper secondary	46	m	48	m	48	49	42	46	51	58	60	**m**
		Upper secondary and post-secondary non-tertiary	60	m	57	m	59	63	54	49	56	63	64	**m**
		Tertiary	71	m	62	m	59	62	66	60	58	67	63	**m**
	Israel	Below upper secondary	m	m	m	m	m	57	56	52	57	58	60	**62**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	59	64	63	62	64	65	**66**
		Tertiary	m	m	m	m	m	58	57	59	58	62	60	**63**
	Italy	Below upper secondary	76	m	70	m	67	m	67	m	63	67	m	**m**
		Upper secondary and post-secondary non-tertiary	65	m	66	m	71	m	66	m	71	70	m	**m**
		Tertiary	62	m	60	m	52	m	53	m	62	63	m	**m**
	Japan	Below upper secondary	m	m	m	m	m	m	m	43	m	m	m	**m**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	m	m	41	m	m	m	**m**
		Tertiary	m	m	m	m	m	m	m	47	m	m	m	**m**
	Korea[1]	Below upper secondary	m	60	60	59	60	61	62	60	63	63	64	**63**
		Upper secondary and post-secondary non-tertiary	m	60	60	58	58	59	59	59	60	56	59	**58**
		Tertiary	m	70	67	67	68	67	66	65	65	60	64	**65**
	Luxembourg	Below upper secondary	m	m	80	m	m	m	87	m	m	61	63	**m**
		Upper secondary and post-secondary non-tertiary	m	m	86	m	m	m	88	m	m	65	64	**m**
		Tertiary	m	m	75	m	m	m	75	m	m	61	64	**m**
	Mexico		m	m	m	m	m	m	m	m	m	m	m	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
3. OECD averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on full-time, full-year earnings, Economic Working Group. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.3b. [2/2] Trends in the differences in earnings between 25-64 year-old women and men, by educational attainment (2000-11)

Average annual earnings of women as a percentage of men's earnings

		Educational attainment	2000 (1)	2001 (2)	2002 (3)	2003 (4)	2004 (5)	2005 (6)	2006 (7)	2007 (8)	2008 (9)	2009 (10)	2010 (11)	2011 (12)
OECD	Netherlands	Below upper secondary	m	m	49	m	m	m	48	m	49	m	49	**m**
		Upper secondary and post-secondary non-tertiary	m	m	58	m	m	m	55	m	55	m	57	**m**
		Tertiary	m	m	62	m	m	m	58	m	57	m	60	**m**
	New Zealand	Below upper secondary	67	63	67	67	68	61	68	68	61	67	69	**70**
		Upper secondary and post-secondary non-tertiary	64	63	65	64	63	64	64	62	64	67	65	**64**
		Tertiary	61	65	65	60	62	61	64	61	64	65	68	**68**
	Norway	Below upper secondary	63	63	64	66	66	65	65	65	66	68	68	**m**
		Upper secondary and post-secondary non-tertiary	62	62	63	64	64	63	63	63	64	65	66	**m**
		Tertiary	62	63	64	65	65	63	63	63	64	65	65	**m**
	Poland	Below upper secondary	m	72	73	m	73	m	71	m	69	m	72	**m**
		Upper secondary and post-secondary non-tertiary	m	83	84	m	84	m	81	m	80	m	81	**m**
		Tertiary	m	69	68	m	68	m	69	m	68	m	72	**m**
	Portugal	Below upper secondary	m	m	m	m	73	73	73	m	m	72	75	**m**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	70	71	71	m	m	71	72	**m**
		Tertiary	m	m	m	m	67	67	67	m	m	71	69	**m**
	Slovak Republic	Below upper secondary	m	m	m	m	m	m	m	m	72	73	73	**75**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	m	m	m	72	72	73	**72**
		Tertiary	m	m	m	m	m	m	m	m	68	67	67	**66**
	Slovenia	Below upper secondary	m	m	m	m	84	m	82	81	m	86	85	**85**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	88	m	86	84	m	88	87	**86**
		Tertiary	m	m	m	m	77	m	77	76	m	78	79	**79**
	Spain	Below upper secondary	m	58	m	56	56	58	m	58	60	62	66	**m**
		Upper secondary and post-secondary non-tertiary	m	71	m	65	67	64	m	68	69	69	71	**m**
		Tertiary	m	64	m	74	76	75	m	77	80	83	84	**m**
	Sweden	Below upper secondary	m	74	74	75	75	74	74	73	73	74	73	**m**
		Upper secondary and post-secondary non-tertiary	m	71	72	73	73	73	73	72	73	74	74	**m**
		Tertiary	m	65	67	68	69	68	68	68	69	70	71	**m**
	Switzerland	Below upper secondary	53	51	53	55	55	54	55	56	53	56	58	**55**
		Upper secondary and post-secondary non-tertiary	58	58	56	56	56	57	56	57	55	57	59	**58**
		Tertiary	62	61	60	61	61	60	65	61	62	62	61	**63**
	Turkey[1]	Below upper secondary	m	m	m	m	52	47	m	m	m	m	m	**m**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	75	78	m	m	m	m	m	**m**
		Tertiary	m	m	m	m	89	78	m	m	m	m	m	**m**
	United Kingdom	Below upper secondary	50	52	53	53	55	55	53	56	59	57	70	**50**
		Upper secondary and post-secondary non-tertiary	54	52	55	55	54	56	56	55	55	58	65	**48**
		Tertiary	63	66	67	66	66	69	69	69	68	68	71	**58**
	United States	Below upper secondary	60	m	63	67	63	63	65	64	60	69	63	**58**
		Upper secondary and post-secondary non-tertiary	60	m	63	64	63	65	65	66	65	68	66	**64**
		Tertiary	56	m	58	61	59	59	60	61	59	62	63	**63**
	OECD average[3]	Below upper secondary	62	65	65	65	66	63	66	64	63	66	67	**66**
		Upper secondary and post-secondary non-tertiary	65	67	68	67	70	67	69	65	66	68	69	**67**
		Tertiary	63	65	65	66	67	66	65	64	64	67	67	**66**
	EU21 average	Below upper secondary	65	70	67	68	69	67	68	67	64	68	69	**67**
		Upper secondary and post-secondary non-tertiary	68	72	71	71	73	70	72	70	68	71	71	**69**
		Tertiary	65	65	67	69	67	68	66	67	65	69	68	**67**
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	**m**
	Brazil	Below upper secondary	m	m	m	m	m	m	m	49	49	50	m	**51**
		Upper secondary and post-secondary non-tertiary	m	m	m	m	m	m	m	58	56	57	m	**59**
		Tertiary	m	m	m	m	m	m	m	55	57	55	m	**58**
	China		m	m	m	m	m	m	m	m	m	m	m	**m**
	India		m	m	m	m	m	m	m	m	m	m	m	**m**
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	**m**
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	**m**
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	**m**
	South Africa		m	m	m	m	m	m	m	m	m	m	m	**m**
	G20 average		m	m	m	m	m	m	m	m	m	m	m	**m**

1. Earnings net of income tax.
2. Break in the time series between 2007 and 2008, change in the data source.
3. OECD averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on full-time, full-year earnings, Economic Working Group. See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.5a. [1/2] Relative earnings of 15-24 year-old students, by educational attainment and gender (2011)[1]

Compared with 15-24 year-old non-students (non-students with income from employment=100)

				Below upper secondary education	Upper secondary or post-secondary non-tertiary education	Tertiary education	All levels of education
				(1)	(2)	(3)	(4)
OECD	Australia	2009	Men	36	56	67	48
			Women	24	53	68	44
			M+W	31	54	69	46
	Austria	2011	Men	54	37	20	36
			Women	49	30	46	30
			M+W	51	32	36	33
	Belgium	2010	Men	56	78	79	70
			Women	57	63	83	64
			M+W	54	67	82	66
	Canada	2010	Men	33	48	48	42
			Women	45	54	43	42
			M+W	36	49	45	42
	Chile	2011	Men	123	120	c	116
			Women	78	92	c	76
			M+W	112	111	c	102
	Czech Republic			m	m	m	m
	Denmark	2011	Men	43	43	43	37
			Women	43	54	43	41
			M+W	42	47	43	38
	Estonia	2011	Men	66	75	c	79
			Women	38	121	130	109
			M+W	51	94	109	90
	Finland	2009	Men	32	55	65	41
			Women	47	57	51	45
			M+W	36	55	53	42
	France	2009	Men	46	39	40	40
			Women	47	48	53	50
			M+W	23	42	47	44
	Germany	2011	Men	35	50	c	43
			Women	57	43	c	44
			M+W	41	46	c	43
	Greece	2011	Men	c	9	n	7
			Women	c	14	c	18
			M+W	c	12	c	13
	Hungary			m	m	m	m
	Iceland			m	m	m	m
	Ireland			m	m	m	m
	Israel	2011	Men	c	46	90	102
			Women	c	51	70	92
			M+W	c	47	77	93
	Italy	2009	Men	28	50	c	44
			Women	43	52	c	58
			M+W	33	50	c	49
	Japan			m	m	m	m
	Korea	2011	Men	39	50	49	50
			Women	60	49	48	48
			M+W	47	49	48	48
	Luxembourg			m	m	m	m
	Mexico			m	m	m	m

1. For some countries in this table the age breakdown is 16-24 year-olds.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.5a. [2/2] Relative earnings of 15-24 year-old students, by educational attainment and gender (2011)[1]

Compared with 15-24 year-old non-students (non-students with income from employment=100)

				Below upper secondary education	Upper secondary or post-secondary non-tertiary education	Tertiary education	All levels of education
				(1)	(2)	(3)	(4)
OECD	Netherlands			m	m	m	m
	New Zealand	2011	Men	49	52	64	52
			Women	27	42	55	40
			M+W	38	46	59	45
	Norway	2010	Men	38	39	38	39
			Women	34	46	40	43
			M+W	36	40	39	40
	Poland			m	m	m	m
	Portugal			m	m	m	m
	Slovak Republic			m	m	m	m
	Slovenia			m	m	m	m
	Spain	2010	Men	59	55	54	59
		2010	Women	38	49	56	52
		2010	M+W	50	48	56	54
	Sweden	2009	Men	11	46	30	24
		2009	Women	12	58	44	34
		2009	M+W	11	50	38	28
	Switzerland	2011	Men	38	58	38	52
		2011	Women	42	47	43	43
		2011	M+W	38	51	41	46
	Turkey			m	m	m	m
	United Kingdom	2011	Men	45	51	97	58
		2011	Women	34	50	68	51
		2011	M+W	40	49	82	53
	United States	2011	Men	27	54	60	46
		2011	Women	42	66	78	55
		2011	M+W	31	58	69	49
	OECD average		Men	46	56	59	53
			Women	45	57	62	53
			M+W	43	55	61	52
	EU21 average		Men	43	49	53	45
			Women	42	53	64	50
			M+W	39	49	61	46
Other G20	Argentina			m	m	m	m
	Brazil	2011	Men	58	120	119	72
			Women	74	118	92	84
			M+W	60	116	106	76
	China			m	m	m	m
	India			m	m	m	m
	Indonesia			m	m	m	m
	Russian Federation			m	m	m	m
	Saudi Arabia			m	m	m	m
	South Africa			m	m	m	m
	G20 average			m	m	m	m

1. For some countries in this table the age breakdown is 16-24 year-olds.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849046

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Table A6.5b. [1/2] Share of young adults with income from employment among all young adults, by gender, age group and student status (2011)

How to read this table: In Australia, 68% of all 15-24 year-old non-students have income from employment; and 52% of all 15-24 year-old students. Among all 15-24 year-olds, 58% have income from employment.

				15-24 year-olds[1]			25-29 year-olds		
				Non-students	Students	Total	Non-students	Students	Total
				(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia	2009	Men	68	51	57	81	80	81
			Women	68	53	59	69	71	69
			M+W	68	52	58	75	75	75
	Austria	2011	Men	87	68	76	96	80	93
			Women	85	63	71	85	76	84
			M+W	86	65	74	91	78	89
	Belgium	2010	Men	62	6	26	76	33	73
			Women	57	7	23	71	34	69
			M+W	60	6	24	73	41	71
	Canada	2010	Men	85	61	71	90	75	88
			Women	80	69	73	86	80	85
			M+W	83	65	72	88	78	87
	Chile	2011	Men	63	12	34	85	44	79
			Women	37	8	21	56	46	54
			M+W	50	10	27	70	45	66
	Czech Republic			m	m	m	m	m	m
	Denmark	2011	Men	74	69	71	85	83	85
			Women	70	75	73	80	83	81
			M+W	73	72	72	83	83	83
	Estonia	2011	Men	47	8	23	59	42	56
			Women	47	13	23	51	52	51
			M+W	47	11	23	55	47	53
	Finland			m	m	m	m	m	m
	France	2009	Men	85	34	58	95	93	95
			Women	81	36	54	86	78	85
			M+W	84	35	56	90	84	90
	Germany	2011	Men	59	35	43	81	44	71
			Women	61	32	41	74	49	69
			M+W	60	33	42	77	46	70
	Greece	2011	Men	61	51	55	76	58	73
			Women	62	52	55	70	66	69
			M+W	62	51	55	73	62	71
	Hungary			m	m	m	m	m	m
	Iceland			m	m	m	m	m	m
	Ireland			m	m	m	m	m	m
	Israel	2011	Men	65	14	43	77	66	74
			Women	58	20	39	71	74	71
			M+W	61	18	41	74	70	73
	Italy	2009	Men	66	13	36	88	41	82
			Women	54	12	27	72	49	69
			M+W	61	13	31	80	46	75
	Japan			m	m	m	m	m	m
	Korea	2011	Men	93	91	92	90	96	90
			Women	97	86	94	94	95	94
			M+W	96	88	93	92	95	92
	Luxembourg			m	m	m	m	m	m
	Mexico			m	m	m	m	m	m

1. For some countries in this table the age breakdown is 16-24 year-olds.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A6.5b. [2/2] Share of young adults with income from employment among all young adults, by gender, age group and student status (2011)

How to read this table: In Australia, 68% of all 15-24 year-old non-students have income from employment; and 52% of all 15-24 year-old students. Among all 15-24 year-olds, 58% have income from employment.

				15-24 year-olds[1]			25-29 year-olds		
				Non-students	Students	Total	Non-students	Students	Total
				(1)	(2)	(3)	(4)	(5)	(6)
OECD	Netherlands			m	m	m	m	m	m
	New Zealand	2011	Men	73	32	49	88	53	83
			Women	62	37	47	66	64	66
			M+W	68	35	48	77	59	74
	Norway	2010	Men	79	73	76	92	91	92
			Women	77	80	79	89	91	89
			M+W	78	77	77	91	91	91
	Poland			m	m	m	m	m	m
	Portugal			m	m	m	m	m	m
	Slovak Republic			m	m	m	m	m	m
	Slovenia			m	m	m	m	m	m
	Spain	2010	Men	60	10	30	79	46	72
			Women	57	14	29	74	47	69
			M+W	58	12	29	76	47	71
	Sweden	2009	Men	100	100	100	100	100	100
			Women	100	100	100	99	100	99
			M+W	100	100	100	99	100	99
	Switzerland	2011	Men	72	12	35	85	66	81
			Women	75	19	38	78	63	76
			M+W	73	16	36	82	65	79
	Turkey			m	m	m	m	m	m
	United Kingdom	2011	Men	67	29	51	85	64	83
			Women	63	35	50	72	63	71
			M+W	65	32	50	79	64	77
	United States	2011	Men	75	37	52	m	m	m
			Women	69	42	52	m	m	m
			M+W	72	40	52	m	m	m
	OECD average		Men	72	40	54	85	67	82
			Women	67	42	52	75	67	74
			M+W	70	41	53	80	67	78
	EU21 average		Men	70	38	52	84	62	80
			Women	67	40	50	76	63	74
			M+W	69	39	51	80	63	77
Other G20	Argentina			m	m	m	m	m	m
	Brazil	2011	Men	76	38	59	88	76	87
			Women	51	28	40	62	67	63
			M+W	64	33	49	75	71	75
	China			m	m	m	m	m	m
	India			m	m	m	m	m	m
	Indonesia			m	m	m	m	m	m
	Russian Federation			m	m	m	m	m	m
	Saudi Arabia			m	m	m	m	m	m
	South Africa			m	m	m	m	m	m
	G20 average			m	m	m	m	m	m

1. For some countries in this table the age breakdown is 16-24 year-olds.

Source: OECD. LSO (Labour market, economic and social outcomes of learning) Network special data collection on earnings. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

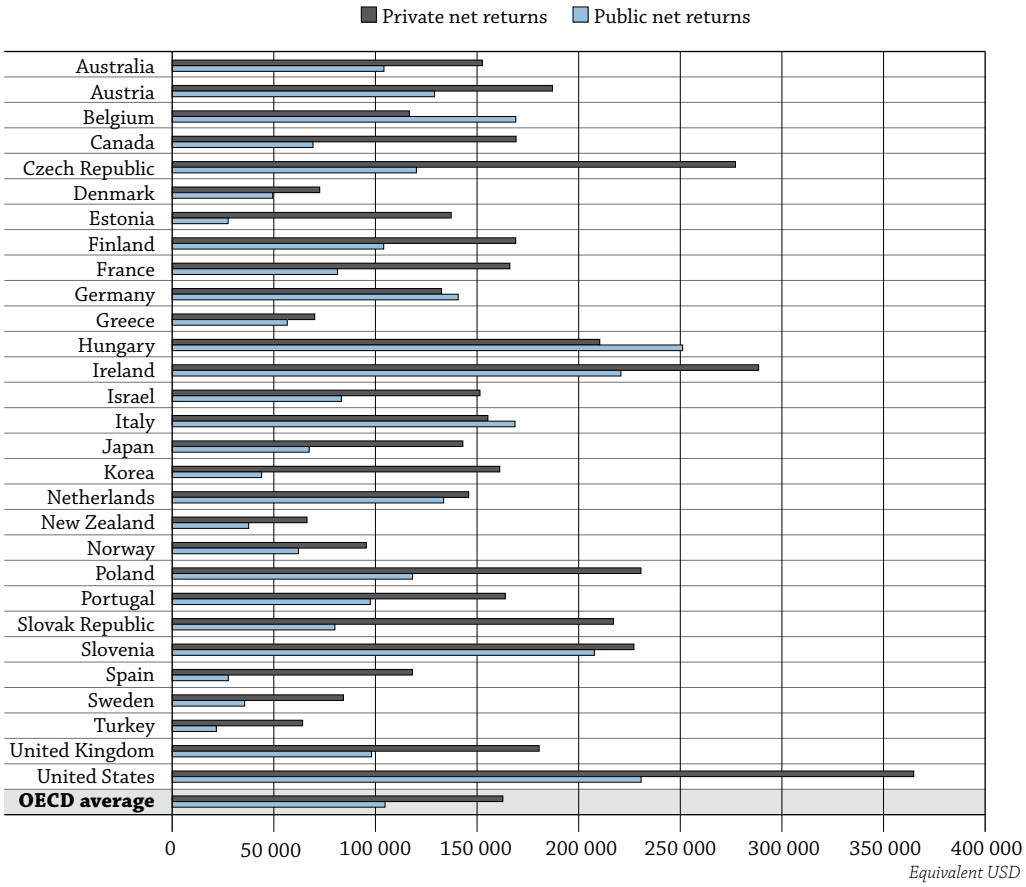
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WHAT ARE THE INCENTIVES TO INVEST IN EDUCATION?

- The private returns on investment in tertiary education are substantial.
- Not only does education pay off for individuals, but the public also benefits in the form of greater tax revenues and social contributions.
- The net public return on investment for a man in tertiary education is over USD 100 000 across OECD countries – almost three times the amount of public investment in that man's education. For a woman, the public return is around USD 60 000, which is almost twice the amount of public investment.

Chart A7.1. Net private and public returns associated with a man attaining tertiary education (2009)

As compared with returns from upper secondary or post-secondary non-tertiary education



Notes: Turkey refers to 2005. Japan refers to 2007. Italy, the Netherlands and Poland refer to 2008. All other countries refer to 2009. Cashflows are discounted at a 3% interest rate.
Countries are shown in alphabetical order.
Source: OECD. Tables A7.3a and A7.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
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Context

Higher educational achievement benefits both individuals and society, not only financially, but in the well-being with which it is also associated. For individuals, having a higher education improves chances for employment and reduces the risk of unemployment. Better opportunities in the labour market (see Indicator A5) and higher earnings expectations (see Indicator A6) are

strong incentives for individuals to invest in education and postpone consumption and earnings for future rewards. Society, in turn, profits through reduced public expenditure on social welfare programmes and revenues earned through taxes paid once individuals enter the labour market.

It is crucial for policy makers to understand the economic incentives for individuals to invest in education. For instance, large increases in labour-market demand for more highly educated workers can drive up earnings and returns before supply catches up. That signals a need for additional investment in education. In countries with rigid labour laws and structures that tend to limit differences in wages across the board, this signal will be weaker.

An understanding of the returns from education is also relevant for policies that address access to education, taxes and the costs of further education for the individual. It is important, then, to consider the balance between private and public returns together with the information from other indicators in this publication. It is not sufficient to consider only the public rate of return to determine the optimal amount governments should invest in education (Box A7.1). Large discrepancies between private and public returns may indicate that there might be distorting tax schemes in effect or that education is being disproportionately subsidised.

In countries with lengthy tertiary programmes and relatively high incomes after upper secondary or post-secondary non-tertiary education, the effect of foregone earnings is considerable (see Indicator B1). The magnitude of this effect also depends on expected wage levels and the probability of finding a job. As the labour market for young adults worsens (see Indicator C5), investment costs fall. Since more highly educated people tend to fare better in the labour market in times of economic hardship (see Indicator A5), larger earnings differentials add to the benefit to both the individual and society. In coming editions of *Education at a Glance*, data from 2010 and 2011, when the effects of the global economic crisis were most strongly felt, are likely to show even greater incentives to invest in education from both private and public sources.

Other findings

- **Gross earnings benefits from tertiary education**, compared with the income of a person with an upper secondary or post-secondary non-tertiary education, **are USD 330 000 for men and USD 240 000 for women across OECD countries**.
- **Gross earning benefits for an individual attaining an upper secondary or post-secondary non-tertiary degree**, compared to benefits for an individual who has not attained this level of education, **are particularly high** in Austria, Norway and the United States. They amount to at least USD 250 000 for a man and USD 150 000 for a woman.
- On average across the 28 OECD countries with available data, **the public return** (net present value) **for a man who completed upper secondary or post-secondary non-tertiary education is about USD 38 000** compared with a man who did not complete that level of education. **For a woman, the public return is USD 22 000**.
- With few exceptions, **the net private returns related to attaining a tertiary education exceed those related to upper secondary or post-secondary non-tertiary education**. Only in Denmark and Sweden does upper secondary or post-secondary non-tertiary education bring higher returns to both men and women. In Norway and Korea, upper secondary or post-secondary non-tertiary education returns exceed tertiary education returns for men; in New Zealand, the same is true for women.
- **Across OECD countries, individuals invest about USD 55 000 to obtain a tertiary degree**. In Japan, the Netherlands, the United Kingdom and the United States, average investment exceeds USD 100 000 when direct and indirect costs are taken into account.

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Analysis

Financial returns on investment in education

This indicator provides information on the costs and benefits of education and the incentives to invest in education. It assesses the economic benefits of education for an individual by estimating the earnings premiums of higher levels of education, taking into consideration the direct and indirect costs and benefits of attaining those levels of education. Besides higher earnings compared to individuals with lower education levels, the probability of finding work, expressed in monetary terms by the variable called «unemployment effect», is also a benefit.

Costs include direct costs, notably tuition fees, and indirect costs due to higher income taxes, social contributions levies, loss of salary because of delayed entry into the labour market, and fewer entitlements to social transfers, such as housing allowances, family allowances or supplemental social welfare benefits. In addition, social contributions and income taxes account for a certain percentage of the income and tend to be higher for individuals with more advanced education because they tend to earn more.

The economic benefits and costs of tertiary education are compared to those of upper secondary or post-secondary non-tertiary education; for upper secondary or post-secondary non-tertiary education, below upper secondary education is used as a point of reference. In the calculations, women are benchmarked against women, and men against men. The calculations are done separately for men and women, and no average is computed to account for differences by gender in earnings differentials and unemployment rates.

To provide information on the costs and benefits of education and the incentives to invest in education is a difficult undertaking that implicates some methodological and analytical considerations. Investing in education, by both individuals and governments, implies a complex interaction of factors and effects that are beyond those taken into account here. Thus, this indicator should be interpreted in the context of other indicators in this volume (and in *Education at a Glance 2012*) to better understanding the results. The limitations of the calculations, and underlying concepts and assumptions, are presented in the *Methodology* section at the end of this indicator.

Incentives for individuals to invest in education

Upper secondary or post-secondary non-tertiary education

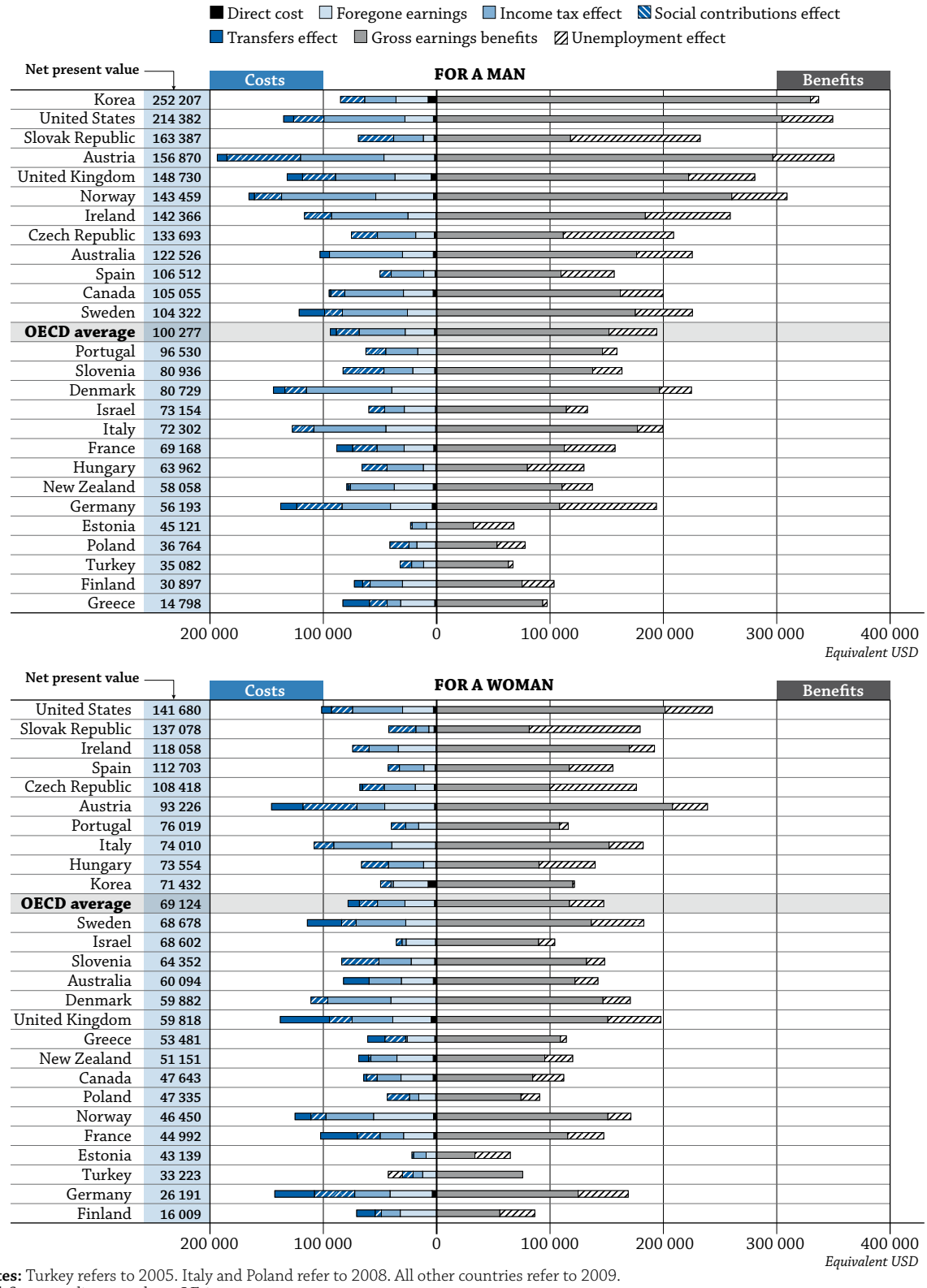
Across OECD countries, a man who invests in upper secondary or post-secondary non-tertiary education can expect a net gain of around USD 100 000 during his working life compared to a man who has attained below upper secondary education. However, the amount varies significantly among countries: in Austria, Korea, Norway and the United States, this level of education generates USD 200 000 or more over a working life (Table A7.1a).

Benefits for an individual are generally based on gross earnings and reduced risk of unemployment. In most countries, men with an upper secondary or post-secondary non-tertiary education enjoy a significant earnings premium over those who have not attained that level of education. The value of reduced risk of unemployment can also be large. In the Czech Republic, Germany and the Slovak Republic, the better labour market prospects for a man with this level of education are valued at USD 85 000 or more (Table A7.1a).

Direct costs, forgone earnings, income tax effect, social transfers and social contribution effect (see *Definitions* section below) are all considered part of the costs of education. Data for a man attaining upper secondary or post-secondary non-tertiary education show that countries with relatively high income tax effects (estimated at more than USD 65 000) are Austria, Denmark, Ireland, Norway and the United States. The income tax effect is less significant (estimated at less than USD 20 000) in Estonia, Greece, Israel, Poland and Turkey. Austria, Germany, Ireland, Norway, the Slovak Republic, Slovenia, the United Kingdom and the United States are the countries with highest social contributions (estimated at more than USD 23 000). In Denmark, France, Germany, Greece, Sweden and the United Kingdom indirect costs due to reduced rights to welfare and other social benefits (social transfers) amount to more than USD 10 000 (Table A7.1a).

Chart A7.2. Private costs and benefits for a man and for a woman attaining upper secondary or post-secondary non tertiary education (2009)

As compared with returns from below upper secondary education



Notes: Turkey refers to 2005. Italy and Poland refer to 2008. All other countries refer to 2009.
Cashflows are discounted at a 3% interest rate.
Countries are ranked in descending order of the private net present value.
Source: OECD. Tables A7.1a and b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846652

The direct costs of education for a woman investing in an upper secondary or post-secondary non-tertiary education are usually negligible; the main investment cost is foregone earnings. Foregone earnings vary substantially among countries, depending on the length of education, earnings levels and earning differentials between individuals with upper secondary or post-secondary non-tertiary education and those without it (Table A7.1b).

Good labour-market prospects for individuals, both men and women, who have not attained an upper secondary or post-secondary non-tertiary education increase the costs of further investment in education; so do smaller earnings differentials and longer upper secondary or post-secondary non-tertiary programmes. In Estonia, Hungary, the Slovak Republic, Spain and Turkey, foregone earnings are estimated at less than USD 13 000 for an individual (both women and men), while in Austria, Denmark, Germany, Italy and Norway they exceed USD 36 000 for an individual (Tables A7.1a and b).

Men generally enjoy better financial returns than women after attaining upper secondary or post-secondary non-tertiary education, except in Greece, Hungary, Italy, Poland and Spain. In these countries, the private net present value for women attaining upper secondary or post-secondary education is higher than that for of men. On average across OECD countries, a woman can expect a net gain of USD 69 000 over her working life – about USD 30 000 less than a man. The gender gap in private net returns is particularly pronounced in Austria, Korea, Norway, the United Kingdom and the United States. The difference is largest in Korea, where gross earnings benefits for a man attaining an upper secondary or post-secondary non-tertiary education are around USD 250 000, but only USD 71 000 for a woman. The main reasons for this difference lie in differences in social transfers and unemployment costs between the two genders (Chart A7.2).

Tertiary education

Individuals who hold a tertiary degree can generally expect the highest net returns. On average across OECD countries, the return for tertiary-educated people is around 60% higher than for those with an upper secondary or post-secondary non-tertiary education. With few exceptions, the net private returns related to a tertiary education exceed those of upper secondary or post-secondary non-tertiary education.

The net returns for investing in tertiary education are typically higher for men than for women. Only in Portugal are average returns nearly identical for men and women; in Greece, Spain and Turkey, the returns are higher for women (Tables A7.3a and b).

The value of the gross earnings benefits for men and women with tertiary education is substantial: on average, USD 330 000 for men and USD 240 000 for women. But there are also significant variations between countries.

The Czech Republic, Hungary, Poland and Slovenia are among those countries where earning premiums are above the OECD average despite relatively lower overall costs and income levels compared to other OECD countries. This may be explained by the still relatively low tertiary attainment levels in the working-age population which, in turn, suggests a short supply of higher-educated individuals. This may have driven up wages and wage inequality between tertiary and lower-educated individuals over the years.

Compared with upper secondary or post-secondary non-tertiary education, the impact of unemployment benefits is less pronounced than the earnings differential, on average across OECD countries; but the effects of taxes, social contributions and social transfers, and the direct costs of education are more substantial. In particular, people with tertiary education remain longer in education and thus loose a substantial amount of earnings (foregone earnings) that they could have received if they had joined the labour market earlier.

Private investment costs for tertiary education are very high in some countries. Across OECD countries, individuals invest about USD 55 000 to obtain a tertiary degree. In the Netherlands, the United Kingdom and the United States average investment exceeds USD 100 000 for an individual of either gender when direct and indirect costs are taken into account. On average across OECD countries, direct costs, such as tuition fees, constitute about one-fifth of the total investment made by a tertiary graduate (estimated at USD 11 000 for an individual of either gender) (Tables A7.3a and b).

One way to increase weak labour-market returns is to provide higher education at lower costs to the individual. Apart from subsidising the direct costs of education, a number of countries also provide students with loans and grants to improve incentives and access to education. Whereas grants are transfers made in cash, goods or services for which no repayment is required, loans are transfers that require repayment. This indicator only takes grants into account; it does not report on loans.

Grants are particularly important in Denmark, where they cover more than 40% of the total costs of tertiary education (grants estimated at USD 25 000). In Austria, Finland, the Netherlands and Sweden, grants are estimated at more than USD 8 000, about 15% of the total cost (Tables A7.3a and b).

Data show, however, that countries that have the highest direct costs of tertiary education, notably Australia, Japan, Korea, the United Kingdom and the United States, do not provide grants, or do so only in small amounts. In Australia, the United Kingdom and the United States, grants cover less than 2% of the direct costs of tertiary education. However, many countries, including those offering only small grants, provide student loans, which must be repaid after graduation. Loan regulations, particularly when graduates have to start reimbursing their loans (e.g. once they earn above a certain income threshold, right after graduation, etc.) and the applicable interest rate, vary widely between countries. For most student loans, however, the total amount to be repaid and the amount to be repaid per period depend on actual income earned after graduation. The availability of student loans can encourage students, particularly those from socio-economically disadvantaged backgrounds, to pursue their studies. But because loans must be repaid after graduation – and thus subtracted from earnings benefits – they reduce the financial benefits of education.

Public rate of return on investments in education

Upper secondary or post-secondary non-tertiary education

As mentioned above, higher educational levels tend to translate into higher income levels, on average (see Indicator A6). In this sense, investments in education generate public returns in the form of higher income taxes, increased social insurance payments and fewer social transfers. The public returns on investing in men's and women's upper secondary or post-secondary non-tertiary education are positive in most countries. On average across OECD countries, this level of education generates a public net return of USD 38 000 for a man and USD 22 000 for a women (Tables A7.2a and b).

On average, the public benefits are twice as large as the overall public costs of upper secondary or post-secondary non-tertiary education, for both men and women. In the United Kingdom, public benefits are six times larger than the public costs for a man with this level of education and eight times larger for a woman (Tables A7.2a and b).

Tertiary education

On average across OECD countries, public investment in an individual's tertiary education is USD 39 000 higher than that for an individual's upper secondary or post-secondary education (taking into account public direct spending and indirect costs). Public investment in an individual's tertiary education is highest (more than USD 60 000 higher than for an individual at the lower education level) in Austria, Denmark, Germany, the Netherlands, Norway and Sweden (Chart A7.3).

In most countries, the public returns from tertiary education are substantially higher than the public returns from upper secondary or post-secondary non-tertiary education. This is because of the higher taxes and social contributions that flow from the higher incomes of those with tertiary qualifications. On average across OECD countries, the public net return from an investment in tertiary education is over USD 100 000 for a man and over USD 57 000 for a woman. Taking into account direct costs, foregone earnings, and public grants, the public benefits from a man in tertiary education are four times higher than the public costs, and from a tertiary-educated woman, more than two times higher (Tables A7.4a and b).

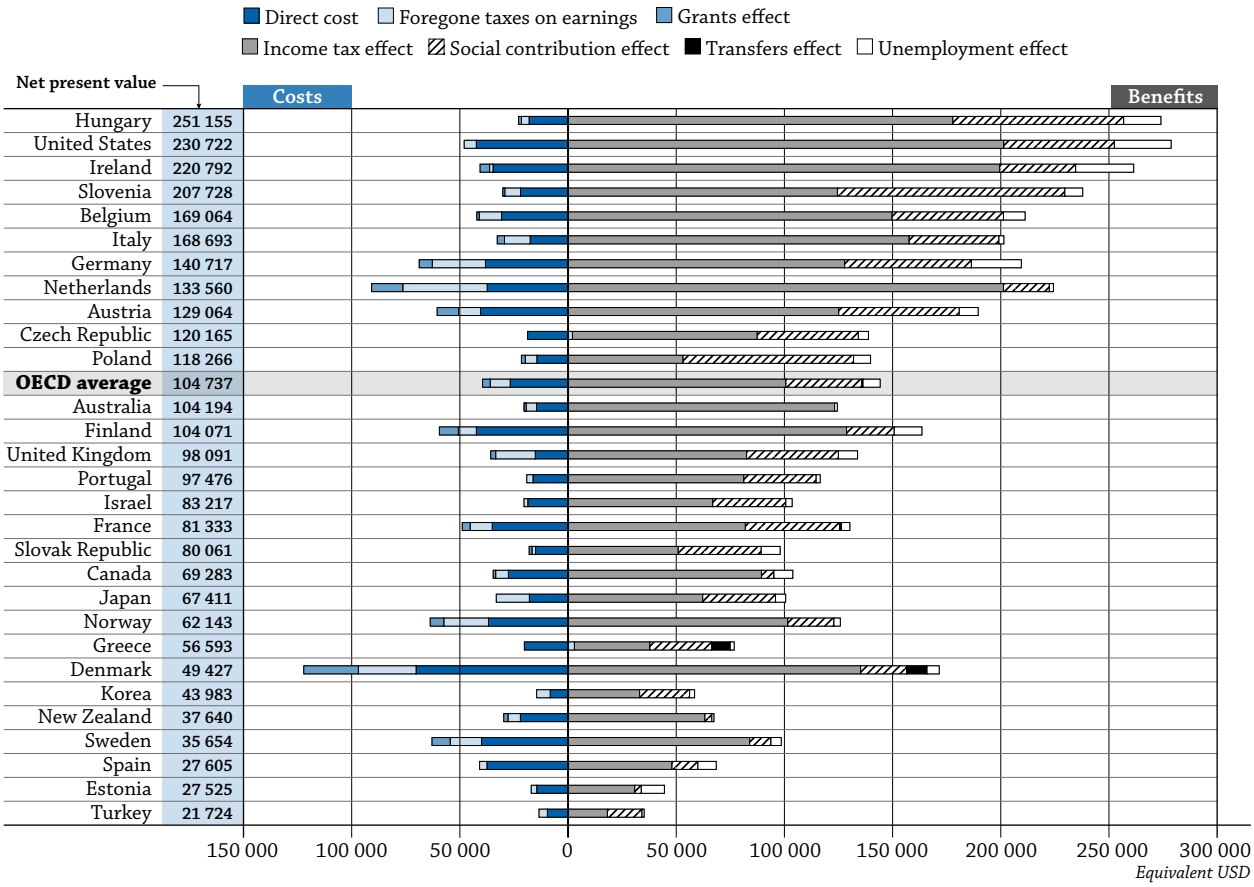
A7

Overall, differences in wages are the source of the differences in returns to both the individual and the public sector. Where the differences between wages are smaller, the returns to higher education are lower. This is particularly true in Denmark, Norway, Sweden and New Zealand. The Nordic countries have generally offset the effects of this weak reward structure by providing a higher-education system that is almost free of charge and by having a generous student-grant system (see Indicator B5).

Given that earnings premiums vary substantially among OECD countries, tax payments and benefits to the public sector also vary in ways that are somewhat counter-intuitive. Because earnings premiums are relatively low in the Nordic countries, average tertiary earnings typically fall below the income bracket where high marginal taxes are levied. The largest public gains in tax and social security benefits from higher education are most often found in countries where earnings differentials are large, or where average earnings reach high income-tax brackets. In Austria, Germany, Hungary, Ireland, Italy, the Netherlands, Poland, Slovenia and the United States, tertiary-educated individuals pay considerably more in taxes and social contributions. In all these countries, earning premiums are above the OECD average and thus levies for social contribution are also higher.

Chart A7.3. Public costs and benefits for a man attaining tertiary education (2009)

As compared with returns from upper secondary or post-secondary non-tertiary education



Notes: Turkey refers to 2005. Japan refers to 2007. Italy, the Netherlands and Poland refer to 2008. All other countries refer to 2009.
Cashflows are discounted at a 3% interest rate.
Countries are ranked in descending order of the public net present value.
Source: OECD. Table A7.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846671

A number of countries have tax policies that effectively lower the actual tax paid by individuals, particularly by those in high income brackets. Tax relief for interest payments on mortgage debt has been introduced in many OECD countries to encourage homeownership. These benefits favour those with higher education and

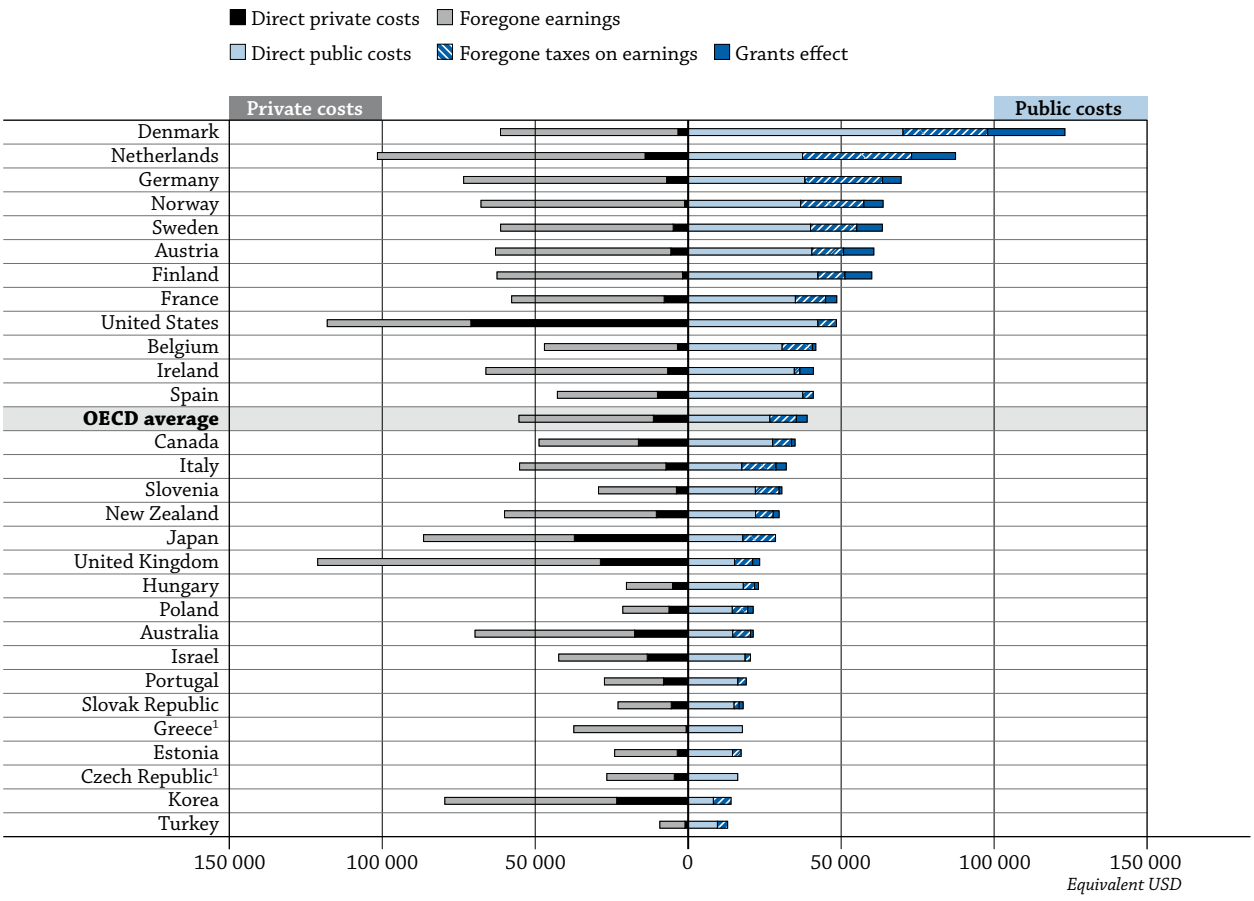
high marginal tax rates. The tax incentives for housing are particularly large in the Czech Republic, Denmark, Finland, Greece, the Netherlands, Norway, Sweden and the United States (See Andrews et al., 2011).

The distribution of costs for education between the public sector and individuals

Direct costs for education are in large part borne by the public sector. On average across OECD countries, individuals carry around 30% of the total private and public direct investment costs in tertiary education. Only in a few countries, notably Australia, Japan, Korea, the United Kingdom and the United States, do private direct costs, such as tuition fees, constitute over half of the overall public and private direct investment costs in tertiary education. Some countries provide grants and loans to individuals to alleviate the financial burden of attaining tertiary education. Grants are awarded based on various criteria, such as outstanding performance or a student's socio-economic background, to encourage young individuals from less-affluent families to pursue their studies. Countries that offer particularly large grants are the Nordic countries of Denmark (USD 25 200), Finland (USD 8700) and Sweden (USD 8 300), as well as Austria (USD 9 900) and the Netherlands (USD 14 400). Interestingly, there appears to be no relationship between direct costs and grants. Countries where grants are higher do not have the highest private direct costs. Conversely, among the five countries where direct costs are the highest, only the United Kingdom provides substantial grants to students (USD 2 200) (Chart A7.4).

Chart A7.4. Public versus private costs for a woman attaining tertiary education (2009)

As compared with returns from upper secondary or post-secondary non-tertiary education



Notes: Turkey refers to 2005. Japan refers to 2007. Italy, the Netherlands and Poland refer to 2008. All other countries refer to 2009.
Cashflows are discounted at a 3% interest rate.
1. For the Czech Republic and Greece, direct public costs refer to the total public costs.
Countries are ranked in descending order of the total public costs.
Source: OECD. Tables A7.3b and A7.4b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846690

Box A7.1. Understanding private and public returns to education

The private return to education constitutes an important incentive for individuals to invest in post-compulsory education. In this box the word "return" is always used in the sense of the internal rate of return. The internal rate expresses revenues as a percentage return to the investment. A high private return constitutes a strong incentive for individuals to invest in (further) education beyond compulsory schooling. In modern societies, governments share in the benefits and cost of education. They typically tax part of individuals' additional revenue, but also bear part of the cost. As a result, it is possible to calculate public returns to additional investment in education. Like individual returns, these returns indicate the extent to which revenues for the government from additional education exceed the costs of that education that are borne by the government. However, unlike private returns, public returns cannot be used to guide government decisions on investment in education directly. Only a comparison of public returns with private returns can offer useful insights to governments. More specifically, this comparison enables governments to design optimal financing schemes for post-compulsory education.

Human capital theory considers individuals, not governments, as the investors in education. After all, it is an individual who chooses to continue schooling or not. In making that decision, the individual knows that investing more time in school raises wages per unit of time. But given that a working life, or pension age, is finite, the amount of time left to participate in the labour market after further education is reduced. In the absence of government, and assuming perfect markets and rational individuals, human capital theory predicts that individuals will choose exactly the amount of time devoted to education that maximises their income over their lifetime. If, for example, a shift in technology raises the private return to human capital, the model predicts that individuals will invest more time in education than they would otherwise do. The increase in private return is a direct incentive for individuals to find a new allocation of time that maximises their lifetime income.

When governments are introduced into this model, the best they can do is not influence the original decisions of individuals in that hypothetical world. This implies that the rate at which revenues from additional schooling (higher wages) are taxed should be set exactly equal to the rate at which government subsidises the cost of education. In other words, government policy should be neutral (Netherlands Bureau of Economic Policy Analysis, 2012). Progressive tax schemes and taxes on capital income lead to more complicated effects, but the principle of neutrality still holds (Lans Bovenberg and Jacobs, 2005).

Hence, public return should be interpreted with care. The efficiency of government policies on financing further education can be assessed by comparing public return with private return. If the public return exceeds the private return, government is taxing additional labour income that comes with additional schooling at a higher rate than the rate at which government is subsidising education. This will discourage investment in education and will lead to a sub-optimal lifetime income, for both individuals and the government. The opposite is true when the public return is lower than the private return. In this case, the government is subsidising too much, leading individual agents to invest too much in education, which also reduces the level of lifetime income below the maximum level obtainable. An optimal government policy implies the equality of public and private returns, which is just another expression of the neutrality rule.

However, this rule only holds when the two remaining assumptions hold: that markets are perfect and that individuals make rational choices. If these two assumptions no longer apply, governments may have reasons to deviate from the neutrality rule.

...

First, education may have a number of external effects. In addition to individual revenues, an investment in education may result in benefits or disadvantages to others that cannot be internalised by the investor and give rise to market imperfections. The benefits to society as a whole may be greater or lesser than the benefits to individuals. The positive external effects include dissemination of knowledge, civic and social well-being, and lower criminality. Negative external effects may also occur. The literature suggests that social benefits would exceed private benefits, indicating the presence of net positive external effects (Netherlands Bureau of Economic Policy Analysis, 2012). Government subsidies can be used to let individuals internalise these external benefits.

Second, investing in additional education is a rational, long-term decision that implies balancing the more or less known immediate cost of education against uncertain rewards in the future. The literature suggests that individuals may be inclined to undervalue future rewards (see, for example, Laibson, 1997) or they may be highly risk averse. In these cases, individuals may underinvest in education. In these situations, subsidies can be used to correct that behaviour. If external effects are positive, on balance, and behavioural aspects of an individual's decisions tend to lead to suboptimal investment in education, governments should subsidise that investment at a higher rate than the marginal tax rate on labour income. This will lead to a public return that is lower than the private return. But again, the public return cannot be used per se as an incentive for governments to further invest in education.

What does this mean for practical policy? In reality, it is very difficult to arrive at correct and comprehensive estimates of public and private returns. Thus, the figures published in *Education at a Glance* should be interpreted with caution. However, large discrepancies between private and public returns should prompt additional analyses to assess whether government tax schemes or subsidies are strongly distortionary. In addition, public and private returns are useful only in guiding optimal financing schemes for post-compulsory education, i.e. determining how to share costs and benefits between the government and the individual. Education policy is about a lot more.

Definitions

Direct costs are a reflection of how much is spent on students per year from all sources (public, private and households), and are relative to the length of schooling.

Foregone earnings while in education depend largely on the level of earnings that a non-student can expect to receive and the duration of studies. The individual's foregone earnings are net of taxes, social contributions and social transfers.

Foregone taxes on earnings include the taxes, social contributions and social transfers not received by the public sector.

Gross earnings benefits are estimates of the earnings an individual will receive when in the labour market.

The **income tax effect** is the estimated amount received by the public sector from taxes. It is usually the main source of public revenue from investments made in education. It is more pronounced at the tertiary level of education because of progressive income taxes.

The **internal rate of return** indicates at what real interest rate the investment breaks even.

The **net present value** is the difference between the discounted benefits and the discounted investment costs, and represents the additional value that education produces over and above the 3% real interest that is charged on these cash flows.

The **social contribution effect** in the calculations only concerns those paid by individuals and not those paid by employers. The latter are an additional source of public income. In most OECD countries individuals pay social contributions on a flat rate and, as such, differences between education levels are smaller and proportional to earnings levels.

The **transfers effect** concerns the social transfers related to a given level of earnings.

The **unemployment effect** is translated into monetary gains by using the level of earnings for different education categories over the working life.

Methodology

This indicator builds on information collected in other chapters of *Education at a Glance 2012* with one exception: to be able to calculate public returns and examine net benefits for individuals, information from the OECD "Taxing Wages" database is used. The earnings data used are from the earning data collection gathered by the LSO (Labour market and social outcomes of learning) Network (available as relative earnings in *Education at a Glance 2012*, Indicator A8). The data on direct costs of education are from Indicators B1 and B3. Data for the probability of finding a job (unemployment rates for different educational categories and age groups) are from Indicator A7. And the minimum wage is used as an approximation for what a student could potentially earn if not in school in calculating the foregone earnings at the upper secondary or post-secondary non-tertiary level of education.

In calculating the returns to education, the approach taken here is the net present value (NPV) of the investment. In this framework, lifetime costs and benefits are transferred back to the start of the investment. This is done by discounting all cash flows back to the beginning of the investment with a set rate of interest (discount rate). The choice of interest rate is difficult, as it should reflect not only the overall time horizon of the investment, but also the cost of borrowing or the perceived risk of the investment. To keep things simple, and to make the interpretation of results easier, the same discount rate is applied across all OECD countries.

To arrive at a reasonable discount rate, long-term government bonds have been used as a benchmark. The average long-term interest rate across OECD countries was approximately 4.4% in 2009 (OECD Finance Database [OECD, 2013]). Assuming that countries' central banks have succeeded in anchoring inflation expectations at or below 2% per year, this implies a real interest rate of 2% to 3%. The 3% real discount rate used in this indicator reflects the fact that calculations are made in constant prices. The change in the discount rate has a substantial impact on the net present value of education.

Discounting the costs and benefits to the present value with this interest rate makes the financial returns on the overall investment and values of the different components comparable across time and countries. Using the same unit of analysis also has the advantage of making it possible to add or subtract components across different education levels or between the private and public sectors to understand how different factors interact.

NPV calculations are based on the same method as internal rate of return (IRR) calculations. The main difference between the two methods lies in how the interest rate is set. For calculations developed within the IRR framework, the interest rate is raised to the level at which the economic benefits equal the cost of the investment. It pinpoints the discount rate at which the investment breaks even.

In calculating the private NPV, investment costs include after-tax foregone earnings adjusted for the probability of finding a job (unemployment rate) and direct private expenditures on education. Both of these investment streams take into account the duration of studies. On the benefit side, age-earnings profiles are used to calculate the earnings differential between different education levels. These gross earnings differentials are adjusted for differences in income taxes, social contributions and social transfers, including housing benefits and social assistance related to earnings level, to arrive at net earnings differentials. The cash flows are further adjusted for probability of finding a job. The calculations are done separately for men and women to account for differences in earnings differentials and unemployment rates.

In calculating the public NPV, public costs include lost tax receipts during the years of schooling (income tax and social contributions) and public expenditures, taking into account the duration of studies. Lost tax receipts are low in some countries because young individuals earn less. Public expenditures on education include direct expenditures, such as teachers' salaries or spending for the construction of school buildings, purchase of textbooks, etc., and public-private transfers, such as public subsidies to households for scholarships and other grants, and to other private entities for providing training at the workplace, etc. The benefits for the public sector are additional tax and social contribution receipts associated with higher earnings and savings on transfers, i.e. housing benefits and social assistance that the public sector does not have to pay because of higher earnings.

It is important to consider some of the broad conceptual limitations on the estimates of financial returns discussed here. For instance:

- To calculate returns over the lifetime, 64 is used as the upper age limit in all countries. However, the pension entry age varies widely between countries. A few years more or less in the labour market can make a substantial difference in the returns to education for an individual and the public. Thus, it is likely that in countries where the retirement age deviates significantly from 64, return rates are over- or underestimated.
- As earnings generally increase with educational attainment, individuals with higher levels of education typically consume more goods and services, and thus pay additional value-added taxes (VAT) on their consumption. Public returns are thus underestimated in this indicator.
- Individuals with higher earnings also tend to pay more into their pensions and, after leaving the labour force, will have a further income advantage that is not taken into account in the calculations here. Better-educated individuals also tend to live longer, entailing additional public costs that are also not taken into account here.
- Many governments have programmes that provide loans to students at low interest rates. Loans can provide a strong incentive for individuals to pursue their studies and reduce the costs of attaining higher education. Yet, as loans have to be repaid later, they also reduce the financial benefits of education. These subsidies can often make a substantial difference in the returns to education for the individual, but they are not included here.
- Direct costs are most notably tuition fees, but also costs for educational materials or daily expenses that are associated with a change in residence required to pursue a specific educational programme. These are not taken into consideration.
- The data reported are accounting-based values only. The results no doubt differ from econometric estimates that would use the same data on the micro level (i.e. data from household or individual surveys) rather than a lifetime stream of earnings derived from average earnings.
- For upper secondary or post-secondary non-tertiary education, caution is required when interpreting foregone earnings, as the minimum wage is used as an approximation.

Given these factors, the returns on education in different countries should be assessed with caution.

The approach used here estimates future earnings for individuals with different levels of education, based on knowledge of how average present gross earnings vary by level of attainment and age. However, the relationship between different levels of educational attainment and earnings may differ in the future, as technological, economic and social changes may all alter how wage levels relate to education levels.

Differences in returns across countries partly reflect different institutional and non-market conditions that bear on earnings, such as institutional conditions that limit flexibility in relative earnings.

In estimating benefits, the effect of education on the likelihood of finding employment when an individual wants to work is taken into account. However, this also makes the estimate sensitive to the stage in the economic cycle at which the data are collected. As more highly educated individuals typically have a stronger attachment to the labour market, the value of education generally increases in times of slow economic growth.

The calculations also involve a number of restrictive assumptions needed for international comparability. For calculating the investments in education, foregone earnings have been standardised at the level of the legal minimum wage or the equivalent in countries in which earnings data include part-time work. When no national minimum wage was available, the wage was selected from wages set in collective agreements. This assumption aims to counterbalance the very low earnings recorded for 15-24 year-olds that led to excessively high estimates in earlier editions of *Education at a Glance*. In the Czech Republic, Hungary, Japan, the Netherlands, Portugal and the United Kingdom, actual earnings are used in calculating foregone earnings, as part-time work is excluded in these earnings data collections.

Cost and benefits for upper secondary or post-secondary non-tertiary education cannot be computed for Belgium and the Netherlands because upper secondary or post-secondary non-tertiary education is compulsory in both countries. The fact that upper secondary education is compulsory in these countries prevents a consistent application of the methodology for this indicator, because it uses an investment approach. The investment approach assumes that individuals make a choice to invest in a given level of education in order to obtain the benefits. In countries where a particular level of education is compulsory, individuals do not face this choice, therefore by making the methodology is inapplicable in these instances.

For further information on the methodology, see OECD, 2011, and Annex 3 at *www.oecd.org/edu/eag.htm*.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator A7 Tables

Table A7.1a Private costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849103

Table A7.1b Private costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849122

Table A7.2a Public costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849141

Table A7.2b Public costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849160

Table A7.3a Private costs and benefits for a man attaining tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849179

Table A7.3b Private costs and benefits for a woman attaining tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849198

Table A7.4a Public costs and benefits for a man attaining tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849217

Table A7.4b Public costs and benefits for a woman attaining tertiary education (2009)
StatLink http://dx.doi.org/10.1787/888932849236

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Table A7.1a. Private costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2009)

As compared with a man attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 3 019	- 27 156	**- 30 175**	176 400	- 64 407	0	- 8 303	49 011	**152 701**	**122 526**	19.9%
	Austria	2009	- 1 890	- 44 642	**- 46 532**	296 619	- 73 664	- 64 903	- 8 442	53 792	**203 402**	**156 870**	13.1%
	Belgium[1]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Canada	2009	- 3 176	- 26 160	**- 29 336**	161 993	- 51 689	- 12 759	- 1 050	37 895	**134 391**	**105 055**	13.9%
	Chile		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 2 116	- 16 417	**- 18 533**	111 711	- 33 748	- 22 963	0	97 226	**152 226**	**133 693**	23.8%
	Denmark	2009	- 767	- 38 878	**- 39 645**	196 594	- 75 388	- 18 916	- 10 020	28 105	**120 374**	**80 729**	11.8%
	Estonia	2009	- 252	- 8 833	**- 9 085**	32 324	- 12 566	- 1 362	0	35 810	**54 206**	**45 121**	16.9%
	Finland	2009	- 178	- 30 022	**- 30 201**	75 381	- 28 532	- 6 632	- 7 202	28 082	**61 097**	**30 897**	7.8%
	France	2009	- 2 632	- 26 088	**- 28 720**	112 593	- 23 972	- 21 496	- 13 971	44 735	**97 888**	**69 168**	10.9%
	Germany	2009	- 3 973	- 36 807	**- 40 779**	108 511	- 42 779	- 39 984	- 14 061	85 286	**96 973**	**56 193**	8.2%
	Greece	2009	- 1 780	- 30 044	**- 31 824**	93 624	- 11 870	- 15 658	- 23 320	3 845	**46 622**	**14 798**	4.1%
	Hungary	2009	- 823	- 11 014	**- 11 837**	80 092	- 31 994	- 22 087	0	49 789	**75 800**	**63 962**	19.4%
	Iceland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Ireland	2009	- 688	- 24 715	**- 25 403**	184 104	- 67 498	- 23 665	0	74 829	**167 770**	**142 366**	20.4%
	Israel	2009	- 1 120	- 27 472	**- 28 592**	114 461	- 17 425	- 13 778	0	18 488	**101 746**	**73 154**	10.1%
	Italy	2008	- 986	- 43 886	**- 44 872**	177 073	- 63 514	- 18 903	0	22 519	**117 174**	**72 302**	8.1%
	Japan[2]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Korea	2009	- 7 620	- 28 267	**- 35 888**	329 758	- 27 699	- 21 179	0	7 215	**288 094**	**252 207**	12.6%
	Luxembourg		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Netherlands[1]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	New Zealand	2009	- 3 128	- 34 334	**- 37 462**	110 659	- 38 760	- 2 339	- 711	26 671	**95 519**	**58 058**	8.1%
	Norway	2009	- 2 859	- 50 874	**- 53 734**	260 393	- 83 124	- 24 042	- 4 703	48 669	**197 192**	**143 459**	13.2%
	Poland	2008	- 916	- 16 602	**- 17 518**	53 311	- 6 965	- 16 753	0	24 689	**54 282**	**36 764**	10.3%
	Portugal	2009	0	- 16 727	**- 16 727**	146 280	- 28 260	- 17 439	0	12 676	**113 256**	**96 530**	12.2%
	Slovak Republic	2009	- 2 358	- 9 468	**- 11 826**	118 139	- 26 127	- 31 086	0	114 287	**175 214**	**163 387**	34.6%
	Slovenia	2009	- 1 803	- 19 322	**- 21 125**	137 605	- 25 432	- 35 986	0	25 875	**102 061**	**80 936**	15.9%
	Spain	2009	- 1 464	- 10 001	**- 11 465**	109 692	- 28 649	- 9 921	0	46 855	**117 977**	**106 512**	21.2%
	Sweden	2009	- 21	- 25 769	**- 25 790**	175 330	- 57 342	- 15 777	- 22 368	50 269	**130 112**	**104 322**	16.3%
	Switzerland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 336	- 11 218	**- 11 554**	63 318	- 10 584	- 10 115	0	4 017	**46 637**	**35 082**	9.5%
	United Kingdom	2009	- 4 880	- 31 944	**- 36 824**	222 261	- 52 477	- 29 089	- 13 494	58 353	**185 553**	**148 730**	13.9%
	United States	2009	- 2 930	- 25 106	**- 28 036**	304 861	- 71 514	- 26 707	- 8 675	44 454	**242 418**	**214 382**	20.6%
	OECD average		- 1 989	- 25 837	**- 27 826**	152 042	- 40 615	- 20 136	- 5 243	42 055	**128 103**	**100 277**	14.5%
	EU21 average		- 1 529	- 24 510	**- 26 039**	135 069	- 38 376	- 22 923	- 6 271	47 612	**115 110**	**89 071**	14.9%
Other G20	Argentina		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	**m**	**m**	m

Notes: Values are based on the difference between men who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Belgium and the Netherlands are not included in the table because upper secondary education is compulsory.
2. Japan is not included in the table because the data at the lower and upper secondary levels of education are not broken down.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A7.1b. Private costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2009)

As compared with a woman attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 3 019	- 28 198	**- 31 217**	122 044	- 28 457	0	- 22 467	20 190	**91 311**	**60 094**	12.7%
	Austria	2009	- 1 890	- 43 950	**- 45 840**	208 105	- 24 496	- 47 697	- 27 606	30 761	**139 066**	**93 226**	10.6%
	Belgium[1]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Canada	2009	- 3 176	- 28 317	**- 31 493**	84 708	- 21 088	- 9 042	- 2 803	27 362	**79 136**	**47 643**	7.4%
	Chile		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 2 116	- 16 853	**- 18 969**	99 967	- 27 339	- 19 280	- 2 144	76 183	**127 387**	**108 418**	20.7%
	Denmark	2009	- 767	- 39 659	**- 40 426**	146 775	- 55 677	- 14 804	0	24 014	**100 308**	**59 882**	9.9%
	Estonia	2009	- 252	- 9 051	**- 9 303**	33 745	- 11 179	- 1 290	0	31 166	**52 442**	**43 139**	25.9%
	Finland	2009	- 178	- 31 990	**- 32 168**	55 774	- 16 608	- 5 546	- 16 226	30 783	**48 177**	**16 009**	5.5%
	France	2009	- 2 632	- 26 610	**- 29 242**	115 681	- 20 689	- 20 151	- 32 278	31 671	**74 234**	**44 992**	7.8%
	Germany	2009	- 3 973	- 37 238	**- 41 210**	124 880	- 31 103	- 35 604	- 34 860	44 088	**67 401**	**26 191**	5.9%
	Greece	2009	- 1 780	- 24 381	**- 26 160**	109 244	- 1 304	- 18 230	- 15 164	5 096	**79 641**	**53 481**	7.8%
	Hungary	2009	- 823	- 10 788	**- 11 611**	90 284	- 31 059	- 23 601	0	49 541	**85 165**	**73 554**	21.9%
	Iceland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Ireland	2009	- 688	- 33 235	**- 33 923**	169 908	- 25 758	- 14 394	0	22 225	**151 980**	**118 058**	21.3%
	Israel	2009	- 1 120	- 25 901	**- 27 021**	90 011	- 3 606	- 4 902	0	14 120	**95 623**	**68 602**	10.3%
	Italy	2008	- 986	- 38 624	**- 39 610**	152 167	- 51 238	- 17 293	0	29 983	**113 620**	**74 010**	8.4%
	Japan[2]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Korea	2009	- 7 620	- 30 787	**- 38 407**	120 130	- 1 914	- 9 164	0	787	**109 839**	**71 432**	10.8%
	Luxembourg		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Netherlands[1]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	New Zealand	2009	- 3 128	- 31 941	**- 35 069**	95 339	- 22 970	- 2 033	- 8 738	24 622	**86 220**	**51 151**	9.2%
	Norway	2009	- 2 859	- 52 871	**- 55 731**	151 109	- 41 979	- 13 303	- 13 885	20 239	**102 181**	**46 450**	6.4%
	Poland	2008	- 916	- 14 879	**- 15 794**	74 416	- 8 271	- 19 448	0	16 433	**63 130**	**47 335**	10.5%
	Portugal	2009	0	- 15 946	**- 15 946**	108 338	- 11 302	- 12 754	0	7 683	**91 965**	**76 019**	12.1%
	Slovak Republic	2009	- 2 358	- 4 617	**- 6 975**	81 677	- 11 451	- 23 898	0	97 725	**144 054**	**137 078**	48.4%
	Slovenia	2009	- 1 803	- 20 740	**- 22 543**	132 244	- 28 476	- 32 797	0	15 924	**86 895**	**64 352**	10.5%
	Spain	2009	- 1 464	- 9 868	**- 11 332**	116 983	- 21 569	- 9 851	0	38 471	**124 035**	**112 703**	24.9%
	Sweden	2009	- 21	- 27 283	**- 27 304**	136 537	- 43 847	- 12 740	- 30 163	46 195	**95 982**	**68 678**	11.0%
	Switzerland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 336	- 12 058	**- 12 394**	75 879	- 8 395	- 9 432	0	- 12 434	**45 618**	**33 223**	9.2%
	United Kingdom	2009	- 4 880	- 33 859	**- 38 739**	151 062	- 35 926	- 19 985	- 43 256	46 662	**98 557**	**59 818**	9.3%
	United States	2009	- 2 930	- 27 153	**- 30 083**	201 542	- 44 205	- 18 597	- 8 544	41 567	**171 763**	**141 680**	16.5%
	OECD average		- 1 989	- 26 031	**- 28 020**	117 252	- 24 227	- 15 994	- 9 928	30 041	**97 143**	**69 124**	13.7%
	EU21 average		- 1 529	- 24 420	**- 25 950**	117 099	- 25 405	- 19 409	- 11 205	35 811	**96 891**	**70 941**	15.1%
Other G20	Argentina		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Belgium and the Netherlands are not included in the table because upper secondary education is compulsory.
2. Japan is not included in the table because the data at the lower and upper secondary levels of education are not broken down.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A7.2a. Public costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2009)

As compared with a man attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	2009	- 15 955	- 3 020	**- 18 975**	55 053	0	8 303	9 355	**72 710**	**53 735**	17.1%
	Austria	2009	- 42 552	- 8 054	**- 50 606**	67 624	55 258	8 442	15 685	**147 010**	**96 404**	9.2%
	Belgium[1]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Canada	2009	- 26 071	- 5 023	**- 31 094**	45 151	10 200	1 050	9 097	**65 497**	**34 403**	6.7%
	Chile		m	m	**m**	m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 21 277	1 458	**- 19 819**	22 510	12 319	0	21 883	**56 711**	**36 892**	10.2%
	Denmark	2009	- 30 337	- 18 553	**- 48 890**	67 718	15 671	10 020	10 915	**104 324**	**55 434**	7.7%
	Estonia	2009	- 18 857	- 1 210	**- 20 066**	6 687	650	0	6 592	**13 928**	**- 6 138**	1.5%
	Finland	2009	- 21 711	- 4 391	**- 26 103**	23 424	4 855	7 202	6 884	**42 366**	**16 263**	6.5%
	France	2009	- 31 556	- 5 171	**- 36 727**	19 109	15 422	13 971	10 937	**59 440**	**22 713**	6.4%
	Germany	2009	- 27 953	- 14 083	**- 42 036**	29 047	22 523	14 061	31 192	**96 824**	**54 788**	9.4%
	Greece	2009	- 22 045	2 032	**- 20 013**	11 723	15 045	23 320	760	**50 848**	**30 835**	6.0%
	Hungary	2009	- 14 716	- 2 674	**- 17 391**	24 747	13 668	0	15 666	**54 081**	**36 690**	10.0%
	Iceland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Ireland	2009	- 29 498	- 763	**- 30 261**	59 215	19 169	0	12 780	**91 164**	**60 903**	8.1%
	Israel	2009	- 15 405	- 1 650	**- 17 055**	16 363	12 601	0	2 240	**31 204**	**14 148**	5.5%
	Italy	2008	- 32 919	- 10 264	**- 43 183**	59 003	16 776	0	6 638	**82 418**	**39 235**	6.0%
	Japan[2]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Korea	2009	- 24 344	- 2 983	**- 27 327**	27 524	20 643	0	711	**48 878**	**21 551**	4.8%
	Luxembourg		m	m	**m**	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	**m**	**m**	m
	Netherlands[1]		m	m	**m**	m	m	m	m	**m**	**m**	m
	New Zealand	2009	- 21 397	- 3 991	**- 25 388**	33 911	1 888	711	5 299	**41 810**	**16 422**	5.3%
	Norway	2009	- 36 851	- 15 816	**- 52 667**	73 644	20 269	4 703	13 253	**111 869**	**59 202**	8.0%
	Poland	2008	- 16 232	- 5 565	**- 21 797**	5 188	11 477	0	7 053	**23 718**	**1 921**	3.4%
	Portugal	2009	- 20 476	- 2 386	**- 22 862**	27 209	16 054	0	2 436	**45 699**	**22 837**	5.5%
	Slovak Republic	2009	- 13 158	- 910	**- 14 068**	18 167	15 854	0	23 191	**57 212**	**43 145**	13.4%
	Slovenia	2009	- 18 800	- 5 902	**- 24 702**	23 126	30 304	0	7 989	**61 419**	**36 716**	8.9%
	Spain	2009	- 19 800	- 1 030	**- 20 830**	24 782	6 967	0	6 822	**38 570**	**17 739**	5.5%
	Sweden	2009	- 28 557	- 6 913	**- 35 470**	46 699	12 285	22 368	14 135	**95 487**	**60 018**	14.8%
	Switzerland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 4 776	- 4 551	**- 9 327**	9 997	9 514	0	1 188	**20 699**	**11 371**	6.4%
	United Kingdom	2009	- 17 187	2 307	**- 14 881**	44 425	24 434	13 494	12 707	**95 060**	**80 179**	21.2%
	United States	2009	- 33 481	- 3 231	**- 36 713**	65 191	23 333	8 675	9 698	**106 897**	**70 185**	10.0%
	OECD average		- 23 304	- 4 705	**- 28 010**	34 894	15 661	5 243	10 196	**65 994**	**37 984**	8.4%
	EU21 average		- 23 757	- 4 560	**- 28 317**	32 245	17 152	6 271	11 904	**67 571**	**39 254**	8.5%
Other G20	Argentina		m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Belgium and the Netherlands are not included in the table because upper secondary education is compulsory.
2. Japan is not included in the table because the data at the lower and upper secondary levels of education are not broken down.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table A7.2b. Public costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2009)

As compared with a woman attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	2009	- 15 955	- 3 136	**- 19 091**	26 218	0	22 467	2 239	**50 924**	**31 833**	18.4%
	Austria	2009	- 42 552	- 7 929	**- 50 481**	23 951	42 287	27 606	5 954	**99 799**	**49 318**	7.8%
	Belgium[1]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Canada	2009	- 26 071	- 5 437	**- 31 508**	17 830	7 276	2 803	5 025	**32 934**	**1 425**	3.2%
	Chile		m	m	**m**	m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 21 277	1 497	**- 19 781**	20 002	10 946	2 144	15 671	**48 763**	**28 983**	8.8%
	Denmark	2009	- 30 337	- 18 925	**- 49 263**	49 790	11 689	0	9 001	**70 481**	**21 218**	5.3%
	Estonia	2009	- 18 857	- 1 240	**- 20 096**	6 916	672	0	4 880	**12 469**	**- 7 628**	0.6%
	Finland	2009	- 21 711	- 4 679	**- 26 390**	12 075	3 607	16 226	6 472	**38 380**	**11 989**	6.6%
	France	2009	- 31 556	- 5 275	**- 36 831**	17 923	15 865	32 278	7 052	**73 117**	**36 287**	6.7%
	Germany	2009	- 27 953	- 14 248	**- 42 201**	27 294	26 613	34 860	12 800	**101 567**	**59 366**	10.9%
	Greece	2009	- 22 045	1 649	**- 20 396**	1 347	17 423	15 164	764	**34 699**	**14 303**	4.8%
	Hungary	2009	- 14 716	- 2 620	**- 17 336**	24 816	15 247	0	14 598	**54 660**	**37 324**	10.4%
	Iceland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Ireland	2009	- 29 498	- 1 027	**- 30 524**	24 738	13 916	0	1 498	**40 152**	**9 628**	4.2%
	Israel	2009	- 15 405	- 1 556	**- 16 961**	3 499	4 383	0	626	**8 508**	**- 8 453**	0.7%
	Italy	2008	- 32 919	- 9 033	**- 41 952**	47 153	14 467	0	6 910	**68 530**	**26 578**	5.2%
	Japan[2]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Korea	2009	- 24 344	- 3 145	**- 27 488**	1 904	9 104	0	70	**11 078**	**- 16 410**	-1.3%
	Luxembourg		m	m	**m**	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	**m**	**m**	m
	Netherlands[1]		m	m	**m**	m	m	m	m	**m**	**m**	m
	New Zealand	2009	- 21 397	- 3 713	**- 25 110**	19 183	1 618	8 738	4 202	**33 740**	**8 631**	4.8%
	Norway	2009	- 36 851	- 16 437	**- 53 288**	39 007	11 741	13 885	4 534	**69 166**	**15 879**	4.8%
	Poland	2008	- 16 232	- 4 987	**- 21 219**	7 206	15 942	0	4 571	**27 719**	**6 500**	4.2%
	Portugal	2009	- 20 476	- 2 275	**- 22 751**	11 178	11 919	0	958	**24 055**	**1 304**	3.2%
	Slovak Republic	2009	- 13 158	- 444	**- 13 601**	8 542	10 905	0	15 902	**35 349**	**21 747**	9.1%
	Slovenia	2009	- 18 800	- 6 335	**- 25 135**	27 178	29 297	0	4 798	**61 272**	**36 137**	7.8%
	Spain	2009	- 19 800	- 1 016	**- 20 817**	20 119	7 434	0	3 866	**31 420**	**10 603**	4.5%
	Sweden	2009	- 28 557	- 7 319	**- 35 876**	34 935	9 544	30 163	12 109	**86 750**	**50 875**	13.4%
	Switzerland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 4 776	- 4 892	**- 9 668**	10 025	11 264	0	- 3 463	**17 827**	**8 159**	5.8%
	United Kingdom	2009	- 17 187	4 881	**- 12 306**	30 198	16 609	43 256	9 105	**99 167**	**86 861**	20.9%
	United States	2009	- 33 481	- 3 495	**- 36 976**	39 703	15 443	8 544	7 657	**71 346**	**34 370**	6.9%
	OECD average		- 23 304	- 4 659	**- 27 963**	21 259	12 893	9 928	6 069	**50 149**	**22 186**	6.8%
	EU21 average		- 23 757	- 4 407	**- 28 164**	21 965	15 243	11 205	7 606	**56 019**	**27 855**	7.5%
Other G20	Argentina		m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	**m**	**m**	m

Notes: Values are based on the difference between women who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Belgium and the Netherlands are not included in the table because upper secondary education is compulsory.
2. Japan is not included in the table because the data at the lower and upper secondary levels of education are not broken down.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849160

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Table A7.3a. Private costs and benefits for a man attaining tertiary education (2009)

As compared with a man attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Grants effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2009	- 17 528	- 50 814	**- 68 342**	339 977	- 124 441	0	0	5 363	7	**220 906**	**152 564**	9.0%
	Austria	2009	- 5 689	- 56 184	**- 61 872**	404 385	- 129 756	- 59 771	0	24 265	9 852	**248 975**	**187 103**	11.7%
	Belgium	2009	- 3 514	- 45 409	**- 48 922**	352 354	- 156 492	- 54 714	0	23 422	1 047	**165 617**	**116 694**	10.4%
	Canada	2009	- 16 282	- 30 684	**- 46 966**	287 032	- 96 213	- 7 645	0	31 906	1 103	**216 183**	**169 217**	12.3%
	Chile		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 4 692	- 23 017	**- 27 709**	424 850	- 88 209	- 48 588	0	16 814	0	**304 867**	**277 158**	20.1%
	Denmark	2009	- 3 365	- 55 899	**- 59 263**	266 180	- 139 677	- 22 432	- 9 435	12 030	25 189	**131 855**	**72 592**	8.5%
	Estonia	2009	- 3 583	- 18 346	**- 21 929**	150 074	- 40 454	- 4 070	0	53 647	0	**159 197**	**137 268**	22.0%
	Finland	2009	- 1 873	- 56 911	**- 58 784**	343 119	- 138 956	- 24 568	0	39 479	8 730	**227 803**	**169 020**	11.9%
	France	2009	- 7 868	- 51 472	**- 59 340**	338 590	- 83 938	- 45 390	- 880	13 494	3 620	**225 495**	**166 155**	10.1%
	Germany	2009	- 7 061	- 64 242	**- 71 304**	353 025	- 140 458	- 69 031	0	54 278	6 021	**203 835**	**132 531**	9.2%
	Greece	2009	- 690	- 43 715	**- 44 405**	182 193	- 35 679	- 29 437	- 8 700	6 156	0	**114 533**	**70 128**	7.5%
	Hungary	2009	- 5 131	- 14 443	**- 19 575**	464 922	- 188 649	- 85 331	0	37 732	1 283	**229 956**	**210 381**	25.6%
	Iceland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Ireland	2009	- 6 716	- 50 436	**- 57 152**	512 095	- 219 981	- 41 438	0	90 659	4 361	**345 695**	**288 543**	19.8%
	Israel	2009	- 13 394	- 28 223	**- 41 617**	281 602	- 68 554	- 34 985	0	14 996	0	**193 060**	**151 443**	11.4%
	Italy	2008	- 7 285	- 50 608	**- 57 893**	408 011	- 159 562	- 41 835	0	3 295	3 330	**213 239**	**155 346**	8.1%
	Japan	2007	- 37 215	- 66 750	**- 103 965**	326 614	- 64 523	- 36 039	0	20 931	0	**246 983**	**143 018**	7.4%
	Korea	2009	- 23 378	- 54 050	**- 77 428**	280 071	- 34 128	- 24 344	0	17 002	0	**238 601**	**161 173**	16.0%
	Luxembourg		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Netherlands	2008	- 14 113	- 90 118	**- 104 231**	455 296	- 202 175	- 22 153	0	4 778	14 371	**250 117**	**145 886**	7.9%
	New Zealand	2009	- 10 414	- 49 605	**- 60 019**	188 649	- 64 074	- 3 261	0	3 169	1 891	**126 375**	**66 357**	6.7%
	Norway	2009	- 1 180	- 66 506	**- 67 686**	273 737	- 103 788	- 22 034	0	9 009	6 226	**163 151**	**95 465**	6.7%
	Poland	2008	- 6 291	- 15 995	**- 22 287**	367 019	- 55 868	- 83 937	0	23 960	1 742	**252 917**	**230 630**	23.4%
	Portugal	2009	- 8 085	- 19 784	**- 27 869**	304 147	- 82 653	- 33 871	0	4 128	0	**191 751**	**163 882**	14.9%
	Slovak Republic	2009	- 5 543	- 17 281	**- 22 823**	302 035	- 55 140	- 42 864	0	34 628	1 250	**239 909**	**217 086**	21.5%
	Slovenia	2009	- 3 858	- 25 921	**- 29 779**	475 118	- 128 427	- 109 421	0	19 474	226	**256 970**	**227 191**	18.2%
	Spain	2009	- 10 051	- 32 644	**- 42 695**	188 318	- 53 898	- 14 573	0	41 006	0	**160 853**	**118 157**	10.2%
	Sweden	2009	- 4 913	- 54 097	**- 59 010**	219 203	- 87 765	- 10 739	0	14 209	8 341	**143 249**	**84 239**	7.6%
	Switzerland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 1 061	- 9 402	**- 10 463**	106 985	- 18 682	- 16 424	0	2 761	0	**74 640**	**64 177**	19.3%
	United Kingdom	2009	- 28 704	- 91 976	**- 120 679**	398 503	- 88 234	- 45 568	0	34 295	2 244	**301 240**	**180 560**	8.2%
	United States	2009	- 71 053	- 43 069	**- 114 122**	667 905	- 220 754	- 57 941	0	89 759	0	**478 969**	**364 847**	12.3%
	OECD average		- 11 398	- 44 055	**- 55 453**	333 173	- 105 901	- 37 669	- 656	25 746	3 477	**218 170**	**162 718**	13.0%
	EU21 average		- 6 951	- 43 925	**- 50 876**	345 472	- 113 798	- 44 487	- 951	27 587	4 580	**218 404**	**167 528**	13.8%
Other G20	Argentina		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849179

Table A7.3b. Private costs and benefits for a woman attaining tertiary education (2009)

As compared with a woman attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Grants effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2009	- 17 528	- 52 120	**- 69 648**	253 308	- 91 641	0	0	13 021	7	**174 695**	**105 046**	8.8%
	Austria	2009	- 5 689	- 57 294	**- 62 983**	318 996	- 87 509	- 57 683	0	4 947	9 852	**188 603**	**125 620**	9.1%
	Belgium	2009	- 3 514	- 43 468	**- 46 981**	305 193	- 121 702	- 72 732	0	32 859	1 047	**144 665**	**97 683**	11.0%
	Canada	2009	- 16 282	- 32 449	**- 48 731**	249 037	- 68 337	- 20 011	0	17 718	1 103	**179 511**	**130 780**	12.2%
	Chile		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 4 556	- 22 004	**- 26 560**	234 992	- 51 432	- 29 160	0	30 543		**184 943**	**158 383**	17.8%
	Denmark	2009	- 3 365	- 57 986	**- 61 351**	166 763	- 60 038	- 14 206	- 8 679	7 527	25 189	**116 556**	**55 205**	8.5%
	Estonia	2009	- 3 583	- 20 438	**- 24 021**	131 866	- 31 316	- 3 140	0	24 987	0	**122 398**	**98 377**	18.5%
	Finland	2009	- 1 873	- 60 589	**- 62 461**	211 875	- 72 749	- 15 039	- 4 079	21 742	8 730	**150 480**	**88 019**	8.8%
	France	2009	- 7 868	- 49 824	**- 57 692**	212 928	- 43 190	- 32 362	- 8 444	23 641	3 620	**156 192**	**98 499**	8.9%
	Germany	2009	- 7 061	- 66 325	**- 73 387**	244 493	- 73 871	- 55 471	- 123	24 260	6 021	**145 309**	**71 922**	6.8%
	Greece	2009	- 690	- 36 674	**- 37 363**	186 037	- 21 786	- 33 976	- 29 066	26 865		**128 074**	**90 710**	9.6%
	Hungary	2009	- 5 131	- 15 047	**- 20 178**	251 870	- 108 574	- 47 547	0	27 402	1 283	**124 433**	**104 255**	17.6%
	Iceland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Ireland	2009	- 6 716	- 59 372	**- 66 088**	391 860	- 116 093	- 51 190	0	23 110	4 361	**252 048**	**185 960**	14.2%
	Israel	2009	- 13 394	- 28 918	**- 42 312**	181 036	- 27 193	- 20 924	0	14 996		**147 914**	**105 602**	10.2%
	Italy	2008	- 7 285	- 47 826	**- 55 111**	223 811	- 79 954	- 21 986	0	7 563	3 330	**132 764**	**77 652**	6.9%
	Japan	2007	- 37 215	- 49 265	**- 86 481**	231 306	- 20 848	- 29 117	0	9 951		**191 293**	**104 812**	7.8%
	Korea	2009	- 23 378	- 56 149	**- 79 527**	255 083	- 9 753	- 19 619	0	4 347		**230 058**	**150 531**	8.6%
	Luxembourg		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Netherlands	2008	- 14 113	- 87 458	**- 101 571**	339 338	- 129 641	- 30 381	0	9 467	14 371	**203 152**	**101 581**	7.0%
	New Zealand	2009	- 10 414	- 49 614	**- 60 027**	133 789	- 31 532	- 2 328	- 2 623	3 114	1 891	**102 311**	**42 283**	6.9%
	Norway	2009	- 1 180	- 66 522	**- 67 702**	224 711	- 63 163	- 17 633	0	319	6 226	**150 459**	**82 758**	7.7%
	Poland	2008	- 6 291	- 15 058	**- 21 350**	215 086	- 24 687	- 52 035	0	27 164	1 742	**167 270**	**145 920**	19.9%
	Portugal	2009	- 8 085	- 19 280	**- 27 365**	259 278	- 60 491	- 31 347	0	25 663		**193 104**	**165 739**	16.2%
	Slovak Republic	2009	- 5 543	- 17 363	**- 22 906**	190 019	- 34 361	- 29 863	0	33 017	1 250	**160 062**	**137 156**	18.5%
	Slovenia	2009	- 3 858	- 25 447	**- 29 305**	358 406	- 87 540	- 84 889	0	26 254	226	**212 456**	**183 151**	17.3%
	Spain	2009	- 10 051	- 32 691	**- 42 743**	240 593	- 64 677	- 18 000	0	43 061		**200 976**	**158 234**	12.1%
	Sweden	2009	- 4 913	- 56 388	**- 61 301**	141 448	- 42 879	- 11 081	- 10	16 338	8 341	**112 156**	**50 855**	6.5%
	Switzerland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 1 061	- 8 185	**- 9 246**	116 530	- 21 267	- 19 627	0	14 075		**89 711**	**80 466**	19.2%
	United Kingdom	2009	- 28 704	- 92 382	**- 121 086**	355 479	- 74 244	- 40 895	- 1 548	21 048	2 244	**262 084**	**140 998**	7.5%
	United States	2009	- 71 053	- 46 918	**- 117 971**	405 817	- 102 914	- 33 654	0	34 571		**303 819**	**185 848**	9.1%
	OECD average		- 11 393	- 43 898	**- 55 291**	242 446	- 62 875	- 30 893	- 1 882	19 640	5 042	**169 914**	**114 622**	11.5%
	EU21 average		- 6 944	- 44 146	**- 51 090**	249 017	- 69 337	- 36 649	- 2 598	22 873	5 725	**167 886**	**116 796**	12.1%
Other G20	Argentina		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849198

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Table A7.4a. Public costs and benefits for a man attaining tertiary education (2009)

As compared with a man attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Grants effect	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 14 588	- 5 652	- 7	**- 20 247**	123 233	0	0	1 208	**124 441**	**104 194**	13.1%
	Austria	2009	- 40 474	- 10 137	- 9 852	**- 60 463**	125 114	55 730	0	8 682	**189 527**	**129 064**	9.3%
	Belgium	2009	- 30 735	- 10 360	- 1 047	**- 42 142**	149 793	51 455	0	9 957	**211 206**	**169 064**	13.3%
	Canada	2009	- 27 580	- 5 892	- 1 103	**- 34 575**	89 400	5 792	0	8 666	**103 858**	**69 283**	8.8%
	Chile		m	m	m		m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 18 675	2 044	0	**- 16 631**	85 412	46 743	0	4 642	**136 796**	**120 165**	17.2%
	Denmark	2009	- 70 252	- 26 675	- 25 189	**- 122 116**	135 256	21 252	9 435	5 601	**171 544**	**49 427**	4.5%
	Estonia	2009	- 14 486	- 2 513	0	**- 16 999**	30 876	3 001	0	10 647	**44 524**	**27 525**	10.2%
	Finland	2009	- 42 400	- 8 324	- 8 730	**- 59 454**	128 733	22 053	0	12 738	**163 525**	**104 071**	8.3%
	France	2009	- 35 052	- 10 203	- 3 620	**- 48 875**	81 969	43 570	880	3 789	**130 208**	**81 333**	7.5%
	Germany	2009	- 38 170	- 24 581	- 6 021	**- 68 772**	127 860	58 572	0	23 056	**209 489**	**140 717**	9.1%
	Greece	2009	- 20 179	2 956	0	**- 17 223**	34 885	28 464	8 700	1 766	**73 816**	**56 593**	11.6%
	Hungary	2009	- 18 036	- 3 507	- 1 283	**- 22 826**	177 893	78 934	0	17 153	**273 981**	**251 155**	25.4%
	Iceland		m	m	m		m	m	m	m	**m**	**m**	m
	Ireland	2009	- 34 708	- 1 558	- 4 361	**- 40 627**	199 558	35 080	0	26 781	**261 419**	**220 792**	17.0%
	Israel	2009	- 18 626	- 1 695	0	**- 20 321**	66 889	33 788	0	2 861	**103 538**	**83 217**	11.3%
	Italy	2008	- 17 538	- 11 836	- 3 330	**- 32 704**	157 696	41 484	0	2 217	**201 397**	**168 693**	10.1%
	Japan	2007	- 17 897	- 15 254	0	**- 33 151**	62 285	33 612	0	4 665	**100 562**	**67 411**	8.4%
	Korea	2009	- 8 250	- 6 238	0	**- 14 488**	33 093	23 097	0	2 281	**58 472**	**43 983**	17.4%
	Luxembourg		m	m	m		m	m	m	m	**m**	**m**	m
	Mexico		m	m	m		m	m	m	m	**m**	**m**	m
	Netherlands	2008	- 37 382	- 39 015	- 14 371	**- 90 768**	201 244	21 220	0	1 863	**224 327**	**133 560**	7.4%
	New Zealand	2009	- 22 037	- 5 766	- 1 891	**- 29 694**	63 286	3 207	0	842	**67 334**	**37 640**	6.9%
	Norway	2009	- 36 777	- 20 675	- 6 226	**- 63 679**	101 586	21 334	0	2 902	**125 821**	**62 143**	5.7%
	Poland	2008	- 14 435	- 5 361	- 1 742	**- 21 539**	53 177	78 804	0	7 824	**139 805**	**118 266**	15.0%
	Portugal	2009	- 16 226	- 2 822	0	**- 19 048**	81 284	33 419	0	1 821	**116 524**	**97 476**	12.4%
	Slovak Republic	2009	- 15 033	- 1 660	- 1 250	**- 17 943**	50 956	38 359	0	8 689	**98 004**	**80 061**	14.2%
	Slovenia	2009	- 21 977	- 7 917	- 226	**- 30 120**	124 522	105 125	0	8 201	**237 848**	**207 728**	15.8%
	Spain	2009	- 37 506	- 3 361	0	**- 40 867**	48 062	11 981	0	8 429	**68 472**	**27 605**	5.3%
	Sweden	2009	- 39 997	- 14 512	- 8 341	**- 62 850**	83 967	9 847	0	4 690	**98 504**	**35 654**	4.9%
	Switzerland		m	m	m		m	m	m	m	**m**	**m**	m
	Turkey	2005	- 9 567	- 3 814	0	**- 13 381**	18 209	16 010	0	886	**35 106**	**21 724**	9.3%
	United Kingdom	2009	- 15 151	- 18 315	- 2 244	**- 35 710**	82 547	42 425	0	8 830	**133 802**	**98 091**	11.1%
	United States	2009	- 42 430	- 5 543	0	**- 47 973**	201 429	51 098	0	26 168	**278 695**	**230 722**	14.1%
	OECD average		- 26 764	- 9 248	- 3 477	**- 39 489**	100 697	35 016	656	7 857	**144 226**	**104 737**	11.2%
	EU21 average		- 28 921	- 9 883	- 4 580	**- 43 384**	108 040	41 376	951	8 869	**159 236**	**115 852**	11.5%
Other G20	Argentina		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849217

Table A7.4b. Public costs and benefits for a woman attaining tertiary education (2009)

As compared with a woman attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Grants effect	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 14 588	- 5 797	- 7	**- 20 392**	89 111	0	0	2 530	**91 641**	**71 249**	13.7%
	Austria	2009	- 40 474	- 10 337	- 9 852	**- 60 663**	86 600	56 802	0	1 790	**145 192**	**84 529**	7.1%
	Belgium	2009	- 30 735	- 9 917	- 1 047	**- 41 699**	113 699	68 183	0	12 552	**194 434**	**152 735**	15.7%
	Canada	2009	- 27 580	- 6 231	- 1 103	**- 34 914**	65 263	18 759	0	4 325	**88 347**	**53 433**	8.5%
	Chile		m	m	m		m	m	m	m	**m**	**m**	m
	Czech Republic	2009	- 18 131	1 954	0	**- 16 177**	47 167	25 813	0	7 612	**80 592**	**64 415**	14.1%
	Denmark	2009	- 70 252	- 27 671	- 25 189	**- 123 112**	57 873	13 394	8 679	2 976	**82 923**	**- 40 189**	1.2%
	Estonia	2009	- 14 486	- 2 799	0	**- 17 285**	27 197	2 643	0	4 616	**34 456**	**17 170**	8.0%
	Finland	2009	- 42 400	- 8 862	- 8 730	**- 59 992**	68 219	13 657	4 079	5 912	**91 868**	**31 876**	5.2%
	France	2009	- 35 052	- 9 877	- 3 620	**- 48 548**	40 275	29 147	8 444	6 130	**83 996**	**35 448**	6.2%
	Germany	2009	- 38 170	- 25 378	- 6 021	**- 69 569**	69 954	50 504	123	8 884	**129 465**	**59 896**	6.1%
	Greece	2009	- 20 179	2 480	0	**- 17 699**	20 386	29 703	29 066	5 673	**84 828**	**67 129**	11.7%
	Hungary	2009	- 18 036	- 3 654	- 1 283	**- 22 972**	101 528	42 906	0	11 687	**156 121**	**133 149**	18.2%
	Iceland		m	m	m		m	m	m	m	**m**	**m**	m
	Ireland	2009	- 34 708	- 1 834	- 4 361	**- 40 903**	112 479	49 498	0	5 306	**167 283**	**126 380**	13.7%
	Israel	2009	- 18 626	- 1 737	0	**- 20 363**	26 284	19 949	0	1 883	**48 117**	**27 754**	7.1%
	Italy	2008	- 17 538	- 11 185	- 3 330	**- 32 053**	77 919	21 270	0	2 750	**101 940**	**69 886**	8.0%
	Japan	2007	- 17 897	- 10 654	0	**- 28 551**	20 218	27 924	0	1 822	**49 965**	**21 414**	6.2%
	Korea	2009	- 8 250	- 5 734	0	**- 13 984**	9 689	19 291	0	393	**29 372**	**15 388**	6.5%
	Luxembourg		m	m	m		m	m	m	m	**m**	**m**	m
	Mexico		m	m	m		m	m	m	m	**m**	**m**	m
	Netherlands	2008	- 37 382	- 35 640	- 14 371	**- 87 392**	128 001	28 440	0	3 582	**160 023**	**72 630**	6.2%
	New Zealand	2009	- 22 037	- 5 767	- 1 891	**- 29 695**	30 974	2 276	2 623	611	**36 484**	**6 788**	4.4%
	Norway	2009	- 36 777	- 20 680	- 6 226	**- 63 684**	63 118	17 608	0	70	**80 796**	**17 112**	4.2%
	Poland	2008	- 14 435	- 5 047	- 1 742	**- 21 225**	22 460	46 221	0	8 041	**76 723**	**55 498**	10.9%
	Portugal	2009	- 16 226	- 2 750	0	**- 18 976**	56 926	28 536	0	6 375	**91 837**	**72 861**	11.1%
	Slovak Republic	2009	- 15 033	- 1 668	- 1 250	**- 17 951**	31 258	25 456	0	7 510	**64 223**	**46 272**	11.2%
	Slovenia	2009	- 21 977	- 7 773	- 226	**- 29 975**	83 288	79 108	0	10 033	**172 429**	**142 454**	13.0%
	Spain	2009	- 37 506	- 3 366	0	**- 40 872**	59 154	15 280	0	8 243	**82 677**	**41 805**	6.5%
	Sweden	2009	- 39 997	- 15 126	- 8 341	**- 63 464**	39 273	9 944	10	4 743	**53 970**	**- 9 494**	2.3%
	Switzerland		m	m	m		m	m	m	m	**m**	**m**	m
	Turkey	2005	- 9 567	- 3 320	0	**- 12 887**	19 194	17 528	0	4 171	**40 894**	**28 006**	9.1%
	United Kingdom	2009	- 15 151	- 5 958	- 2 244	**- 23 353**	71 002	39 051	1 548	5 086	**116 686**	**93 333**	14.8%
	United States	2009	- 42 430	- 6 038	0	**- 48 468**	97 093	31 023	0	8 452	**136 568**	**88 100**	9.5%
	OECD average		- 26 746	- 8 633	- 3 477	**- 38 856**	59 848	28 618	1 882	5 302	**95 650**	**56 794**	9.0%
	EU21 average		- 28 893	- 9 220	- 4 580	**- 42 694**	65 733	33 778	2 598	6 475	**108 583**	**65 889**	9.6%
Other G20	Argentina		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. *Education at a Glance 2012*. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

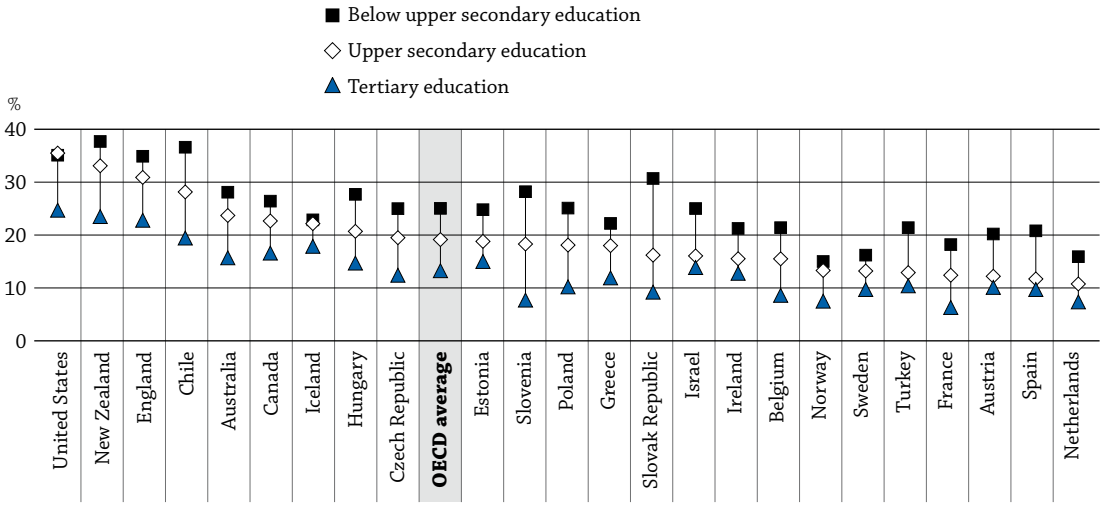
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849236

WHAT ARE THE SOCIAL OUTCOMES OF EDUCATION?

- On average across 24 OECD countries, adults with a tertiary education are half as likely to be obese compared to those with only a below upper secondary education.
- Adults in 23 OECD countries with a tertiary education are 16 percentage points less likely to smoke, on average, than those with below upper secondary education only.

Chart A8.1. Proportion of obese adults, by level of educational attainment (2011)



Notes: Obese adults are defined as those whose Body Mass Index (BMI) is greater or equal to 30 (see Annex 3 for survey questions used).
Data refers to 2011, except for Australia (2010), Austria (2006), Belgium (2008), Chile (2009-10), the Czech Republic (2008), England (2010), Estonia (2006), France (2008), Greece (2009), Hungary (2009), Iceland (2007), Ireland (2007), Israel (2010), the Netherlands (2008), Norway (2008), Poland (2009), the Slovak Republic (2009), Slovenia (2007), Spain (2009) and Turkey (2008).
Countries are ranked in descending order of the proportion of adults aged 25-64 reporting levels of BMI greater or equal to 30, among adults who have attained upper secondary education.
Source: OECD. Table A8.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846709

Context

Health remains an important policy concern in OECD countries, in spite of the rapid increases in life expectancy over the last decades. There have been significant changes in the nature of health problems, with a sharp rise in chronic debilitating conditions, such as diabetes and severe depression, and the deterioration of health-related behaviours in the areas of diet, exercise and drinking. In addition, there are concerns related to inequalities, as certain demographic and socio-economic groups face significantly worse health conditions (WHO, 2008). Overall, among OECD countries, expenditure on health increased to 9.5% of GDP in 2010, up from 3.9% when the OECD was founded in 1961, and it is likely to increase further as the populations in OECD countries age (OECD, 2011).

Given that childhood through adolescence is an important time for developing healthy behaviours and lifestyles (OECD, 2010), education can have an impact on the incidence of obesity and smoking. This year's *Education at a Glance* looks at two health indicators, obesity and smoking, and how they are associated with educational attainment.

Other findings

- More-educated adults are less likely to be obese and smoke daily. **The reduction in obesity rates by educational attainment is much greater among women** and in countries that have a high average level of obesity. **The reduction in smoking rates by educational attainment is much greater among men than women**. The reduction is also greater in Central European and predominantly English-speaking countries than in other OECD countries.
- **The relationship between educational attainment and health indicators (obesity and daily smoking) remains strong even after taking into account differences in individuals' gender, age and income.**

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Analysis

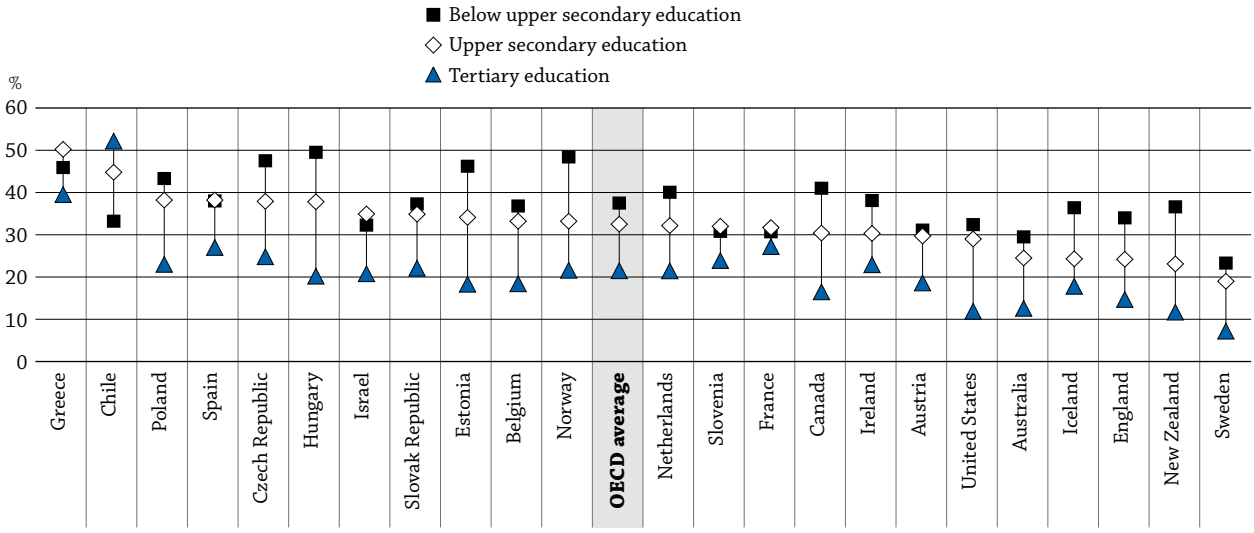
Obesity

Obesity has reached epidemic proportions, according to the World Health Organization (WHO, 2008). It is associated with serious chronic diseases, disability, reduced quality of life, and shortened life expectancy. It also affects mental health, social life, and is associated with negative effects on educational outcomes (OECD, 2010). While the rise in obesity has affected all population groups, evidence suggests that obesity tends to be more common among individuals, especially women, in disadvantaged socio-economic groups.

On average across the 24 OECD countries with available data, approximately 19% of adults are obese (Table A8.1). The incidence of obesity is particularly high among those with below upper secondary education (25%) and relatively low among those with tertiary education (13%). The incremental difference in health outcomes associated with more education (in this case, 12 percentage points) is commonly called the *education gradient*. The education gradient for obesity is particularly steep among women: a 16 percentage-point difference, compared to a 7 percentage-point difference among men.

Some countries with a high level of obesity, namely, Chile, New Zealand and the United States, show a particularly steep education gradient of 14 percentage points, on average. The education gradient is 8 percentage points, on average, across those countries with a low level of obesity, namely, the Netherlands, Norway and Sweden (Table A8.1).

Chart A8.2. Proportion of adults who smoke, by level of educational attainment (2011)



Notes: Adults who smoke are defined as those who currently smoke or otherwise use tobacco products (see Annex 3 for survey questions used). Data refers to 2011, except for Australia (2010), Austria (2006), Belgium (2008), Chile (2009-10), the Czech Republic (2008), England (2010), Estonia (2006), France (2008), Greece (2009), Hungary (2009), Iceland (2007), Ireland (2007), Israel (2010), the Netherlands (2008), Norway (2008), Poland (2009), the Slovak Republic (2009), Slovenia (2007) and Spain (2009).

Countries are ranked in descending order of the proportion of adults aged 25-64 reporting using tobacco regularly, among adults who have attained upper secondary education.

Source: OECD. Table A8.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Is the relationship between education and obesity largely driven by age or gender? This may occur if, for example, the younger cohorts (or women) are less likely to be obese and are also better educated compared to the older cohorts (or men). Table A8.3 provides regression-based estimates that take into account these differences. They suggest that the relationship between educational attainment and obesity remains strong even after accounting for age and gender.

Smoking

On average, smoking rates have decreased by about one-fifth over the past ten years, with a higher decline amongst men than women (OECD, 2011). However, smoking is still responsible for about 10% of adult deaths worldwide and is the leading cause of circulatory disease and cancer (OECD, 2011). In all OECD countries except Sweden, more men than women smoke. This gender gap is particularly large in China, Indonesia, Japan, Korea, the Russian Federation and Turkey. Those from socio-economically disadvantaged backgrounds report a higher incidence and greater intensity of smoking.

Across the 23 OECD countries covered in this indicator, 30% of adults smoke daily (Table A8.2). The incidence of daily smoking is particularly high among those with below upper secondary education (37%) and low among those with tertiary education (21%). This education gradient is particularly high among men, with a 20 percentage-point difference in the incidence of daily smoking. The education gradient among women is only 13 percentage points (Table A8.2).

Certain Central European countries, namely the Czech Republic, Estonia, Hungary and Poland, the predominantly English-speaking countries; i.e. Australia, Canada, New Zealand, and the United States, as well as Norway, show particularly high education gradients. In all these countries, adults with at least a tertiary education are half as likely to be currently smoking compared to those with only a below upper secondary education (Table A8.2).

The relationship between education and daily smoking is not generally driven by individual differences in gender and age. Regression-based estimates, which take into account such differences, suggest that the relationship between educational attainment and daily smoking generally remains strong even after accounting for age and gender (Table A8.4).

Income effects of education

Education may have a direct impact on health behaviours and outcomes in that through education, individuals can learn to choose healthier lifestyles and avoid behaviours that are detrimental to health. Education may also indirectly affect health since those with higher levels of education are more likely to earn more and be able to afford better health care and lifestyles. To consider these indirect effects, Tables A8.3 and A8.4 present regression-based estimates that take into account the income effects. The results show that the impact of education remains strong even after controlling for income effects. This suggests that education may have an impact on health by improving skills and habits, although other factors related to the choice of education or the impact of certain qualifications on life choices may also be at play.

Definitions

This section describes the educational attainment and health related variables. See Annex 3 (*www.oecd.org/edu/eag.htm*) for detailed descriptions of the variables, including the actual questions used in each survey.

Educational attainment variables in each data source are converted to three categories of educational attainment (below upper secondary education, upper secondary education, and tertiary education) based on the ISCED-97 classification system. Levels of education: below upper secondary corresponds to ISCED levels 0,1,2 and 3C short programmes; upper secondary or post-secondary non-tertiary correspond to ISCED levels 3A, 3B, 3C long programmes, and 4; and tertiary corresponds to ISCED levels 5A, 5B and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

Obesity and overweight are defined as excessive weight presenting health risks because of the high proportion of body fat. The most frequently used measure is based on the body mass index (BMI), which is a single number that evaluates an individual's weight in relation to height (weight/height^2, with weight in kilograms and height in metres). Based on the WHO classification, adults with a BMI from 25 to 30 are defined as overweight, and those with a BMI of 30 or over as obese. This classification may not be suitable for all ethnic groups, many of which have equivalent levels of risk at lower or higher BMI. The thresholds for adults are not suitable to measure overweight and obesity among children (OECD, 2011).

Smoking daily means a person currently smokes or otherwise uses tobacco on a daily basis. International comparability is limited due to the lack of standardisation in measuring smoking habits in health interview surveys across OECD countries. Some Nordic countries have significant numbers of users of *snus* (Low-nitrosamine smokeless tobacco). The literature estimates that *snus* reduces health risks to users by 90% compared to cigarette smokers. Due to partial substitutability (that some cigarette users quit and use *snus* instead), the overall public health effect of *snus* is positive (SCENIHR, 2008). Users of *snus* in Norway and Sweden who are not also smokers are therefore not included in this indicator.

Methodology

Given the potentially significant cross-country differences in the standards in measuring obesity and smoking, these indicators should be interpreted with caution (see Annex 3 for details). The main focus should be on *within-country* differences in health behaviours and outcomes across levels of educational attainment, rather than *cross-country* comparisons.

The indicators presented here are based on developmental work jointly conducted by the INES Network on Labour Market, Economic and Social Outcomes of Learning (LSO) and the OECD Centre for Educational Research and Innovation (CERI). The conceptual framework for the indicators was developed by CERI's Social Outcomes of Learning project (OECD, 2007; OECD, 2010), and the empirical strategies were developed by the INES LSO Network. See Annex 3 at *www.oecd.org/edu/eag.htm* for details on the calculation of the indicators.

This year's edition of *Education at a Glance* presents new indicators calculated mainly using microdata from the European Health Interview Survey (Eurostat), which provides a unified and relatively comparable source of data across European countries. To calculate indicators from outside of European countries, various surveys were used, namely: the Australian Institute of Health and Welfare's National Drug Strategy Household Survey, 2010, of the Australian Data Archive; the Canadian Community Health Survey, 2010; Chile's National Health Survey (Encuesta Nacional de Salud, ENS), 2009-10; Health Survey for England, 2010; the Questioner Survey, Health and Wellbeing of Icelanders in 2007; the Irish Survey of Lifestyle and Attitudes to Nutrition, 2007; Israel's Social Survey (Year 2010); the Dutch Health Interview Survey (part of Permenent Survey on Living Conditions), 2008; New Zealand Health Survey, 2011/12; the Norwegian Health Survey, 2008; Statistics Sweden's, Living Conditions Surveys (2011); and the United States' National Health Interview Survey, 2011. Note that data from all the countries are based on self-reported survey data, which may not necessarily capture true prevalence of obesity and smoking.

Surveys were selected on the basis of the following factors:

Age restriction: Data on adults aged 25 to 64 were used.

Comparability of educational attainment variables: The general principle is to use microdata for which the distribution of educational attainment was within 10 percentage points of figures published for comparable years in *Education at a Glance*.

Comparability of health variables: Surveys are selected on the basis of the comparability of variables that allow identification of obesity and daily smoking.

Country coverage: An important objective is to select surveys that represent a large number of OECD countries. This was the reason for the selection of the European Health Interview Survey, which covers a large number of European Union member countries and other countries for the adult population.

Sample size: Surveys with a minimum sample of approximately 1 000 observations per country were used to obtain reliable estimates. Most surveys in this area have relatively large sample sizes.

To calculate incremental percentage-point differences, country-specific regression models were estimated to predict each dichotomous outcome variable (e.g. high versus low level of obesity) from individuals' educational attainment level, with and without control variables for age, gender and family income. In preliminary analyses, both probit and ordinary least squares (OLS) regressions were used, and were found to produce

similar estimates of incremental differences. Because OLS regression provides more readily interpretable coefficients, OLS was used for the final analysis to generate incremental differences (Tables A8.3 and A8.4).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator A8 Tables

Table A8.1	**Proportion of obese adults, by level of educational attainment and gender (2011)**	StatLink http://dx.doi.org/10.1787/888932849274
Table A8.2	**Proportion of adults who smoke, by level of educational attainment and gender (2011)**	StatLink http://dx.doi.org/10.1787/888932849293
Table A8.3	**Percentage-point differences in the "likelihood of being obese" associated with an increase in the level of educational attainment (2011)**	StatLink http://dx.doi.org/10.1787/888932849312
Table A8.4	**Percentage-point differences in the "likelihood of smoking" associated with an increase in the level of educational attainment (2011)**	StatLink http://dx.doi.org/10.1787/888932849331

A8

Table A8.1. Proportion of obese adults, by level of educational attainment and gender (2011)

Percentage of 25-64 year-olds

		Year	Men			Women			Men + Women			
			Below upper secondary education	Upper secondary education	Tertiary education	Below upper secondary education	Upper secondary education	Tertiary education	Below upper secondary education	Upper secondary education	Tertiary education	All levels of education
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	2010	29.2	25.5	16.7	27.4	21.3	14.8	28.1	23.7	15.7	21.6
	Austria	2006	13.8	13.4	12.3	23.5	10.8	7.4	20.2	12.2	10.1	13.1
	Belgium	2008	20.3	16.2	10.0	22.5	14.8	7.2	21.4	15.5	8.6	14.5
	Canada	2010	25.1	24.0	19.5	28.0	20.9	14.1	26.4	22.7	16.6	19.7
	Chile	2009-10	21.4	24.3	17.2	49.9	32.1	21.7	36.6	28.2	19.4	28.7
	Czech Republic	2008	21.4	22.3	10.8	26.9	16.5	14.3	25.0	19.5	12.4	19.0
	Denmark		m	m	m	m	m	m	m	m	m	m
	England	2010	33.6	32.4	24.8	36.1	29.5	20.5	34.9	30.9	22.8	28.3
	Estonia	2006	19.1	17.7	21.2	32.9	19.8	11.5	24.8	18.8	15.0	19.3
	Finland		m	m	m	m	m	m	m	m	m	m
	France	2008	16.0	11.9	6.8	20.0	13.0	5.9	18.2	12.4	6.3	12.2
	Germany		m	m	m	m	m	m	m	m	m	m
	Greece	2009	20.3	21.2	14.2	23.8	15.0	9.1	22.2	18.0	11.9	17.7
	Hungary	2009	23.7	23.0	16.2	30.3	18.0	13.7	27.7	20.7	14.7	20.5
	Iceland	2007	20.5	20.9	19.0	25.0	24.0	17.0	22.9	22.2	17.9	20.9
	Ireland	2007	22.6	18.4	13.8	20.0	13.7	12.1	21.2	15.5	12.8	16.7
	Israel	2010	24.2	15.2	13.7	26.1	16.9	14.0	25.0	16.1	13.9	16.4
	Italy		m	m	m	m	m	m	m	m	m	m
	Japan		m	m	m	m	m	m	m	m	m	m
	Korea		m	m	m	m	m	m	m	m	m	m
	Luxembourg		m	m	m	m	m	m	m	m	m	m
	Mexico		m	m	m	m	m	m	m	m	m	m
	Netherlands	2008	14.6	10.0	7.1	17.1	11.6	7.6	15.9	10.8	7.4	11.6
	New Zealand	2011	36.1	32.9	24.4	39.2	33.5	22.7	37.7	33.1	23.5	30.0
	Norway	2008	18.4	14.4	8.0	11.5	11.9	7.1	15.0	13.3	7.5	11.6
	Poland	2009	19.3	19.9	15.4	29.8	16.4	6.8	25.1	18.1	10.2	17.2
	Portugal		m	m	m	m	m	m	m	m	m	m
	Slovak Republic	2009	16.5	17.0	10.5	39.1	15.4	8.1	30.7	16.2	9.2	15.3
	Slovenia	2007	22.3	21.3	7.8	33.3	14.2	7.7	28.2	18.3	7.7	21.7
	Spain	2009	22.0	14.1	13.8	19.4	9.3	5.7	20.8	11.7	9.7	15.3
	Sweden	2011	17.0	12.8	10.9	15.0	13.5	8.5	16.2	13.2	9.7	12.1
	Switzerland		m	m	m	m	m	m	m	m	m	m
	Turkey	2008	15.3	15.0	12.2	27.4	9.5	7.2	21.4	12.9	10.4	18.9
	United States	2011	33.4	35.9	26.1	37.1	35.2	23.4	35.1	35.5	24.7	30.6
	OECD average		21.9	20.0	14.7	27.6	18.2	12.0	25.0	19.1	13.2	18.9
	EU21 average		20.2	18.1	13.0	26.0	15.4	9.7	23.5	16.8	11.2	17.0
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m
	Brazil		m	m	m	m	m	m	m	m	m	m
	China		m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m

Note: Obese adults are defined as those whose Body Mass Index (BMI) is greater or equal to 30 (see Annex 3 for survey questions used).

Sources: European Health Interview Survey (EHIS) for Austria, Belgium, the Czech Republic, Estonia, France, Greece, Hungary, Poland, the Slovak Republic, Slovenia, Spain and Turkey. National Drug Strategy Household Survey, for Australia. Canadian Community Health Survey for Canada. National Health Survey for Chile. Health Survey for England. Questionersurvey, Health and Wellbeing of Icelanders for Iceland. Survey of Lifestyle and Attitudes to Nutrition for Ireland. Social Survey for Israel. Health Interview Survey for the Netherlands. New Zealand Health Survey for New Zealand. Norwegian Health Survey for Norway. Living Conditions Surveys for Sweden. National Health Interview Survey for the United States. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849274

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Table A8.2. Proportion of adults who smoke, by level of educational attainment and gender (2011)

Percentage of 25-64 year-olds

		Year	Men			Women			Men + Women			
			Below upper secondary education	Upper secondary education	Tertiary education	Below upper secondary education	Upper secondary education	Tertiary education	Below upper secondary education	Upper secondary education	Tertiary education	All education
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	2010	31.9	26.9	13.8	27.9	21.0	11.4	29.5	24.5	12.6	21.0
	Austria	2006	39.9	34.3	20.6	26.6	24.7	16.1	31.1	29.7	18.6	27.0
	Belgium	2008	41.7	39.3	18.5	32.2	27.1	18.2	36.8	33.2	18.4	28.6
	Canada	2010	48.5	33.1	19.0	32.2	27.1	14.6	41.0	30.4	16.5	23.8
	Chile	2009-10	36.7	47.9	56.8	30.1	41.6	47.4	33.2	44.8	52.1	43.0
	Czech Republic	2008	61.8	43.1	32.1	39.3	32.5	16.5	47.5	37.9	24.8	36.9
	Denmark		m	m	m	m	m	m	m	m	m	m
	England	2010	37.2	27.1	18.3	31.2	21.9	10.7	34.0	24.2	14.7	22.1
	Estonia	2006	58.3	48.2	30.8	29.9	22.1	11.4	46.2	34.1	18.3	34.1
	Finland		m	m	m	m	m	m	m	m	m	
	France	2008	32.5	35.2	31.0	29.2	28.1	24.4	30.7	31.7	27.2	30.1
	Germany		m	m	m	m	m	m	m	m	m	m
	Greece	2009	58.3	56.7	40.7	34.9	44.0	37.9	45.9	50.2	39.5	45.8
	Hungary	2009	59.0	41.0	22.7	43.3	33.9	18.5	49.5	37.8	20.2	35.7
	Iceland	2007	37.5	22.9	18.2	35.5	26.3	17.5	36.4	24.3	17.8	25.5
	Ireland	2007	36.2	34.3	24.4	39.5	27.3	21.9	38.1	30.3	22.9	30.5
	Israel	2010	42.9	41.2	27.2	18.7	28.5	15.4	32.3	34.9	20.8	27.3
	Italy		m	m	m	m	m	m	m	m	m	m
	Japan		m	m	m	m	m	m	m	m	m	m
	Korea		m	m	m	m	m	m	m	m	m	m
	Luxembourg		m	m	m	m	m	m	m	m	m	m
	Mexico		m	m	m	m	m	m	m	m	m	m
	Netherlands	2008	44.0	35.7	24.7	36.6	28.5	17.8	40.1	32.2	21.5	31.8
	New Zealand	2011	37.2	24.1	12.8	36.2	21.8	10.9	36.6	23.1	11.7	21.2
	Norway	2008	49.7	35.7	23.8	47.1	30.1	19.7	48.4	33.2	21.6	32.3
	Poland	2009	56.5	45.0	26.1	32.5	31.7	21.0	43.3	38.2	23.0	35.5
	Portugal		m	m	m	m	m	m	m	m	m	
	Slovak Republic	2009	56.2	44.1	26.8	26.2	25.2	17.8	37.3	34.9	22.1	32.2
	Slovenia	2007	37.8	34.0	18.2	24.8	29.5	28.0	30.8	32.0	23.9	30.5
	Spain	2009	46.7	41.9	27.1	28.9	34.3	27.0	38.0	38.2	27.0	34.8
	Sweden	2011	22.0	18.3	6.8	25.2	19.7	7.6	23.3	19.0	7.2	14.7
	Switzerland		m	m	m	m	m	m	m	m	m	m
	Turkey		m	m	m	m	m	m	m	m	m	m
	United States	2011	36.5	32.3	12.7	27.8	25.6	11.3	32.4	29.0	11.9	21.7
	OECD average		43.9	36.6	24.0	32.0	28.4	19.3	37.5	32.5	21.5	29.8
	EU21 average		45.9	38.5	24.6	32.0	28.7	19.7	38.2	33.6	21.9	31.4
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m
	Brazil		m	m	m	m	m	m	m	m	m	m
	China		m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m

Note: Adults who smoke are defined as those who currently smoke or otherwise use tobacco products (see Annex 3 for survey questions used).

Sources: European Health Interview Survey (EHIS) for Austria, Belgium, the Czech Republic, Estonia, France, Greece, Hungary, Poland, the Slovak Republic, Slovenia and Spain. National Drug Strategy Household Survey, for Australia. Canadian Community Health Survey for Canada. National Health Survey for Chile. Health Survey for England. Questionersurvey, Health and Wellbeing of Icelanders for Iceland. Survey of Lifestyle and Attitudes to Nutrition for Ireland. Social Survey for Israel. Health Interview Survey for the Netherlands. New Zealand Health Survey for New Zealand. Norwegian Health Survey for Norway. Living Conditions Surveys for Sweden. National Health Interview Survey for the United States. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849293

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Table A8.3. Percentage-point differences in the "likelihood of being obese" associated with an increase in the level of educational attainment (2011)

Percentage of 25-64 year-olds, by level of educational attainment

		Year	Proportion of obese adults among those who have attained upper secondary education	Difference in outcome from below upper secondary to upper secondary			Difference in outcome from upper secondary to tertiary		
				No adjustments	Adjustments age, gender	Adjustments age, gender, income	No adjustments	Adjustments age, gender	Adjustments age, gender, income
			(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD	Australia	2010	23.7	-4.4	-3.1	-2.9	-8.0	-7.5	-7.4
	Austria	2006	12.2	-8.0	-6.6	-6.4	-2.1	-2.2	-1.6
	Belgium	2008	15.5	-5.9	-4.0	-3.9	-6.9	-6.7	-6.5
	Canada	2010	22.7	-3.7	-3.4	-3.3	-6.1	-5.3	-5.4
	Chile	2009-10	28.2	8.5	5.0	5.5	-8.7	-7.1	-6.5
	Czech Republic	2008	19.5	-5.5	-3.5	-2.3	-7.1	-5.4	-4.4
	Denmark		m	m	m	m	m	m	m
	England	2010	30.9	-4.0	-2.1	-1.1	-8.1	-7.7	-6.3
	Estonia	2006	18.8	-6.0	-5.1	-5.6	-3.8	-1.8	-1.7
	Finland		m	m	m	m	m	m	m
	France	2008	12.4	-5.8	-4.7	-4.7	-6.1	-5.6	-5.6
	Germany		m	m	m	m	m	m	m
	Greece	2009	18.0	-4.2	0.0	-0.1	-6.1	-6.9	-6.9
	Hungary	2009	20.7	-7.0	-5.7	-6.0	-6.0	-4.2	-3.2
	Iceland	2007	22.2	-0.7	-0.2	-0.1	-4.3	-4.2	-2.9
	Ireland	2007	15.5	-5.7	-4.6	-4.4	-2.8	-2.2	-2.2
	Israel	2010	16.1	-9.0	-5.9	-6.0	-2.2	-4.0	-3.9
	Italy		m	m	m	m	m	m	m
	Japan		m	m	m	m	m	m	m
	Korea		m	m	m	m	m	m	m
	Luxembourg		m	m	m	m	m	m	m
	Mexico		m	m	m	m	m	m	m
	Netherlands	2008	10.8	m	m	m	m	m	m
	New Zealand	2011	33.1	m	m	m	m	m	m
	Norway	2008	13.3	-1.7	-1.7	-1.2	-5.8	-5.6	-5.2
	Poland	2009	18.1	-7.0	-3.7	-4.1	-7.9	-4.8	-5.3
	Portugal		m	m	m	m	m	m	m
	Slovak Republic	2009	16.2	-14.5	-10.1	-9.7	-7.0	-5.1	-5.1
	Slovenia	2007	18.3	-9.9	-7.1	-6.2	-10.6	-9.2	-6.9
	Spain	2009	11.7	-9.0	-7.7	-7.0	-2.0	-1.5	-0.4
	Sweden	2011	13.2	m	m	m	m	m	m
	Switzerland		m	m	m	m	m	m	m
	Turkey	2008	12.9	-8.5	-4.1	-4.8	-2.4	-2.9	-3.6
	United States	2011	35.5	0.4	0.4	2.2	-10.8	-10.7	-8.3
	OECD average		19.1	-5.3	-3.7	-3.4	-5.9	-5.3	-4.7
	EU21 average		16.8	-7.1	-5.0	-4.7	-5.9	-4.9	-4.3
Other G20	Argentina		m	m	m	m	m	m	m
	Brazil		m	m	m	m	m	m	m
	China		m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m

Notes: Obese adults are defined as those whose Body Mass Index (BMI) is greater or equal to 30 (see Annex 3 for survey questions used). Except for the first column, calculations are based on ordinary least-squares regressions among adults aged 25-64. Cells highlighted in grey are statistically significant and different from zero at the 5% level. Non-linear models (probit models) produce similar results.

Source: European Health Interview Survey (EHIS) for Austria, Belgium, the Czech Republic, Estonia, France, Greece, Hungary, Poland, the Slovak Republic, Slovenia, Spain and Turkey. National Drug Strategy Household Survey, for Australia. Canadian Community Health Survey for Canada. National Health Survey for Chile. Health Survey for England. Questionersurvey, Health and Wellbeing of Icelanders for Iceland. Survey of Lifestyle and Attitudes to Nutrition for Ireland. Social Survey for Israel. Health Interview Survey for the Netherlands. New Zealand Health Survey for New Zealand. Norwegian Health Survey for Norway. Living Conditions Surveys for Sweden. National Health Interview Survey for the United States. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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A8

Table A8.4. Percentage-point differences in the "likelihood of smoking" associated with an increase in the level of educational attainment (2011)

Percentage of 25-64 year-olds, by level of educational attainment

		Year	Proportion of adults who smoke among those who have attained upper secondary education	Difference in outcome from below upper secondary to upper secondary			Difference in outcome from upper secondary to tertiary		
				No adjustments	Adjustments age, gender	Adjustments age, gender, income	No adjustments	Adjustments age, gender	Adjustments age, gender, income
			(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD	Australia	2010	24.5	-5.0	-7.6	-6.0	-11.9	-11.7	-10.2
	Austria	2006	29.7	-1.4	-4.5	-3.6	-11.1	-11.4	-10.3
	Belgium	2008	33.2	-3.6	-6.0	-4.7	-14.8	-14.9	-12.0
	Canada	2010	30.4	-11.6	-12.4	-9.8	-13.6	-13.4	-11.4
	Chile	2009-10	44.8	11.6	7.3	7.7	7.4	5.0	3.6
	Czech Republic	2008	37.9	-9.5	-13.0	-11.4	-13.1	-14.3	-11.6
	Denmark		m	m	m	m	m	m	m
	England	2010	24.2	-9.8	-12.5	-8.7	-9.5	-10.6	-7.3
	Estonia	2006	34.1	-12.1	-11.1	-9.9	-15.8	-13.7	-12.8
	Finland		m	m	m	m	m	m	m
	France	2008	31.7	1.0	-2.4	-2.4	-4.5	-6.0	-6.0
	Germany		m	m	m	m	m	m	m
	Greece	2009	50.2	4.2	0.7	-0.5	-10.7	-11.3	-11.4
	Hungary	2009	37.8	-11.8	-13.9	-11.5	-17.5	-17.1	-13.5
	Iceland	2007	24.3	-12.1	-12.9	-11.7	-6.5	-7.6	-6.1
	Ireland	2007	30.3	-8.1	-11.4	-8.6	-7.0	-8.4	-6.9
	Israel	2010	34.9	2.6	2.6	3.7	-14.1	-13.2	-11.8
	Italy		m	m	m	m	m	m	m
	Japan		m	m	m	m	m	m	m
	Korea		m	m	m	m	m	m	m
	Luxembourg		m	m	m	m	m	m	m
	Mexico		m	m	m	m	m	m	m
	Netherlands	2008	32.2	m	m	m	m	m	m
	New Zealand	2011	23.1	m	m	m	m	m	m
	Norway	2008	33.2	-15.2	-15.3	-12.6	-11.6	-11.9	-10.3
	Poland	2009	38.2	-5.1	-7.2	-5.6	-15.1	-13.9	-12.5
	Portugal		m	m	m	m	m	m	m
	Slovak Republic	2009	34.9	-2.43	-6.79	-5.44	-12.8	-12.8	-12.0
	Slovenia	2007	32.0	-1.2	-1.9	-9.1	-8.1	-0.1	-7.5
	Spain	2009	38.2	0.2	-2.6	-1.8	-11.1	-11.5	-10.7
	Sweden	2011	19.0	m	m	m	m	m	m
	Switzerland		m	m	m	m	m	m	m
	Turkey		m	m	m	m	m	m	m
	United States	2011	29.0	-3.4	-3.3	-0.3	-17.1	-17.1	-13.2
	OECD average		32.5	-4.6	-6.7	-5.6	-10.9	-10.8	-9.7
	EU21 average		33.6	-4.6	-7.1	-6.4	-11.6	-11.2	-10.4
Other G20	Argentina		m	m	m	m	m	m	m
	Brazil		m	m	m	m	m	m	m
	China		m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m

Notes: Adults who smoke are defined as those who currently smoke or otherwise use tobacco products (see Annex 3 for survey questions used). Except for the first column, calculations are based on ordinary least-squares regressions among adults aged 25-64. Cells highlighted in grey are statistically significant and different from zero at the 5% level. Non-linear models (probit models) produce similar results.

Source: European Health Interview Survey (EHIS) for Austria, Belgium, the Czech Republic, Estonia, France, Greece, Hungary, Poland, the Slovak Republic, Slovenia and Spain. National Drug Strategy Household Survey, for Australia. Canadian Community Health Survey for Canada. National Health Survey for Chile. Health Survey for England. Questionersurvey, Health and Wellbeing of Icelanders for Iceland. Survey of Lifestyle and Attitudes to Nutrition for Ireland. Social Survey for Israel. Health Interview Survey for the Netherlands. New Zealand Health Survey for New Zealand. Norwegian Health Survey for Norway. Living Conditions Surveys for Sweden. National Health Interview Survey for the United States. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Chapter

B

Financial and Human Resources Invested In Education



Indicator B1 How much is spent per student?
StatLink http://dx.doi.org/10.1787/888932849350

Indicator B2 What proportion of national wealth is spent on education?
StatLink http://dx.doi.org/10.1787/888932849559

Indicator B3 How much public and private investment in education is there?
StatLink http://dx.doi.org/10.1787/888932849673

Indicator B4 What is the total public spending on education?
StatLink http://dx.doi.org/10.1787/888932849787

Indicator B5 How much do tertiary students pay and what public support do they receive?
StatLink http://dx.doi.org/10.1787/888932849901

WEB **Indicator B6** On what resources and services is education funding spent?
StatLink http://dx.doi.org/10.1787/888932850015

Indicator B7 Which factors influence the level of expenditure?
StatLink http://dx.doi.org/10.1787/888932850072

Classification of educational expenditure

Educational expenditure in this chapter is classified through three dimensions:

- The first dimension – represented by the horizontal axis in the diagram below – relates to the location where spending occurs. Spending on schools and universities, education ministries and other agencies directly involved in providing and supporting education is one component of this dimension. Spending on education outside these institutions is another.
- The second dimension – represented by the vertical axis in the diagram below – classifies the goods and services that are purchased. Not all expenditure on educational institutions can be classified as direct educational or instructional expenditure. Educational institutions in many OECD countries offer various ancillary services – such as meals, transport, housing, etc. – in addition to teaching services to support students and their families. At the tertiary level, spending on research and development can be significant. Not all spending on educational goods and services occurs within educational institutions. For example, families may purchase textbooks and materials themselves or seek private tutoring for their children.
- The third dimension – represented by the colours in the diagram below – distinguishes among the sources from which funding originates. These include the public sector and international agencies (indicated by light blue), and households and other private entities (indicated by medium-blue). Where private expenditure on education is subsidised by public funds, this is indicated by cells in the grey colour.

Public sources of funds | Private sources of funds | Private funds publicly subsidised

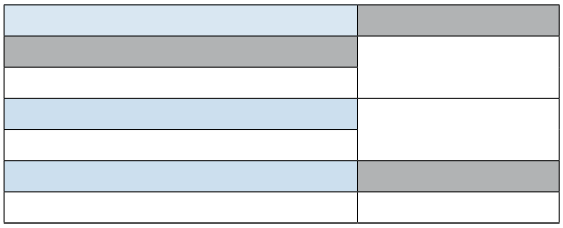
	Spending on educational institutions (e.g. schools, universities, educational administration and student welfare services)	**Spending on education outside educational institutions** (e.g. private purchases of educational goods and services, including private tutoring)
Spending on core educational services	e.g. public spending on instructional services in educational institutions	e.g. subsidised private spending on books
	e.g. subsidised private spending on instructional services in educational institutions	e.g. private spending on books and other school materials or private tutoring
	e.g. private spending on tuition fees	
Spending on research and development	e.g. public spending on university research	
	e.g. funds from private industry for research and development in educational institutions	
Spending on educational services other than instruction	e.g. public spending on ancillary services such as meals, transport to schools, or housing on the campus	e.g. subsidised private spending on student living costs or reduced prices for transport
	e.g. private spending on fees for ancillary services	e.g. private spending on student living costs or transport

Coverage diagrams

For Indicators B1, B2, B3 and B6



For Indicators B4 and B5

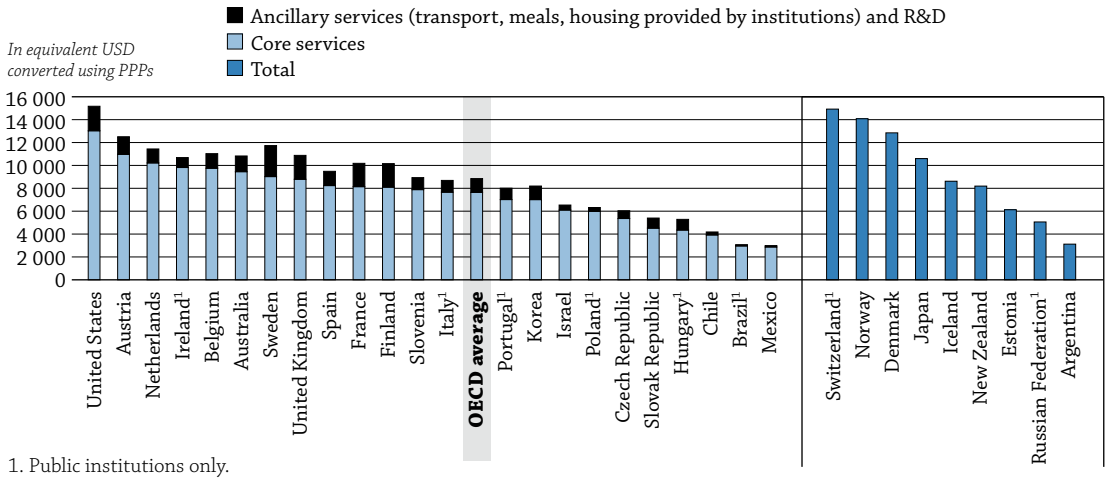


HOW MUCH IS SPENT PER STUDENT?

- On average, OECD countries spend USD 9 313 per student per year from primary through tertiary education: USD 7 974 per primary student, USD 9 014 per secondary student, and USD 13 528 per tertiary student.
- In primary and secondary education, 94% of total expenditure per student is devoted to core educational services. Greater differences are seen at the tertiary level, partly because expenditure on R&D represents an average of 31% of total expenditure per student
- From 2005 to 2010, expenditure per student in primary, secondary and post-secondary non-tertiary educational institutions increased by 17 percentage points on average across OECD countries; but between 2009 and 2010, investment in education fell in around one-third of OECD countries as a result of the economic crisis.

Chart B1.1. Annual expenditure per student by educational institutions, by type of service (2010)

In equivalent USD converted using PPPs, based on full-time equivalents, for primary through tertiary education



1. Public institutions only.

Countries are ranked in descending order of expenditure per student by educational institutions for core services.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators programme). Table B1.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846747

How to read this chart

The amount of expenditure per student by educational institutions provides a measure of the unit costs of formal education. This chart shows annual expenditure (from public and private sources) per student by educational institutions in equivalent USD converted using purchasing power parities (PPPs), based on the number of full-time equivalent students. It distinguishes expenditure by type of services: core educational services, ancillary services, and research and development. Expenditure on core educational services includes all expenditure that is directly related to instruction in educational institutions. This covers all expenditure on teachers, school buildings, teaching materials, books, and the administration of schools.

Context

The demand for high-quality education, which can translate into higher costs per student, must be balanced against other demands on public expenditure and the overall tax burden. Policy makers must also balance the importance of improving the quality of education services with the desirability of expanding access to education opportunities, notably at the tertiary level. A comparative review of trends in expenditure per student by educational institutions shows that in many OECD countries, expenditure has not kept up with expanding enrolments. In addition, some OECD countries emphasise broad access to higher education, while others invest in near-universal

education for children as young as three or four. Both the extent of investment in education and the number of students enrolled can be affected by financial crises. Consequently, the recent global economic crisis is likely to have resulted in changes in the level of expenditure per student. However, because the crisis began in late 2008, available data cannot show yet the full extent of this impact.

Expenditure per student by educational institutions is largely influenced by teachers' salaries (see Indicators B6 and D3), pension systems, instructional and teaching hours (see Indicator B7), the cost of teaching materials and facilities, the programme provided (e.g. general or vocational), and the number of students enrolled in the education system (see Indicator C1). Policies to attract new teachers or to reduce average class size or change staffing patterns (see Indicator D2) have also contributed to changes in expenditure per student by educational institutions over time. Ancillary and R&D services can also influence the level of expenditure per student.

Other findings

- Among the ten countries with the largest expenditure per student by secondary educational institutions, **high teachers' salaries and low student-teacher ratios are often the main factors explaining the level of expenditure**.
- **At the primary and secondary levels there is a strong positive relationship between spending per student by educational institutions and GDP per capita.** The relationship is weaker at the tertiary level, mainly because financing mechanisms and enrolment patterns differ more at this level.
- **Excluding activities peripheral to instruction (research and development and ancillary services such as welfare services to students), OECD countries annually spend USD 7 637 from primary through tertiary education**, on average. This lower figure in comparison with average total expenditure results mainly from the much lower expenditure per student at the tertiary level (USD 8 889) when peripheral activities are excluded.
- On average, **OECD countries spend nearly twice as much per student at the tertiary level than at the primary level**. However, R&D activities or ancillary services can account for a significant proportion of expenditure at the tertiary level. When these are excluded, expenditure per student on core educational services at the tertiary level is still, on average, 10% higher than at the primary, secondary and post-secondary non-tertiary levels.
- **The orientation of secondary school programmes influences the level of expenditure per student** in most countries. Among the 17 OECD countries with separate data on expenditure for general and vocational programmes at the upper secondary level, an average of USD 706 more was spent per student in a vocational programmes than in a general programme.

Trends

Expenditure per primary, secondary and post-secondary non-tertiary student by educational institutions increased in every country with available data, and by an average of more than 61% between 1995 and 2010, a period of relatively stable student enrolment in most countries.

Between 2005 and 2010, spending per tertiary student fell in 8 of the 31 countries with available data, as expenditure did not keep up with expanding enrolments. Austria, Iceland, Israel, the United Kingdom and the United States, which saw significant increases in student enrolment between 2005 and 2010, did not increase spending at the same pace as enrolment grew. As a result, expenditure per student decreased in these countries. This is also the case in New Zealand, the Russian Federation and Switzerland, where public expenditure per student (data on private expenditure are not available) decreased during this period.

Analysis

Expenditure per student by educational institutions

Spending per student from primary through tertiary education in 2010 ranged from USD 4 000 per student or less in Argentina, Brazil and Mexico, to more than USD 10 000 per student in Australia, Austria, Belgium, Denmark, Finland, France, Ireland, Japan, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom, and by over USD 15 000 in the United States. In 9 of 32 countries with available data, spending per student ranged from USD 10 000 to less than USD 12 000 per student from primary through tertiary education (Chart B1.1 and Table B1.1a).

Countries have different priorities for allocating their resources (see Indicator B7). For example, among the ten countries with the largest expenditure per student by educational institutions at the secondary level, Belgium, Denmark, Ireland, Luxembourg, the Netherlands, Switzerland and the United States have among the highest teachers' salaries after 10 years of experience at lower and upper secondary levels (see Indicator D3), and Austria, Belgium, Denmark and Norway have some of the lowest student-teacher ratios at that level (see Indicator D2).

Even if spending per student from primary through tertiary education is similar among some OECD countries, the ways in which resources are allocated to the different levels of education vary widely. Spending per student by educational institutions in a typical OECD country (as represented by the simple mean across all OECD countries) amounts to USD 7 974 at the primary level, USD 9 014 at the secondary level and USD 13 528 at the tertiary level (Table B1.1a and Chart B1.2). The mean for spending per tertiary student is affected by high expenditure – more than USD 20 000 – in a few OECD countries, notably Canada, Switzerland and the United States.

These averages mask a broad range of expenditure per student by educational institutions across countries, varying by a factor of 11 at the primary level and by a factor of 7 at the secondary level. At the primary level, expenditures range from USD 2 400 or less per student in Mexico and Turkey to USD 21 240 in Luxembourg. At the secondary level, expenditure ranges from USD 2 600 or less per student in Brazil and Turkey to USD 17 633 in Luxembourg (Table B1.1a and Chart B1.2).

These comparisons are based on purchasing power parities (PPPs) for GDP, not on market exchange rates. Therefore, they reflect the amount of a national currency required to produce the same basket of goods and services in a given country as produced by the United States in USD.

Expenditure per student on core education services

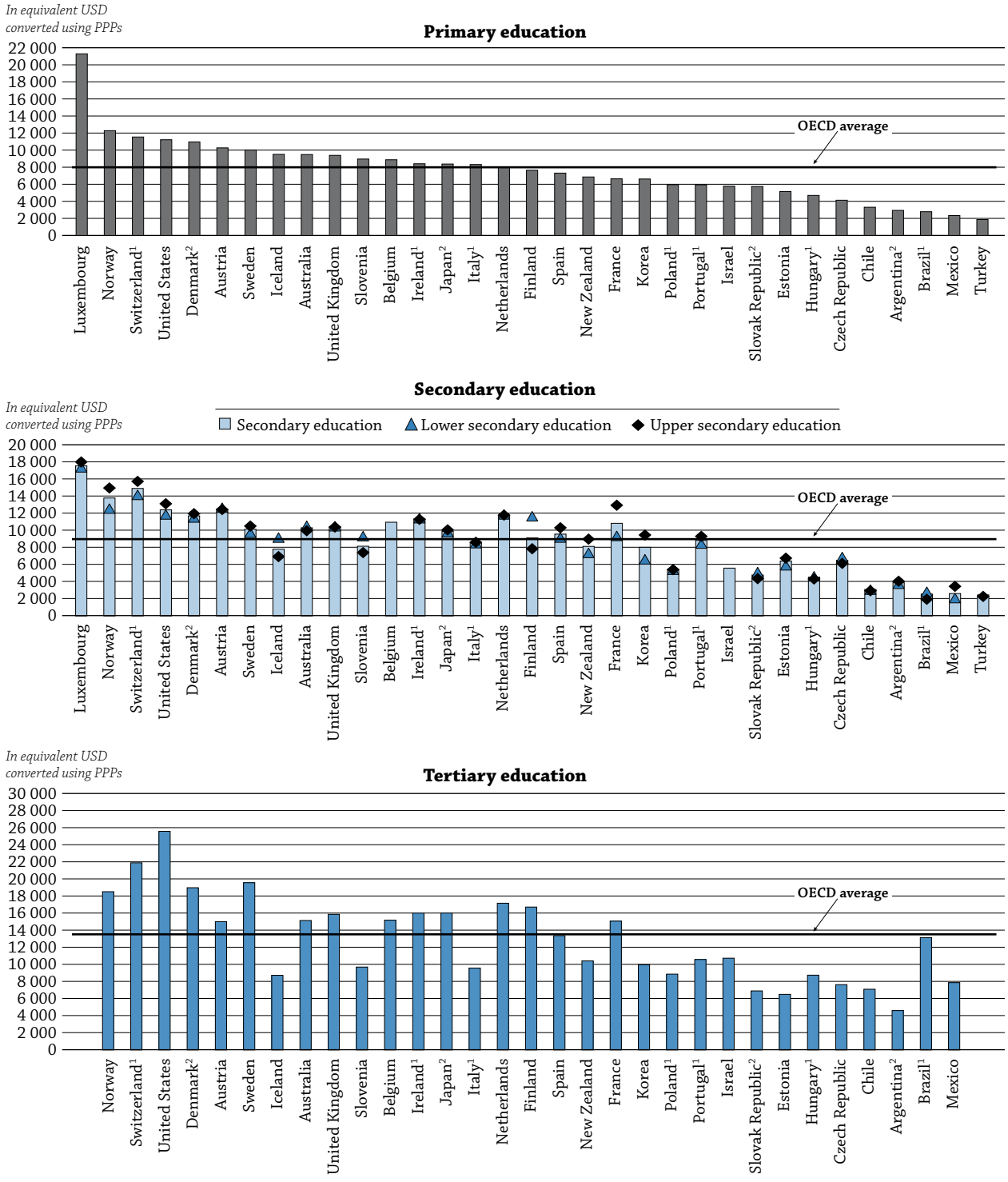
On average across OECD countries, expenditure on core education services represents 82% of total expenditure per student from primary through tertiary education, and exceeds 94% in Brazil, Mexico and Poland. In 4 of the 23 countries for which data are available – Finland, France, Sweden and the United Kingdom – core educational services account for less than 80% of total expenditure per student. Annual expenditure on R&D and ancillary services influence the ranking of countries for all services combined. However, this overall picture masks large variations among the levels of education (Table B1.2).

At the primary and secondary levels, expenditure is dominated by spending on core education services. On average, OECD countries for which data are available spend 94% of the total expenditure (or USD 8 001) per student by primary, secondary and post-secondary non-tertiary educational institutions on core educational services. In 9 of the 23 countries for which data are available, ancillary services provided by these institutions account for less than 5% of the total expenditure per student. The proportion of total expenditure per student devoted to ancillary services exceeds 10% in Finland, France, Hungary, Korea, the Slovak Republic, Sweden and the United Kingdom (Table B1.2).

Greater differences are seen at the tertiary level, partly because R&D expenditure can account for a significant proportion of spending on education. The OECD countries in which most R&D is performed in tertiary educational institutions (e.g. Portugal, Sweden and Switzerland) tend to report higher expenditure per student on educational institutions than those in which a large proportion of R&D is performed in other public institutions or in industry.

Chart B1.2. Annual expenditure per student by educational institutions for all services, by level of education (2010)

In equivalent USD converted using PPPs, based on full-time equivalents



1. Public institutions only (for Canada, in tertiary education only; for Italy, except in tertiary education).
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Countries are ranked in descending order of expenditure on educational institutions per student in primary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B1.1a.

See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Excluding R&D activities and ancillary services (peripheral services, such as student welfare services), expenditure on core education services in tertiary institutions is, on average, USD 8 889 per student. It ranges from USD 5 000 or less in Argentina, Estonia and the Slovak Republic to more than USD 10 000 in Austria, Brazil, Canada, Ireland, the Netherlands and Norway, and more than USD 19 000 in the United States (Table B1.2).

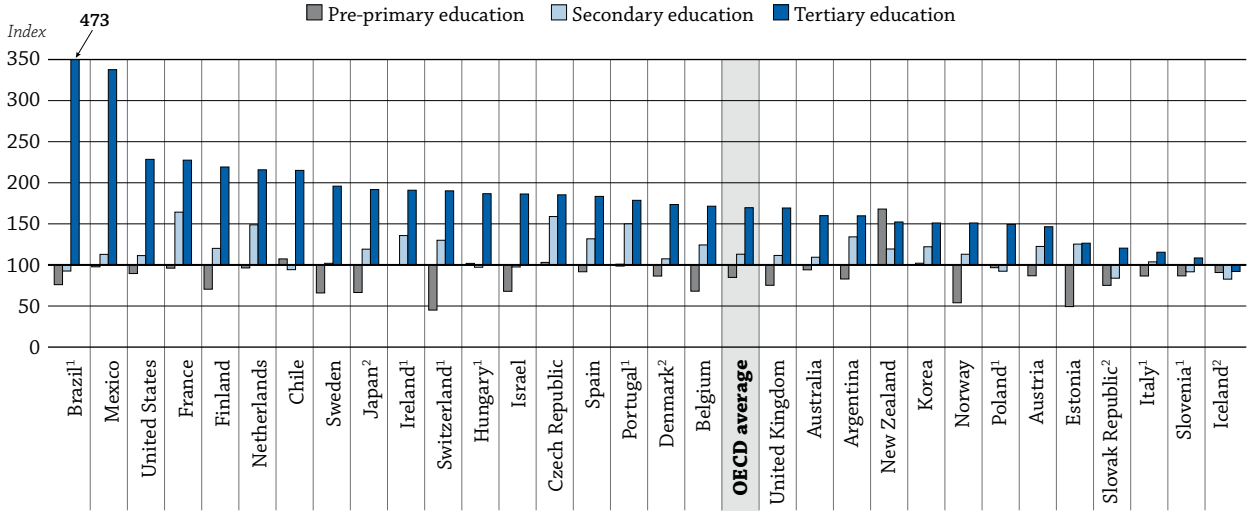
On average across OECD countries, expenditure on R&D and ancillary services at the tertiary level represents 31% and 4%, respectively, of all expenditure per student by tertiary institutions. In 6 of the 28 OECD countries for which data on R&D and ancillary services are available separately from total expenditure – Australia, Finland, Norway, Portugal, Sweden and Switzerland – expenditure on R&D and ancillary services represents at least 40 % of total tertiary expenditure per student by educational institutions. This can translate into significant amounts: in Canada, Finland, the Netherlands, Norway, Sweden and Switzerland, expenditure for R&D and ancillary services amounts to more than USD 6 000 per student (Table B1.2).

Expenditure per student by educational institutions at different levels of education

Expenditure per student by educational institutions rises with the level of education in almost all countries, but the size of the differentials varies markedly (Table B1.1a and Chart B1.3). Expenditure on secondary education is 1.1 times greater than expenditure on primary education, on average. This ratio exceeds 1.5 in the Czech Republic, France and Portugal largely because of the concurrent increase in the number of instructional hours for students and significant decrease in the number of teachers' teaching hours between primary and secondary education, as compared to the OECD average. In these countries, teachers' salaries are also lower in primary education compared to lower secondary education (see Indicators B7, D1 and D4).

Chart B1.3. Expenditure per student by educational institutions for all services, at various levels of education relative to primary education (2010)

Primary education = 100



Notes: A ratio of 300 for tertiary education means that expenditure per tertiary student by educational institutions is three times the expenditure per primary student by educational institutions.

A ratio of 50 for pre-primary education means that expenditure per pre-primary student by educational institutions is half the expenditure per primary student by educational institutions.

1. Public institutions only.

2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Countries are ranked in descending order of expenditure per student by educational institutions in tertiary education relative to primary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B1.1a.

See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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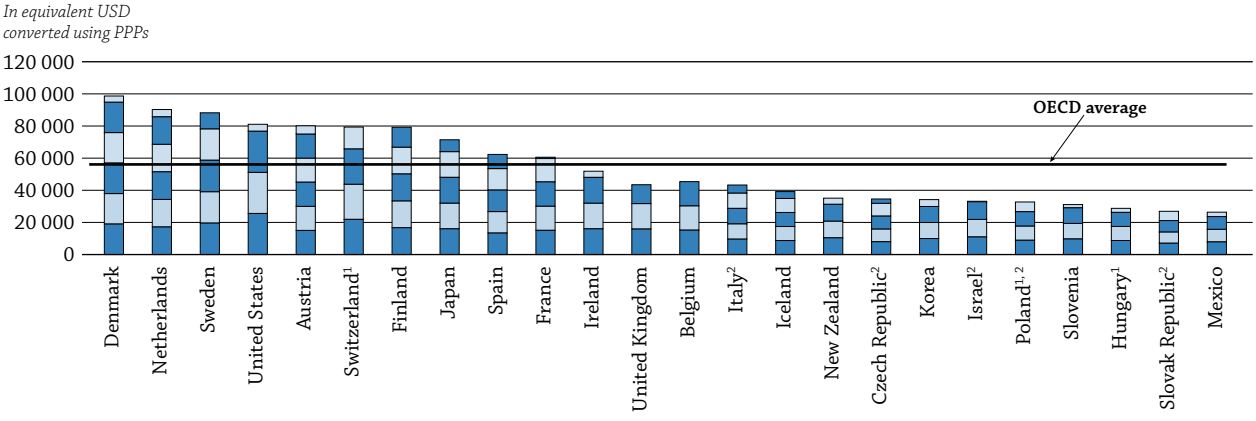
Educational institutions in OECD countries spend an average of 1.7 times more per tertiary student than per primary student, but spending patterns vary widely, mainly because education policies vary more at the tertiary level (see Indicator B5). For example, Austria, Estonia, Iceland, Italy, Poland, the Slovak Republic and Slovenia spend less than 1.5 times more on a tertiary student than on a primary student, but Brazil and Mexico spend about three times as much or even more (Table B1.1a and Chart B1.3).

Differences in expenditure per student between general and vocational programmes

In the 17 OECD countries for which data are available, USD 706 more is spent per upper secondary vocational student than per student in a general programme, on average. The countries with large enrolments in dual-system apprenticeship programmes at the upper secondary level (e.g. Austria, Finland, France, Hungary, Luxembourg, the Netherlands, and Switzerland) tend to be those with the largest differences between expenditure per general and vocational student, compared with the OECD average. For example, Finland spends USD 1 422 more per vocational than per general upper secondary student; Luxembourg spends USD 3 664 more; the Netherlands spends USD 2 628 more; New Zealand spends USD 1 559 more; and Switzerland spends USD 4 495 more. The Czech Republic (USD 1 182 more), France (USD 801 more) and the Slovak Republic (USD 1 234 more) also spend more per student in vocational programmes than they spend per student in general programmes, although the differences are smaller. Exceptions to this pattern are Austria, which has approximately the same level of expenditure per student regardless of the type of programmes, and Hungary, where expenditure per student enrolled in a general programme is slightly higher than expenditure per student in an apprenticeship programme. The underestimation of the expenditure made by private enterprises on dual vocational programmes can partly explain the small differences in Austria, France and Hungary (Box B3.1 in *Education at a Glance 2011*, Table B1.6, and Table C1.3 in Indicator C1).

Chart B1.4. Cumulative expenditure per student by educational institutions over the average duration of tertiary studies (2010)

Annual expenditure per student by educational institutions multiplied by the average duration of studies, in equivalent USD converted using PPPs



Note: Each segment of the bar represents the annual expenditure by educational institutions per student. The number of segments represents the average number of years a student remains in tertiary education.

1. Public institutions only.

2. Tertiary-type A and advanced research programmes only.

Countries are ranked in descending order of the total expenditure per student by educational institutions over the average duration of tertiary studies.

Source: OECD. Table B1.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Expenditure per student by educational institutions over the average duration of tertiary studies

Given that the duration and intensity of tertiary education vary from country to country, differences in annual expenditure on education services per student (Chart B1.2) do not necessarily reflect differences in the total cost of educating the typical tertiary student. For example, if the usual duration of tertiary studies is long,

comparatively low annual expenditure per student by educational institutions can result in comparatively high overall costs for tertiary education. Chart B1.4 shows the average expenditure per student throughout the course of tertiary studies. The figures account for all students for whom expenditure is incurred, including those who do not finish their studies. Although the calculations are based on a number of simplified assumptions, and therefore should be treated with caution (see Annex 3 at *www.oecd.org/edu/eag.htm*), there are some notable differences between annual and aggregate expenditure in the ranking of countries.

For example, annual spending per tertiary student in Japan is about the same as in Ireland, at USD 16 015 and USD 16 008, respectively (Table B1.1a). However, the average duration of tertiary studies is more than one year longer in Japan than in Ireland (4.5 and 3.2 years, respectively). As a consequence, the cumulative expenditure for each tertiary student is nearly USD 20 000 less in Ireland (USD 51 865) than in Japan (USD 71 441) (Chart B1.4 and Table B1.3a).

The total cost of tertiary-type A education in Switzerland (USD 127 904) is more than twice the amount reported by nearly two-thirds of countries, with the exception of Austria, Finland, France, Japan, the Netherlands, Spain and Sweden (Table B1.3a). These figures must be interpreted bearing in mind differences in national degree structures and possible differences in the qualifications students obtain after completing their studies. Tertiary-type B (shorter and vocationally oriented) programmes tend to be less expensive than tertiary-type A programmes, largely because of their shorter duration.

Expenditure per student by educational institutions relative to GDP per capita

Since access to education is universal (and usually compulsory) at the lower levels of schooling in most OECD countries, spending per student by educational institutions at those levels relative to GDP per capita can be interpreted as the resources spent on the school-age population relative to a country's ability to pay. At higher levels of education, this measure is more difficult to interpret because student enrolment levels vary sharply among countries. At the tertiary level, for example, OECD countries may rank relatively high on this measure if a large proportion of their wealth is spent on educating a relatively small number of students.

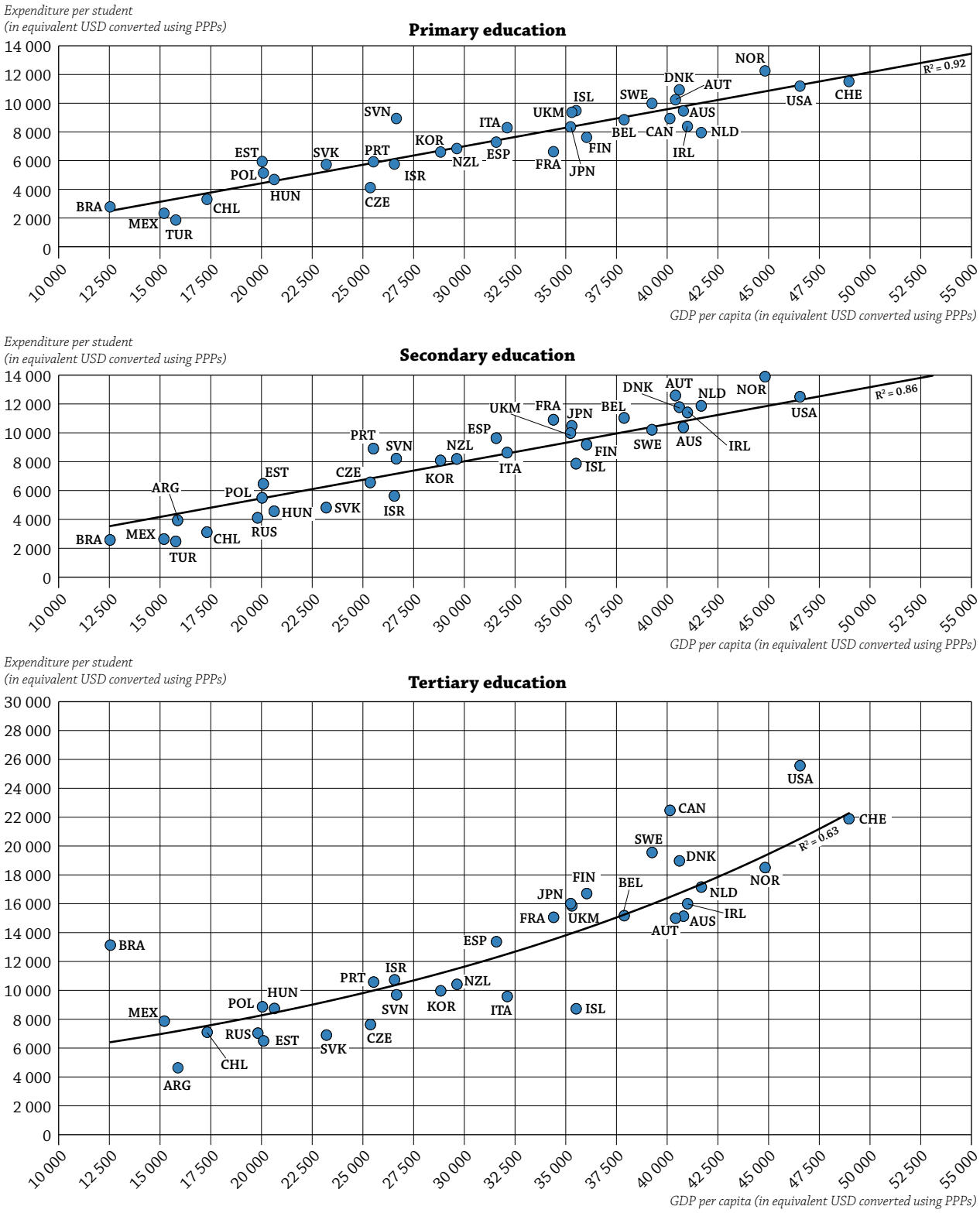
In OECD countries, expenditure per student by educational institutions averages 23% of GDP per capita at the primary level, 26% at the secondary level, and 41% at the tertiary level. Overall, from the primary to tertiary levels of education, expenditure per student averages 28% of the GDP per capita in OECD countries (Table B1.4). Countries with low levels of expenditure may nonetheless show distributions of investment relative to GDP per capita that are similar to those of countries with a high level of spending per student. For example, Korea and Portugal – countries with below-OECD-average expenditure per student by educational institutions at the secondary level and below-OECD-average GDP per capita – spend more per student relative to GDP per capita than the OECD average.

The relationship between GDP per capita and expenditure per student by educational institutions is difficult to interpret. However, there is a clear positive relationship between the two at both the primary and secondary levels of education – in other words, poorer countries tend to spend less per student than richer ones. Although the relationship is generally positive at these levels, there are variations, even among countries with similar levels of GDP per capita, and especially those in which GDP per capita exceeds USD 30 000. Israel and Slovenia, for example, have similar levels of GDP per capita (see Table X2.1 in Annex 2) but spend very different proportions of it on primary and secondary education. In Israel, the proportions are 22% at the primary level and 21% at the secondary level (below the OECD averages of 23% and 26%, respectively), while in Slovenia, the proportions are among the highest, at 34% and 31%, respectively (Table B1.4 and Chart B1.5).

There is more variation in spending levels at the tertiary level, and the relationship between countries' relative wealth and their expenditure levels varies as well. Canada, Mexico, Sweden and the United States spend more than 49% of GDP per capita on each tertiary student – among the highest proportions after Brazil (Table B1.4 and Chart B1.5). Brazil spends the equivalent of 105% of GDP per capita on each tertiary student; however, tertiary students represent only 4% of students enrolled in all levels of education combined (Table B1.7, available on line).

Chart B1.5. Annual expenditure per student by educational institutions relative to GDP per capita (2010)

In equivalent USD converted using PPPs, by level of education



Note: : Please refer to the Reader's Guide for the list of country codes used in this chart.

Source: OECD. Argentina : UNESCO Institute for Statistics (World Education Indicators Programme). Tables B1.1a, B1.4 and Annex 2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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B1

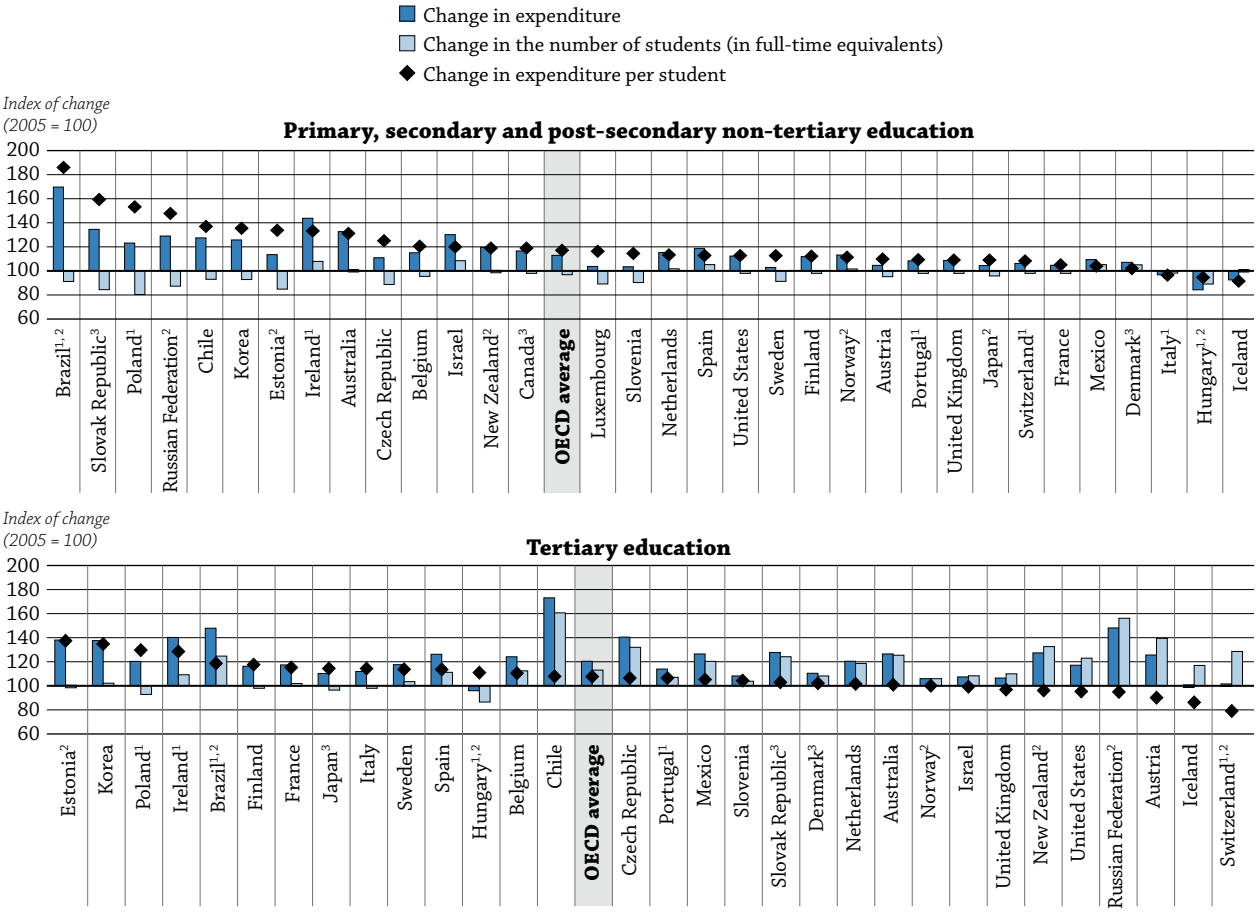
Change in expenditure per student by educational institutions between 1995 and 2010

Changes in expenditure by educational institutions largely reflect changes in the size of the school-age population and in teachers' salaries. These tend to rise over time in real terms: teachers' salaries, the main component of costs, have increased in the majority of countries during the past decade (see Indicator D3). The size of the school-age population influences both enrolment levels and the amount of resources and organisational effort a country must invest in its education system. The larger this population, the greater the potential demand for education services.

Expenditure per primary, secondary and post-secondary non-tertiary student by educational institutions increased in every country by an average of 61% between 1995 and 2010, a time during which student enrolment at these levels was relatively stable. The increase was relatively similar over the periods 2000-05 and 2005-10, showing that the global economic crisis had not yet affected the overall investment in education in most countries. However, this trend could be reversed in the future because, as Table B2.5 and Box B2.1 show, education budgets shrank in one-third of countries between 2009 and 2010.

Chart B1.6. Change in expenditure per student by educational institutions, by level of education (2005, 2010)

Index of change between 2005 and 2010 (2005 = 100, 2010 constant prices)



1. Public institutions only.
2. Public expenditure only.
3. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Countries are ranked in descending order of change in expenditure per student by educational institutions.

Source: OECD. Tables B1.5a and B1.5b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846842

Between 2005 and 2010, in 23 of the 33 countries for which data are available, expenditure per primary, secondary and post-secondary non-tertiary student by educational institutions increased by at least 10%. The increase exceeded 50% in Brazil, Poland and the Slovak Republic. By contrast, in Denmark, France and Mexico this expenditure increased by only 5% or less between 2005 and 2010. Only Iceland, Italy and Hungary showed a decrease in expenditure per primary, secondary and post-secondary non-tertiary student between 2005 and 2010 (Table B1.5a and Chart B1.6).

Decreases in enrolments do not seem to have been the main factor behind changes in expenditure at these levels, except in Hungary. In fact, in Brazil, Chile, the Czech Republic, Estonia, Korea, Poland, the Russian Federation and the Slovak Republic, a decrease in enrolment of more than 5% coincided with significant increases (over 5%) in spending per student by educational institutions between 2005 and 2010. In Luxembourg, Slovenia and Sweden, a similar decline in enrolment at the primary, secondary and post-secondary non-tertiary levels coincided with only a slight increase in expenditure at those levels (Chart B1.6).

The pattern is different at the tertiary level. In some cases, spending per student fell between 1995 and 2010, as expenditure did not keep up with expanding enrolments. On average across OECD countries, expenditure per tertiary student by educational institutions remained stable from 1995 to 2000 but then increased during 2000-05 and 2005- 10. Between 2005 and 2010, Estonia, Korea and Poland increased expenditure per student by 30% or more.

By contrast, between 2005 and 2010, of the 31 countries for which data are available, Austria, Iceland, Israel, the United Kingdom and the United States recorded a decrease in expenditure per student in tertiary education. This is also the case in New Zealand, the Russian Federation and Switzerland, where public expenditure per student (data on private expenditure are not available) decreased during the period. In all of these countries, the decline was mainly the result of a rapid increase of 8% or more in the number of tertiary students (Table B1.5 and Chart B1.6).

Definitions

Ancillary services are services provided by educational institutions that are peripheral to the main educational mission. The main component of ancillary services is student welfare services. In primary, secondary and post-secondary non-tertiary education, student welfare services include meals, school health services, and transportation to and from school. At the tertiary level, they include residence halls (dormitories), dining halls, and health care.

Core educational services are directly related to instruction in educational institutions, including teachers' salaries, construction and maintenance of school buildings, teaching materials, books, and administration of schools.

Research and development (R&D) includes research performed at universities and other tertiary educational institutions, regardless of whether the research is financed from general institutional funds or through separate grants or contracts from public or private sponsors.

Methodology

Data refer to the financial year 2010 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

Table B1.5 shows the changes in expenditure per student by educational institutions between the financial years 1995, 2000, 2005 and 2010. OECD countries were asked to collect 1995, 2000 and 2005 data according to the definitions and coverage of UOE 2012 data collection. All expenditure data and GDP information for 1995, 2000 and 2005 are adjusted to 2010 prices using the GDP price deflator.

The indicator shows direct public and private expenditure by educational institutions in relation to the number of full-time equivalent students enrolled. Public subsidies for students' living expenses outside educational institutions have been excluded to ensure international comparability.

Core educational services are estimated as the residual of all expenditure, that is, total expenditure on educational institutions net of expenditure on R&D and ancillary services. The classification of R&D expenditure is based on data collected from the institutions carrying out R&D, rather than on the sources of funds.

Expenditure per student by educational institutions at a particular level of education is calculated by dividing total expenditure by educational institutions at that level by the corresponding full-time equivalent enrolment. Only educational institutions and programmes for which both enrolment and expenditure data are available are taken into account. Expenditure in national currency is converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for GDP. The PPP exchange rate is used because the market exchange rate is affected by many factors (interest rates, trade policies, expectations of economic growth, etc.) that have little to do with current relative domestic purchasing power in different OECD countries (see Annex 2 for further details).

Expenditure data for students in private educational institutions are not available for certain countries, and some other countries provide incomplete data on independent private institutions. Where this is the case, only expenditure on public and government-dependent private institutions has been taken into account.

Expenditure per student by educational institutions relative to GDP per capita is calculated by expressing expenditure per student by educational institutions in units of national currency as a percentage of GDP per capita, also in national currency. In cases where the educational expenditure data and the GDP data pertain to different reference periods, the expenditure data are adjusted to the same reference period as the GDP data, using inflation rates for the OECD country in question (see Annex 2).

Cumulative expenditure over the average duration of tertiary studies (Table B1.3a) is calculated by multiplying current annual expenditure by the typical duration of tertiary studies. The methodology used to estimate the typical duration of tertiary studies is described in Annex 3 (*www.oecd.org/edu/eag.htm*). For estimates of the duration of tertiary education, data are based on a survey carried out in OECD countries in 2012.

Full-time equivalent student: The ranking of OECD countries by annual expenditure on educational services per student is affected by differences in how countries define full-time, part-time and full-time equivalent enrolment. Some OECD countries count every participant at the tertiary level as a full-time student, while others determine a student's intensity of participation by the credits that he/she obtains for successful completion of specific course units during a specified reference period. OECD countries that can accurately account for part-time enrolment have higher apparent expenditure per full-time equivalent student by educational institutions than OECD countries that cannot differentiate among the different types of student attendance.

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Indicator B1 Tables

	Table B1.1a	**Annual expenditure per student by educational institutions for all services (2010)** StatLink http://dx.doi.org/10.1787/888932849369
WEB	Table B1.1b	**Annual expenditure per student by educational institutions for core services (2010)** StatLink http://dx.doi.org/10.1787/888932849388
	Table B1.2	**Annual expenditure per student by educational institutions for core services, ancillary services and R&D (2010)** StatLink http://dx.doi.org/10.1787/888932849407
	Table B1.3a	**Cumulative expenditure per student by educational institutions for all services over the average duration of tertiary studies (2010)** StatLink http://dx.doi.org/10.1787/888932849426
WEB	Table B1.3b	**Cumulative expenditure per student by educational institutions for all services over the theoretical duration of primary and secondary studies (2010)** StatLink http://dx.doi.org/10.1787/888932849445

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Table B1.4	Annual expenditure per student by educational institutions for all services, relative to GDP per capita (2010)	StatLink http://dx.doi.org/10.1787/888932849464
Table B1.5a	Change in expenditure per student by educational institutions for all services, relative to different factors, at the primary, secondary and post-secondary non-tertiary levels of education (1995, 2000, 2005, 2010)	StatLink http://dx.doi.org/10.1787/888932849483
Table B1.5b	Change in expenditure per student by educational institutions for all services, relative to different factors, at the tertiary level of education (1995, 2000, 2005, 2010)	StatLink http://dx.doi.org/10.1787/888932849502
Table B1.6	Annual expenditure per student by educational institutions for all services, by type of programme, at the secondary level (2010)	StatLink http://dx.doi.org/10.1787/888932849521
WEB Table B1.7	Distribution of expenditure (as a percentage) by educational institutions compared to the number of students enrolled at each level of education (2010)	StatLink http://dx.doi.org/10.1787/888932849540

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Table B1.1a. Annual expenditure per student by educational institutions for all services (2010)

In equivalent USD converted using PPPs for GDP, by level of education, based on full-time equivalents

		Pre-primary education (for children aged 3 and older)	Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education (including R&D activities)			All tertiary education (excluding R&D activities)	Primary to tertiary education (including R&D activities)
				Lower secondary education	Upper secondary education	All secondary education		Tertiary-type B education	Tertiary-type A & advanced research programmes	All tertiary education		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	8 899	9 463	10 595	9 966	10 350	7 124	8 829	16 502	15 142	9 379	**10 825**
	Austria	8 893	10 244	12 711	12 390	12 551	5 418	6 491	15 101	15 007	10 488	**12 507**
	Belgium	6 024	8 852	x(5)	x(5)	11 004	x(5)	x(9)	x(9)	15 179	9 645	**11 028**
	Canada[1, 2]	x(2)	8 933	x(2)	11 317	m	m	14 461	27 123	22 475	16 300	**m**
	Chile[3]	3 544	3 301	3 092	3 119	3 110	a	4 028	9 580	7 101	6 829	**4 183**
	Czech Republic	4 247	4 120	6 919	6 244	6 546	1 920	3 275	7 970	7 635	6 244	**6 037**
	Denmark	9 454	10 935	11 561	11 914	11 747	x(4, 9)	x(9)	x(9)	18 977	m	**12 848**
	Estonia	2 533	5 140	5 948	6 834	6 444	7 923	7 361	6 080	6 501	3 909	**6 126**
	Finland	5 372	7 624	11 705	7 912	9 162	x(5)	n	16 714	16 714	9 802	**10 157**
	France	6 362	6 622	9 399	12 874	10 877	m	12 283	15 997	15 067	10 309	**10 182**
	Germany	m	m	m	m	m	m	m	m	m	m	**m**
	Greece	m	m	m	m	m	m	m	m	m	m	**m**
	Hungary[2]	4 773	4 684	4 657	4 459	4 553	3 360	4 463	9 071	8 745	6 824	**5 285**
	Iceland	8 606	9 482	9 204	7 014	7 841	x(5)	x(9)	x(9)	8 728	m	**8 619**
	Ireland[2]	m	8 384	11 477	11 265	11 380	10 394	x(9)	x(9)	16 008	11 512	**10 685**
	Israel	3 910	5 758	x(5)	x(5)	5 616	5 096	9 748	10 945	10 730	m	**6 537**
	Italy[2]	7 177	8 296	8 548	8 646	8 607	m	10 674	9 576	9 580	6 266	**8 690**
	Japan	5 550	8 353	9 847	10 064	9 957	x(4, 9)	10 239	17 544	16 015	m	**10 596**
	Korea	6 739	6 601	6 652	9 477	8 060	a	5 713	11 271	9 972	8 226	**8 198**
	Luxembourg	20 958	21 240	17 449	17 813	17 633	m	m	m	m	m	**m**
	Mexico	2 280	2 331	2 102	3 617	2 632	a	x(9)	x(9)	7 872	6 611	**2 993**
	Netherlands	7 664	7 954	11 925	11 750	11 838	11 145	9 873	17 172	17 161	10 818	**11 439**
	New Zealand	11 495	6 842	7 400	9 007	8 170	9 440	8 491	10 923	10 418	8 816	**8 192**
	Norway	6 610	12 255	12 603	14 845	13 852	x(5)	x(9)	x(9)	18 512	10 933	**14 081**
	Poland[2]	5 737	5 937	5 428	5 530	5 483	7 020	6 432	8 892	8 866	7 281	**6 321**
	Portugal[2]	5 977	5 922	8 504	9 327	8 882	m	x(9)	x(9)	10 578	5 843	**8 009**
	Slovak Republic	4 306	5 732	5 147	4 501	4 806	x(4)	x(4)	6 904	6 904	5 831	**5 400**
	Slovenia	7 744	8 935	9 368	7 472	8 187	x(4)	x(9)	x(9)	9 693	7 719	**8 933**
	Spain	6 685	7 291	9 208	10 306	9 608	a	10 384	14 072	13 373	9 494	**9 484**
	Sweden	6 582	9 987	9 776	10 497	10 185	6 176	6 387	20 750	19 562	9 143	**11 734**
	Switzerland[2]	5 186	11 513	14 216	15 595	14 972	x(4)	5 021	23 457	21 893	9 620	**14 922**
	Turkey	2 490	1 860	a	2 470	2 470	a	m	m	m	m	**m**
	United Kingdom	7 047	9 369	10 533	10 388	10 452	a	x(9)	x(9)	15 862	10 546	**10 878**
	United States	10 020	11 193	11 920	13 045	12 464	m	x(9)	x(9)	25 576	22 744	**15 171**
	OECD average	6 762	7 974	8 893	9 322	9 014	4 413	~	~	13 528	9 274	**9 313**
	OECD total	6 569	7 126	~	~	8 973	~	~	~	17 665	14 624	**10 416**
	EU21 average	7 085	8 277	9 459	9 451	9 471	5 336	~	~	12 856	8 334	**9 208**
Other G20	Argentina[2]	2 427	2 929	3 779	4 202	3 930	a	2 932	5 539	4 680	m	**3 628**
	Brazil[2]	2 111	2 778	2 849	2 148	2 571	a	x(9)	x(9)	13 137	12 381	**3 067**
	China	m	m	m	m	m	m	m	m	m	m	**m**
	India	m	m	m	m	m	m	m	m	m	m	**m**
	Indonesia	m	m	m	m	m	a	m	m	m	m	**m**
	Russian Federation[2]	m	x(5)	x(5)	x(5)	4 100	x(5)	4 509	7 622	7 039	6 612	**5 058**
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	**m**
	South Africa	m	m	m	m	m	m	m	m	m	m	**m**
	G20 average	m	m	m	m	m	m	m	m	m	m	**m**

1. Year of reference 2009.
2. Public institutions only (for Canada, in tertiary education only; for Italy and the Russian Federation, except in tertiary education).
3. Year of reference 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932849369

Table B1.2. Annual expenditure per student by educational institutions for core services, ancillary services and R&D (2010)

In equivalent USD converted using PPPs for GDP, by level of education and type of service, based on full-time equivalents

		Primary, secondary and post-secondary non-tertiary education			Tertiary education				Primary to tertiary education		
		Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Total	Educational core services	Ancillary services (transport, meals, housing provided by institutions)	R & D	Total	Educational core services	Ancillary services (transport, meals, housing provided by institutions) and R&D	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	9 599	204	**9 803**	8 831	548	5 763	**15 142**	9 452	1 373	**10 825**
	Austria	11 158	535	**11 693**	10 380	108	4 519	**15 007**	10 967	1 540	**12 507**
	Belgium	9 845	278	**10 123**	9 320	324	5 534	**15 179**	9 751	1 277	**11 028**
	Canada[1, 2, 3]	9 271	504	**9 774**	15 120	1 180	6 176	**22 475**	m	m	**m**
	Chile[4]	2 989	213	**3 203**	6 829	x(4)	272	**7 101**	3 921	262	**4 183**
	Czech Republic	5 103	429	**5 532**	6 165	79	1 392	**7 635**	5 358	679	**6 037**
	Denmark[1]	11 404	a	**11 404**	x(7)	a	x(7)	**18 977**	x(10)	x(10)	**12 848**
	Estonia	x(3)	x(3)	**5 984**	3 909	x(4)	2 592	**6 501**	x(10)	x(10)	**6 126**
	Finland	7 692	898	**8 591**	9 802	n	6 912	**16 714**	8 099	2 058	**10 157**
	France	7 839	1 230	**9 070**	9 473	836	4 758	**15 067**	8 143	2 040	**10 182**
	Germany	m	m	**m**	m	m	m	**m**	m	m	**m**
	Greece	m	m	**m**	m	m	m	**m**	m	m	**m**
	Hungary[3]	4 062	492	**4 555**	5 707	1 118	1 920	**8 745**	4 349	936	**5 285**
	Iceland	x(3)	x(3)	**8 592**	x(7)	x(7)	x(7)	**8 728**	x(10)	x(10)	**8 619**
	Ireland[3]	9 481	156	**9 638**	11 512	m	4 496	**16 008**	9 815	870	**10 685**
	Israel	5 409	282	**5 692**	9 514	1 216	m	**10 730**	6 098	439	**6 537**
	Italy[3, 5]	8 190	299	**8 489**	5 892	374	3 314	**9 580**	7 659	1 031	**8 690**
	Japan[1]	x(3)	x(3)	**9 168**	x(7)	x(7)	x(7)	**16 015**	x(10)	x(10)	**10 596**
	Korea	6 490	906	**7 396**	8 159	66	1 746	**9 972**	7 010	1 188	**8 198**
	Luxembourg	17 731	1 319	**19 050**	m	m	m	**m**	m	m	**m**
	Mexico	x(3)	x(3)	**2 464**	6 611	m	1 262	**7 872**	2 870	124	**2 993**
	Netherlands	10 075	n	**10 075**	10 818	n	6 343	**17 161**	10 218	1 220	**11 439**
	New Zealand	x(3)	x(3)	**7 681**	8 816	x(4)	1 602	**10 418**	x(10)	x(10)	**8 192**
	Norway	x(3)	x(3)	**13 067**	10 741	191	7 579	**18 512**	x(10)	x(10)	**14 081**
	Poland[3]	5 654	40	**5 693**	7 281	n	1 585	**8 866**	5 976	345	**6 321**
	Portugal[3]	7 283	136	**7 419**	5 843	x(4)	4 736	**10 578**	7 014	995	**8 009**
	Slovak Republic[1]	4 430	636	**5 066**	4 902	929	1 073	**6 904**	4 516	884	**5 400**
	Slovenia	7 944	561	**8 505**	7 689	30	1 974	**9 693**	7 883	1 050	**8 933**
	Spain	8 037	442	**8 479**	9 009	485	3 879	**13 373**	8 237	1 248	**9 484**
	Sweden	8 997	1 048	**10 044**	9 143	n	10 419	**19 562**	9 023	2 711	**11 734**
	Switzerland[3]	x(3)	x(3)	**13 510**	9 620	x(4)	12 273	**21 893**	x(10)	x(10)	**14 922**
	Turkey	1 942	78	**2 020**	m	m	m	**m**	m	m	**m**
	United Kingdom	8 503	1 477	**9 980**	9 256	1 290	5 316	**15 862**	8 618	2 260	**10 878**
	United States	10 892	934	**11 826**	19 672	3 072	2 832	**25 576**	13 028	2 143	**15 171**
	OECD average	8 001	524	**8 550**	8 889	564	4 241	**13 528**	7 637	1 213	**9 313**
	EU21 average	8 524	554	**8 915**	8 006	371	4 162	**12 856**	7 852	1 322	**9 208**
Other G20	Argentina[3]	x(3)	x(3)	**3 398**	x(7)	x(7)	x(7)	**4 680**	x(10)	x(10)	**3 628**
	Brazil[3]	x(3)	x(3)	**2 653**	12 381	x(4)	756	**13 137**	3 037	30	**3 067**
	China	m	m	**m**	m	m	m	**m**	m	m	**m**
	India	m	m	**m**	m	m	m	**m**	m	m	**m**
	Indonesia	x(3)	x(3)	**m**	x(7)	x(7)	x(7)	**m**	x(10)	x(10)	**m**
	Russian Federation[3]	x(3)	x(3)	**4 100**	x(7)	x(7)	427	**7 039**	x(10)	x(10)	**5 058**
	Saudi Arabia	m	m	**m**	m	m	m	**m**	m	m	**m**
	South Africa	m	m	**m**	m	m	m	**m**	m	m	**m**
	G20 average	m	m	**m**	m	m	m	**m**	m	m	**m**

1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
2. Year of reference 2009.
3. Public institutions only (for Canada, in tertiary education only; for Italy, except in tertiary education).
4. Year of reference 2011.
5. Exclude post-secondary non-tertiary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932849407

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Table B1.3a. Cumulative expenditure per student by educational institutions for all services over the average duration of tertiary studies (2010)

In equivalent USD converted using PPPs for GDP, by type of programme

		Method[1]	Average duration of tertiary studies in 2010 (in years)			Cumulative expenditure per student over the average duration of tertiary studies (in USD)		
			Tertiary-type B education	Tertiary-type A and advanced research programmes	All tertiary education	Tertiary-type B education	Tertiary-type A and advanced research programmes	All tertiary education
			(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia		m	m	**m**	m	m	**m**
	Austria	AF	2.34	6.10	**5.34**	15 189	92 119	**80 138**
	Belgium[2]	CM	2.41	3.67	**2.99**	x(6)	x(6)	**45 384**
	Canada		m	m	**m**	m	m	**m**
	Chile		m	m	**m**	m	m	**m**
	Czech Republic[3]	CM	2.36	4.34	**4.10**	m	34 591	**m**
	Denmark	AF	2.74	5.49	**5.20**	x(6)	x(6)	**98 680**
	Estonia	CM	3.29	4.97	**4.42**	24 222	30 202	**28 762**
	Finland	CM	a	4.74	**4.74**	a	79 224	**79 224**
	France[3]	CM	3.00	4.74	**4.02**	36 849	75 827	**60 570**
	Germany	CM	2.41	4.95	**4.19**	m	m	**m**
	Greece		m	m	**m**	m	m	**m**
	Hungary[4]	AF	1.85	3.71	**3.29**	8 275	33 665	**28 764**
	Iceland	CM	x(3)	x(3)	**4.49**	x(6)	x(6)	**39 188**
	Ireland[4]	CM	2.21	4.02	**3.24**	x(6)	x(6)	**51 865**
	Israel	CM	m	3.03	**m**	m	33 163	**m**
	Italy	AF	m	4.52	**m**	m	43 283	**m**
	Japan	CM	2.09	4.63	**4.46**	21 433	81 269	**71 441**
	Korea	CM	2.07	4.22	**3.43**	11 826	47 564	**34 202**
	Luxembourg		m	m	**m**	m	m	**m**
	Mexico	AF	1.72	3.49	**3.35**	x(6)	x(6)	**26 373**
	Netherlands	CM	m	5.26	**5.26**	m	90 322	**90 269**
	New Zealand	CM	1.93	4.06	**3.37**	16 417	44 293	**35 102**
	Norway		m	m	**m**	m	m	**m**
	Poland[4]	CM	m	3.68	**m**	m	32 721	**m**
	Portugal		m	m	**m**	m	m	**m**
	Slovak Republic	AF	2.47	3.90	**3.82**	m	26 924	**m**
	Slovenia	AF	2.63	3.64	**3.21**	x(6)	x(6)	**31 097**
	Spain	CM	2.15	5.54	**4.66**	22 327	77 961	**62 319**
	Sweden	CM	2.44	4.70	**4.51**	15 566	97 526	**88 225**
	Switzerland[4]	CM	2.19	5.45	**3.62**	10 979	127 904	**79 346**
	Turkey	CM	1.94	2.73	**2.65**	x(6)	x(6)	**m**
	United Kingdom[3]	CM	x(3)	x(3)	**2.74**	x(6)	x(6)	**43 463**
	United States	AF	x(3)	x(3)	**3.17**	x(6)	x(6)	**81 076**
	OECD total		2.23	4.38	**3.90**	~	~	**57 774**
	EU21 average		2.31	4.59	**4.11**	~	~	**60 674**
Other G20	Argentina		m	m	**m**	m	m	**m**
	Brazil		m	m	**m**	m	m	**m**
	China		m	m	**m**	m	m	**m**
	India		m	m	**m**	m	m	**m**
	Indonesia		m	m	**m**	m	m	**m**
	Russian Federation		m	m	**m**	m	m	**m**
	Saudi Arabia		m	m	**m**	m	m	**m**
	South Africa		m	m	**m**	m	m	**m**
	G20 average		m	m	**m**	m	m	**m**

1. Either the Chain Method (CM) or an Approximation Formula (AF) was used to estimate the duration of tertiary studies.
2. Year of reference 2008.
3. Average duration of tertiary studies is estimated based on national data.
4. Public institutions only.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849426

Table B1.4. Annual expenditure per student by educational institutions for all services, relative to GDP per capita (2010)

By level of education, based on full-time equivalents

		Pre-primary education (for children 3 years and older)	Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education (including R&D activities)			All tertiary education (excluding R&D activities)	Primary to tertiary education (including R&D activities)
				Lower secondary education	Upper secondary education	All secondary education		Tertiary-type B education	Tertiary-type A and advanced research programmes	All tertiary education		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	22	23	26	24	25	17	22	40	37	23	**27**
	Austria	22	25	31	31	31	13	16	37	37	26	**31**
	Belgium	16	23	x(5)	x(5)	29	x(5)	x(9)	x(9)	40	25	**29**
	Canada[1, 2]	x(2)	22	x(2)	28	m	m	36	68	56	41	**m**
	Chile[3]	20	19	18	18	18	a	23	55	41	39	**24**
	Czech Republic	17	16	27	25	26	8	13	31	30	25	**24**
	Denmark	23	27	28	29	29	x(4,9)	x(9)	x(9)	47	m	**32**
	Estonia	13	26	30	34	32	39	37	30	32	19	**30**
	Finland	15	21	32	22	25	x(5)	n	46	46	27	**28**
	France	18	19	27	37	32	m	36	47	44	30	**30**
	Germany	m	m	m	m	m	m	m	m	m	m	**m**
	Greece	m	m	m	m	m	m	m	m	m	m	**m**
	Hungary[2]	23	23	23	22	22	16	22	44	42	33	**26**
	Iceland	24	27	26	20	22	x(5)	x(9)	x(9)	25	m	**24**
	Ireland[2]	m	20	28	27	28	25	x(9)	x(9)	39	28	**26**
	Israel	15	22	x(5)	x(5)	21	19	37	41	40	m	**25**
	Italy[2]	22	26	27	27	27	m	33	30	30	20	**27**
	Japan	16	24	28	29	28	x(4,9)	29	50	45	m	**30**
	Korea	23	23	23	33	28	a	20	39	35	29	**28**
	Luxembourg	25	25	21	21	21	m	m	m	m	m	**m**
	Mexico	15	15	14	24	17	a	x(9)	x(9)	52	44	**20**
	Netherlands	18	19	29	28	28	27	24	41	41	26	**27**
	New Zealand	39	23	25	30	28	32	29	37	35	30	**28**
	Norway	15	27	28	33	31	x(5)	x(9)	x(9)	41	24	**31**
	Poland[2]	29	30	27	28	27	35	32	44	44	36	**32**
	Portugal[2]	23	23	33	37	35	m	x(9)	x(9)	41	23	**31**
	Slovak Republic	19	25	22	19	21	x(4)	x(4)	30	30	25	**23**
	Slovenia	29	34	35	28	31	x(4)	x(9)	x(9)	36	29	**34**
	Spain	21	23	29	33	30	a	33	45	42	30	**30**
	Sweden	17	25	25	27	26	16	16	53	50	23	**30**
	Switzerland[2]	11	24	29	32	31	x(4)	10	48	45	20	**30**
	Turkey	16	12	a	16	16	a	m	m	m	m	**m**
	United Kingdom	20	27	30	29	30	a	x(9)	x(9)	45	30	**31**
	United States	22	24	26	28	27	m	x(9)	x(9)	55	49	**33**
	OECD average	20	23	26	27	26	15	25	43	41	29	**28**
	EU21 average	20	23	25	27	26	12	24	41	39	29	**28**
Other G20	Argentina[2]	15	18	24	26	25	a	18	35	29	m	**23**
	Brazil[2]	17	22	23	17	21	a	x(9)	x(9)	105	99	**24**
	China	m	m	m	m	m	m	m	m	m	m	**m**
	India	m	m	m	m	m	m	m	m	m	m	**m**
	Indonesia	m	m	m	m	m	a	m	m	m	m	**m**
	Russian Federation[2]	m	x(5)	x(5)	x(5)	21	a	23	38	36	33	**26**
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	**m**
	South Africa	m	m	m	m	m	m	m	m	m	m	**m**
	G20 average	m	m	m	m	m	m	m	m	m	m	**m**

1. Year of reference 2009.
2. Public institutions only (for Canada, in tertiary education only. For Italy and the Russian Federation, except in tertiary education).
3. Year of reference 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932849464

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Table B1.5a. Change in expenditure per student by educational institutions for all services, relative to different factors, at the primary, secondary and post-secondary non-tertiary levels of education (1995, 2000, 2005, 2010)

Index of change (GDP deflator 2005 = 100, constant prices)

		Primary, secondary and post-secondary non-tertiary education								
		Change in expenditure (2005 = 100)			Change in the number of students (2005 = 100)			Change in expenditure per student (2005 = 100)		
		1995	2000	2010	1995	2000	2010	1995	2000	2010
OECD	Australia	63	82	133	87	93	101	**73**	**88**	**131**
	Austria	90	97	105	m	101	95	**m**	**95**	**110**
	Belgium	m	94	115	m	91	95	**m**	**103**	**121**
	Canada[1, 2]	91	86	117	m	99	98	**m**	**87**	**119**
	Chile[3]	m	m	127	m	m	93	**m**	**m**	**137**
	Czech Republic	86	76	111	115	107	89	**75**	**71**	**125**
	Denmark[1]	72	86	107	91	95	105	**79**	**91**	**102**
	Estonia[4]	62	80	114	117	121	85	**53**	**66**	**134**
	Finland	72	81	112	88	95	100	**81**	**85**	**112**
	France	90	100	105	m	102	100	**m**	**98**	**105**
	Germany	94	100	m	99	102	m	**95**	**97**	**m**
	Greece[1]	50	78	m	107	101	m	**46**	**77**	**m**
	Hungary[4, 5]	69	69	84	113	108	89	**61**	**64**	**95**
	Iceland	m	72	93	93	94	101	**m**	**77**	**91**
	Ireland[5]	54	67	144	102	97	108	**53**	**69**	**133**
	Israel	79	95	130	84	94	108	**94**	**101**	**120**
	Italy[5, 6]	97	96	97	101	99	100	**96**	**97**	**97**
	Japan[1]	97	99	104	124	109	96	**78**	**90**	**109**
	Korea	m	69	126	110	102	93	**m**	**68**	**135**
	Luxembourg[4, 5, 7]	m	m	104	m	m	89	**m**	**m**	**116**
	Mexico	65	80	109	88	95	105	**74**	**85**	**104**
	Netherlands	69	84	115	94	97	102	**73**	**87**	**113**
	New Zealand[4]	65	92	120	m	m	100	**m**	**m**	**119**
	Norway[4]	72	87	113	84	95	102	**86**	**92**	**111**
	Poland[5]	63	89	123	125	114	80	**50**	**78**	**153**
	Portugal[5]	74	98	108	117	111	99	**63**	**88**	**109**
	Slovak Republic[1]	71	73	135	114	108	84	**62**	**68**	**159**
	Slovenia	m	m	103	m	m	90	**m**	**m**	**115**
	Spain	92	93	119	127	107	105	**73**	**87**	**113**
	Sweden	71	88	103	85	98	91	**84**	**90**	**113**
	Switzerland[5]	76	88	106	93	98	98	**81**	**89**	**108**
	Turkey[4, 5]	m	m	m	m	m	m	**m**	**m**	**m**
	United Kingdom	61	70	109	98	113	100	**62**	**62**	**109**
	United States	69	86	112	93	98	100	**74**	**89**	**113**
	OECD average	75	85	113	102	101	97	**73**	**84**	**117**
	EU21 average	74	85	111	106	104	95	**69**	**83**	**118**
Other G20	Argentina	m	m	m	m	m	m	**m**	**m**	**m**
	Brazil[4, 5]	58	66	170	84	98	91	**69**	**67**	**186**
	China	m	m	m	m	m	m	**m**	**m**	**m**
	India	m	m	m	m	m	m	**m**	**m**	**m**
	Indonesia	m	m	m	m	m	m	**m**	**m**	**m**
	Russian Federation[4]	m	66	129	m	m	87	**m**	**m**	**148**
	Saudi Arabia	m	m	m	m	m	m	**m**	**m**	**m**
	South Africa	m	m	m	m	m	m	**m**	**m**	**m**
	G20 average	m	m	m	m	m	m	**m**	**m**	**m**

1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
2. Year of reference 2009 instead of 2010.
3. Year of reference 2011 instead of 2010. Year of reference 2006 instead of 2005.
4. Public expenditure only.
5. Public institutions only.
6. Excluding post-secondary non-tertiary education.
7. Including pre-primary education.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table B1.5b. Change in expenditure per student by educational institutions for all services, relative to different factors, at the tertiary level of education (1995, 2000, 2005, 2010)

Index of change (GDP deflator 2005 = 100, constant prices)

		Tertiary education								
		Change in expenditure (2005 = 100)			Change in the number of students (2005 = 100)			Change in expenditure per student (2005 = 100)		
		1995	2000	2010	1995	2000	2010	1995	2000	2010
OECD	Australia	74	83	126	73	m	125	**103**	**m**	**101**
	Austria	72	75	126	93	103	139	**77**	**73**	**90**
	Belgium	m	98	124	m	94	112	**m**	**104**	**110**
	Canada[1, 2, 3]	64	86	117	m	m	m	**m**	**m**	**m**
	Chile[4]	m	m	173	m	m	161	**m**	**m**	**108**
	Czech Republic	64	65	140	46	72	132	**139**	**90**	**106**
	Denmark[1]	78	86	110	94	98	108	**83**	**88**	**102**
	Estonia[5]	64	92	138	51	85	100	**124**	**108**	**137**
	Finland	77	86	116	85	95	99	**91**	**91**	**118**
	France	85	93	117	m	95	102	**m**	**98**	**115**
	Germany	89	94	m	96	93	m	**92**	**101**	**m**
	Greece[1]	28	42	m	46	68	m	**61**	**63**	**m**
	Hungary[3, 5]	64	81	96	38	66	86	**167**	**122**	**111**
	Iceland	m	69	101	53	68	117	**m**	**103**	**86**
	Ireland[3]	55	100	140	72	85	109	**76**	**117**	**128**
	Israel	64	90	107	59	82	108	**107**	**110**	**99**
	Italy	73	93	112	89	90	98	**82**	**103**	**114**
	Japan[1]	82	94	110	98	99	96	**84**	**95**	**114**
	Korea	m	79	138	63	93	102	**m**	**84**	**135**
	Luxembourg	m	m	m	m	m	m	**m**	**m**	**m**
	Mexico	57	73	126	64	83	120	**89**	**88**	**105**
	Netherlands	80	84	120	82	85	119	**97**	**98**	**102**
	New Zealand[5]	87	84	127	m	m	133	**m**	**m**	**96**
	Norway[5]	78	83	106	88	88	106	**88**	**95**	**100**
	Poland[3]	34	57	120	44	80	93	**77**	**72**	**130**
	Portugal[3]	51	70	114	69	90	107	**74**	**78**	**106**
	Slovak Republic[1]	54	67	128	51	71	124	**106**	**94**	**103**
	Slovenia	m	m	108	m	m	104	**m**	**m**	**104**
	Spain	63	88	126	108	107	111	**59**	**82**	**113**
	Sweden	70	86	117	68	82	103	**102**	**105**	**114**
	Switzerland[3, 5]	69	77	101	75	79	128	**92**	**98**	**79**
	Turkey	m	m	m	m	m	m	**m**	**m**	**m**
	United Kingdom	64	66	106	83	93	110	**77**	**70**	**97**
	United States	65	78	117	81	89	123	**80**	**88**	**95**
	OECD average	67	81	120	72	86	113	**93**	**93**	**108**
	EU21 average	65	80	120	72	87	109	**93**	**92**	**111**
Other G20	Argentina	m	m	m	m	m	m	**m**	**m**	**m**
	Brazil[3, 5]	66	79	148	56	70	125	**118**	**112**	**119**
	China	m	m	m	m	m	m	**m**	**m**	**m**
	India	m	m	m	m	m	m	**m**	**m**	**m**
	Indonesia	m	m	m	m	m	m	**m**	**m**	**m**
	Russian Federation[5]	m	44	148	m	m	156	**m**	**m**	**95**
	Saudi Arabia	m	m	m	m	m	m	**m**	**m**	**m**
	South Africa	m	m	m	m	m	m	**m**	**m**	**m**
	G20 average	m	m	m	m	m	m	**m**	**m**	**m**

1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
2. Year of reference 2009 instead of 2010.
3. Public institutions only.
4. Year of reference 2011 instead of 2010. Year of reference 2006 instead of 2005.
5. Public expenditure only.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table B1.6. Annual expenditure per student by educational institutions for all services, by type of programme, at the secondary level (2010)

In equivalent US dollars converted using PPPs for GDP, by level of education, based on full-time equivalents

		Secondary education								
		Lower secondary education			Upper secondary education			All secondary education		
		All programmes	General programmes	Vocational/ Pre-vocational programmes	All programmes	General programmes	Vocational/ Pre-vocational programmes	All programmes	General programmes	Vocational/ Pre-vocational programmes
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	**10 595**	10 976	6 344	**9 966**	11 364	6 723	**10 350**	11 103	6 609
	Austria	**12 711**	12 711	a	**12 390**	12 154	12 472	**12 551**	12 598	12 472
	Belgium[1]	**x(7)**	x(7)	x(7)	**x(7)**	x(7)	x(7)	**11 004**	x(7)	x(7)
	Canada[1, 2]	**m**	m	m	**11 317**	x(4)	x(4)	**m**	m	m
	Chile[3]	**3 092**	3 092	a	**3 119**	3 036	3 286	**3 110**	3 059	3 286
	Czech Republic	**6 919**	6 898	x(1)	**6 244**	5 380	6 563	**6 546**	6 518	6 588
	Denmark	**11 561**	11 561	a	**11 914**	x(4)	x(4)	**11 747**	x(7)	x(7)
	Estonia	**5 948**	x(1)	x(1)	**6 834**	6 586	7 284	**6 444**	6 235	7 284
	Finland[1]	**11 705**	11 705	a	**7 912**	6 895	8 317	**9 162**	9 939	8 317
	France	**9 399**	9 399	a	**12 874**	12 558	13 359	**10 877**	10 377	13 359
	Germany	**m**	m	m	**m**	m	m	**m**	m	m
	Greece	**m**	m	m	**m**	m	m	**m**	m	m
	Hungary[4]	**4 657**	4 683	1 950	**4 459**	4 953	3 154	**4 553**	4 805	3 118
	Iceland[1]	**9 204**	9 204	a	**7 014**	x(4)	x(4)	**7 841**	x(7)	x(7)
	Ireland[4]	**11 477**	x(1)	x(1)	**11 265**	x(4)	x(4)	**11 380**	x(7)	x(7)
	Israel	**x(7)**	x(7)	x(7)	**x(7)**	x(7)	x(7)	**5 616**	4 173	11 967
	Italy[4]	**8 548**	8 487	14 200	**8 646**	x(4)	x(4)	**8 607**	x(7)	x(7)
	Japan[1]	**9 847**	9 847	a	**10 064**	x(4)	x(4)	**9 957**	x(7)	x(7)
	Korea	**6 652**	6 652	a	**9 477**	x(4)	x(4)	**8 060**	x(7)	x(7)
	Luxembourg	**17 449**	17 449	a	**17 813**	15 614	19 278	**17 633**	16 916	19 278
	Mexico	**2 102**	2 509	442	**3 617**	3 580	3 993	**2 632**	2 914	1 150
	Netherlands	**11 925**	10 573	15 387	**11 750**	9 957	12 585	**11 838**	10 386	13 410
	New Zealand	**7 400**	7 400	a	**9 007**	8 637	10 196	**8 170**	7 910	10 196
	Norway[1]	**12 603**	12 603	a	**14 845**	x(4)	x(4)	**13 852**	x(7)	x(7)
	Poland[4]	**5 428**	x(1)	x(1)	**5 530**	5 709	5 376	**5 483**	x(7)	x(7)
	Portugal[4]	**8 504**	x(1)	x(1)	**9 327**	x(4)	x(4)	**8 882**	x(7)	x(7)
	Slovak Republic[1]	**5 147**	5 147	x(6)	**4 501**	3 661	4 895	**4 806**	4 756	4 895
	Slovenia[1]	**9 368**	9 368	a	**7 472**	x(4)	x(4)	**8 187**	x(7)	x(7)
	Spain	**9 208**	x(1)	x(1)	**10 306**	x(4)	x(4)	**9 608**	x(7)	x(7)
	Sweden	**9 776**	9 881	a	**10 497**	10 664	10 381	**10 185**	10 156	10 241
	Switzerland[1, 4]	**14 216**	14 216	a	**15 595**	12 696	17 191	**14 972**	13 758	17 191
	Turkey	**a**	a	a	**2 470**	2 291	2 685	**2 470**	2 291	2 685
	United Kingdom[1]	**x(7)**	x(7)	x(7)	**x(7)**	x(7)	x(7)	**10 452**	x(7)	x(7)
	United States	**11 920**	11 920	a	**13 045**	13 045	a	**12 464**	12 464	a
	OECD average	**8 893**	~	~	**9 322**	7 984	8 690	**9 014**	8 111	8 944
	EU21 average	**9 396**	~	~	**9 396**	8 557	9 424	**9 471**	9 269	9 896
Other G20	Argentina[4]	**3 779**	3 779	a	**4 202**	x(4)	x(4)	**3 930**	x(7)	x(7)
	Brazil[4]	**2 849**	2 849	a	**2 148**	x(4)	x(4)	**2 571**	x(7)	x(7)
	China	**m**	m	m	**m**	m	m	**m**	m	m
	India	**m**	m	m	**m**	m	m	**m**	m	m
	Indonesia	**m**	m	m	**m**	m	m	**m**	m	m
	Russian Federation[1, 4]	**x(7)**	x(8)	a	**x(7)**	x(8)	x(9)	**4 100**	4 095	4 148
	Saudi Arabia	**m**	m	m	**m**	m	m	**m**	m	m
	South Africa	**m**	m	m	**m**	m	m	**m**	m	m
	G20 average	**m**	m	m	**m**	m	m	**m**	m	m

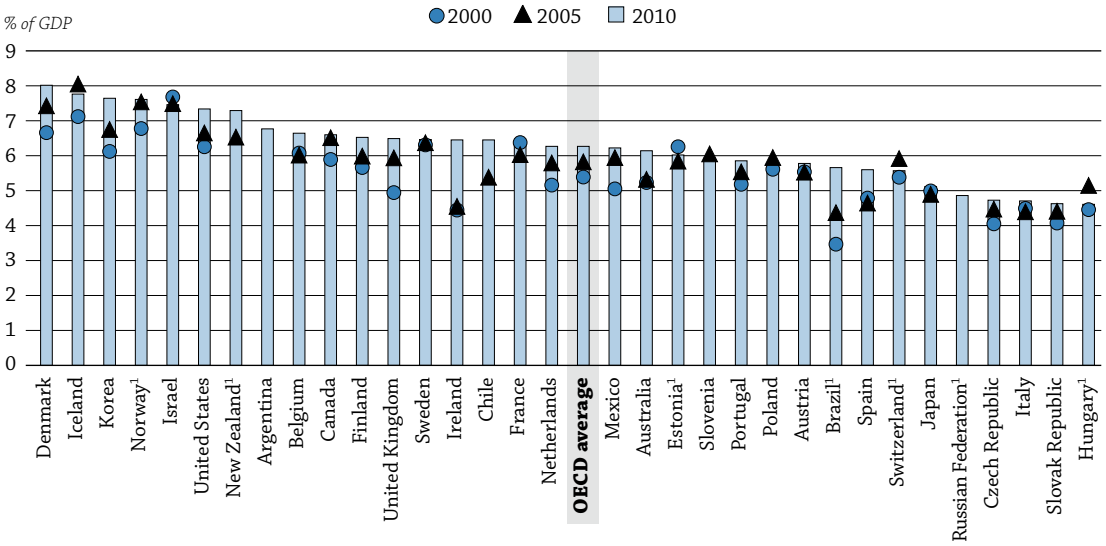
1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
2. Year of reference 2009.
3. Year of reference 2011.
4. Public institutions only.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
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WHAT PROPORTION OF NATIONAL WEALTH IS SPENT ON EDUCATION?

- In 2010, OECD countries spent an average of 6.3% of their GDP on educational institutions; Denmark, Iceland, Israel, Korea, New Zealand, Norway and the United States spent more than 7%.
- Between 2000 and 2010, expenditure on all levels of education combined increased at a faster rate than GDP growth during that period in almost all countries for which data are available.
- While GDP rose (in real terms) in most countries between 2009 and 2010, public expenditure on educational institutions fell in one-third of OECD countries during that period, probably as a consequence of fiscal consolidation policies.

Chart B2.1. Expenditure on educational institutions as a percentage of GDP for all levels of education (2000, 2005 and 2010)



1. Public expenditure only (for Switzerland, in tertiary education only; for Norway, in primary, secondary and post-secondary non-tertiary education only; for Estonia, New Zealand and the Russian Federation, for 2000 only).

Countries are ranked in descending order of expenditure from both public and private sources on educational institutions in 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B2.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846880

How to read this chart

The chart shows investment in education as a proportion of the national income that countries devoted to spending on educational institutions in 2000, 2005 and 2010. It includes direct and indirect expenditure on educational institutions, from both public and private sources of funds.

Context

This indicator presents a measure of expenditure on educational institutions relative to a nation's wealth. The national wealth is estimated based on the GDP, and expenditure on education includes spending by governments, enterprises and individual students and their families.

Countries invest in educational institutions to help foster economic growth, enhance productivity, contribute to personal and social development, and reduce social inequality, among other reasons. The proportion of education expenditure relative to GDP depends on the different preferences of various public and private actors. Nevertheless, expenditure on education largely comes from public budgets and is closely scrutinised by governments. During times of financial crisis, even core sectors like education can be subject to budget cuts.

The level of expenditure on educational institutions is affected by the size of a country's school-age population, enrolment rates, level of teachers' salaries, and the organisation and delivery of instruction. At the primary and lower secondary levels of education (corresponding broadly to the 5-14 year-old population), enrolment rates are close to 100% in OECD countries, and changes in the number of students are closely related to demographic changes. This is not as much the case in upper secondary and tertiary education, because part of the concerned population has left the education system (see Indicator C1).

Other findings

- **Expenditure on pre-primary education accounts for nearly one-tenth of expenditure on educational institutions**, or 0.6% of the GDP, on average across OECD countries. There are large differences among countries. For instance, expenditure on pre-primary education is less than 0.2% of GDP in Australia and Turkey, but about 1% or more in Denmark and Iceland.
- **Primary, secondary and post-secondary non-tertiary education accounts for nearly two-thirds of expenditure on educational institutions**, or 3.9% of the GDP, on average across OECD countries. New Zealand and Norway spend more than 5% of their GDP on these levels of education, while the Czech Republic, Hungary, Japan, the Russian Federation and Turkey spend 3% or less.
- **Tertiary education accounts for one-quarter of expenditure on educational institutions**, or 1.6% of the GDP, on average across OECD countries. Canada, Chile, Korea and the United States spend between 2.4% and 2.8% of their GDP on tertiary institutions.
- **Private expenditure on educational institutions as a percentage of GDP is highest in tertiary education**. This share is between 1.7% and 1.9% of the GDP in Chile, Korea and the United States.

Trends

For all levels of education combined public investment in education increased by an average of 5% in OECD countries between 2008 and 2010. However, the annual rate of growth of public expenditure on educational institutions slowed during this period, from 4% between 2008 and 2009 to 1% between 2009 and 2010, on average across OECD countries.

More than one-third of the countries with available data reported a slowdown in the annual growth of public expenditure on educational institutions between 2008 and 2010: Austria, Ireland, New Zealand, Norway, Portugal, Spain and the United States reported an increase between 2008 and 2009 then a drop between 2009 and 2010, while Estonia, Hungary, Iceland and Italy reported decreases between both 2008-09 and 2009-10.

B2

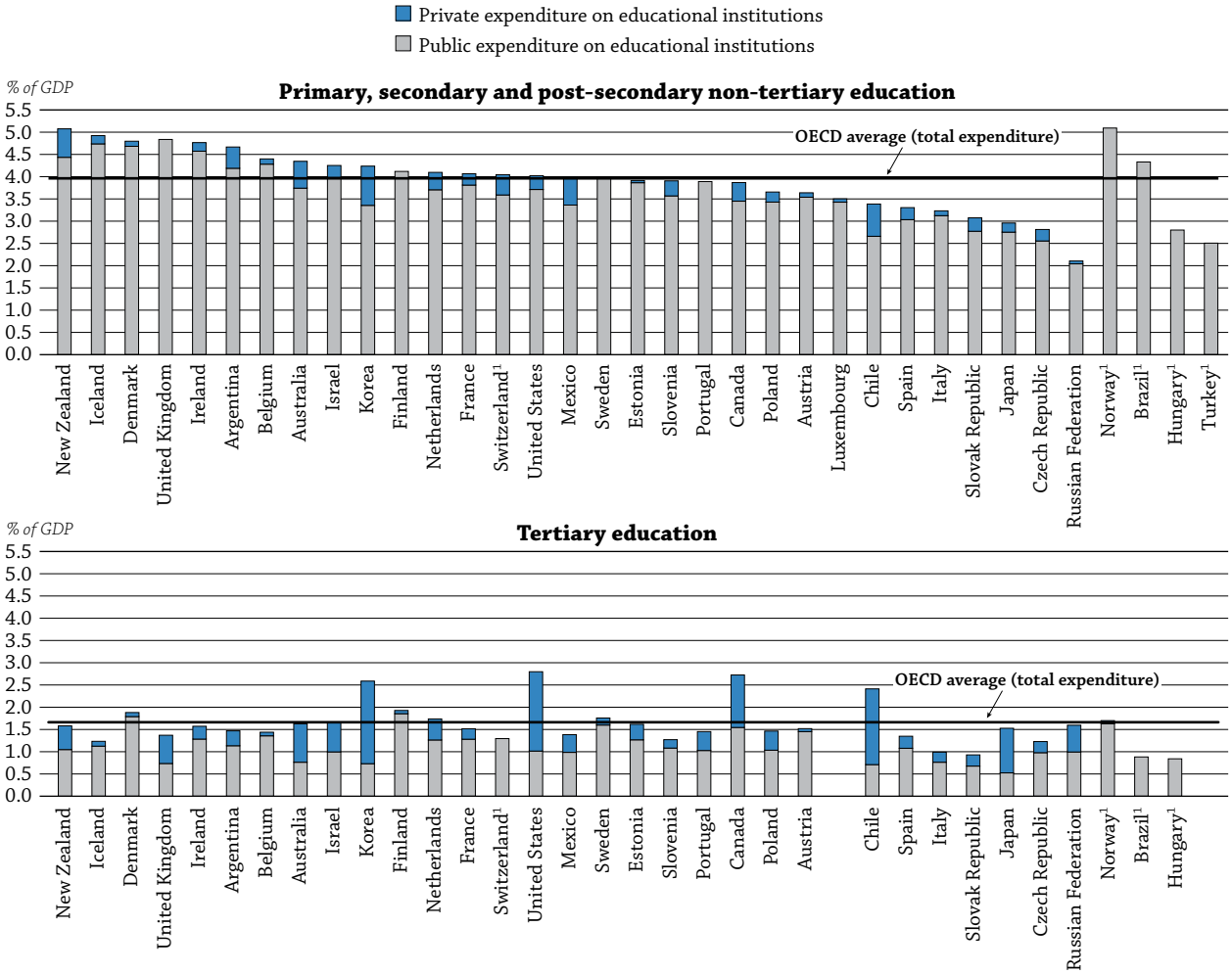
Analysis

Overall investment relative to GDP

The share of national wealth devoted to educational institutions is substantial in all OECD and G20 countries with available data. In 2010, OECD countries spent an average of 6.3% of their GDP on educational institutions; and OECD countries as a whole spent 6.5% of their combined GDP on educational institutions, taking into account both public and private sources of funds.

Expenditure on educational institutions (all levels combined) relative to GDP was greater than 6% in nearly half of the OECD and G20 countries with available data, and even above 7% in seven of them: Denmark (8.0%), Iceland (7.7%), Israel (7.4%), Korea (7.6%), New Zealand (7.3%), Norway (7.6%) and the United States (7.3%). At the other end of the spectrum, five countries spent less than 5% of their GDP on education, namely the Czech Republic (4.7%), Hungary (4.6%), Italy (4.7%), the Russian Federation (4.9%) and the Slovak Republic (4.6%).

Chart B2.2. Expenditure on educational institutions as a percentage of GDP (2010)
From public and private sources, by level of education and source of funds



1. Public expenditure only (for Switzerland, in tertiary education only; for Norway, in primary, secondary and post-secondary non-tertiary education only).
Countries are ranked in descending order of expenditure from both public and private sources on educational institutions in primary, secondary and post-secondary non-tertiary education.
Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B2.3. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932846899

Expenditure on educational institutions by level of education

An average of nearly two-thirds of the expenditure on education in all OECD countries is devoted to primary, secondary and post-secondary non-tertiary education, while a quarter goes to tertiary education, and nearly one-tenth to pre-primary education. Primary and lower secondary education receive on average 42% of the educational expenditure of all OECD countries. Expenditure on educational institutions depends on the age of the population. In most cases, countries with above-average expenditure on educational institutions relative to GDP are usually those with an above-average proportion of people whose age corresponds to primary and lower secondary education (Table B2.2 and see Indicator C1).

In all OECD and G20 countries with available data, the level of national resources devoted to primary, secondary and post-secondary non-tertiary education combined is the largest share of the total expenditure on educational institutions (compared with the share devoted to pre-primary and tertiary education). This share exceeds 60% in most countries, with only eight exceptions: Canada (59%), Chile (53%), Israel (57%), Japan (58%), Korea (56%), the Russian Federation (43%), Spain (59%) and the United States (55%). For primary, secondary and post-secondary non-tertiary education, expenditure as a percentage of GDP ranges from 3% or less in the Czech Republic (2.8%), Hungary (2.8%), Japan (3.0%), the Russian Federation (2.1%) and Turkey (2.5%), to more than 5% in New Zealand (5.1%) and Norway (5.1%).

Expenditure on primary and lower secondary education amounts to more than 1.6% of GDP in all countries, and 3% or more in Australia (3.4%), Brazil (3.5%), Denmark (3.4%), Iceland (3.6%), Ireland (3.5%), Mexico (3.1%), New Zealand (3.2%), Norway (3.5%), the United Kingdom (3.2%) and the United States (3.0%).

Every country except Denmark and Iceland spends less than 1% of GDP on pre-primary education. Nevertheless, data on pre-primary education should be analysed with care because there are large differences among countries in enrolment rates, the age at which pre-primary education begins, and the extent to which privately funded early childhood education is accounted for (see Indicator C1).

Expenditure on tertiary education amounts to more than 1.5% of GDP in more than half of all countries, and exceeds 2.5% in Canada (2.7%), Korea (2.6%) and the United States (2.8%). Three countries devote less than 1% of GDP to tertiary education, namely Brazil (0.9%), Hungary (0.8%) and the Slovak Republic (0.9%) (Table B2.2 and Chart B2.2).

Changes in overall spending on educational institutions between 2000 and 2010

The expansion in the number of students enrolled in upper secondary and tertiary education between 2000 and 2010 was accompanied in most countries by an increase in the financial investment at these levels.

Over the period 2000-10, in countries with comparable data, expenditure on educational institutions (all levels of education combined) and GDP increased (see Table X2.3). In Estonia, France and Israel, expenditure on education increased less than the GDP, leading to a decrease in expenditure as a proportion of GDP of up to 0.2 percentage point. In all other countries with comparable data, expenditure on educational institutions (all levels of education combined) increased at a faster rate than GDP, resulting in an increase in expenditure on educational institutions as a percentage of GDP (Chart B2.1). The increase was more than one percentage point in Brazil (from 3.5% to 5.6%), Denmark (from 6.6% to 7.9%), Ireland (from 4.4% to 6.4%), Korea (from 6.1% to 7.6%), Mexico (from 5.0% to 6.2%), the Netherlands (from 5.1% to 6.3%), the Russian Federation (from 2.9% to 4.9%), the United Kingdom (from 4.9% to 6.5%) and the United States (from 6.2% to 7.3%) (Table B2.1).

There were similar changes in expenditure on primary, secondary and post-secondary non-tertiary education combined, as well as on tertiary education.

Effect of the financial crisis on public expenditure on educational institutions between 2008 and 2010

The global economic crisis that began in 2008 had – and is still having – major adverse effects on the different sectors of the economy. With only 2009 and 2010 data, it is too early to assess the full impact of the crisis

on the funding of educational institutions, but its effects on the broader economy can already be observed. Box B2.1 provides additional information on how the crisis has affected education budgets.

Between 2008 and 2010, GDP (expressed in constant prices) grew in only 9 of the 30 countries with available data, and by more than 1% in seven countries: Australia, Israel, Korea, New Zealand, Poland, Sweden and Switzerland.

Box B2.1. Funding education in Europe: The impact of the economic crisis (Eurydice report)

Changes to education budgets from 2010 to 2012

In order to gain an overall picture of the most recent changes in education funding, information on education budgets adopted by European countries was collected by Eurydice for the years 2010, 2011 and 2012. **Please note that these data should be interpreted with some caution because they are based on budgetary data and not disbursed expenses as in Chapter B of *Education at a Glance 2013*.** However, these data reinforced the trend observed in Table B2.5 and tend to show that the cuts in education budgets observed in one-third of countries in 2010 will also begin to appear in more OECD countries over the next two years.

The effect of the financial crisis on education budgets is mainly seen in the OECD countries that had substantial general budget deficits in 2010 and 2011 (France, Greece, Iceland, Ireland, Poland, Portugal, the Slovak Republic, Slovenia, Spain and the United Kingdom). In 2011, the exceptions were France and Slovenia, where the budgets remained stable.

In total, in 2011 and/or 2012, cuts in education budgets were made in 15 OECD countries/regions for which data are available. Cuts of more than 5% were observed in Greece, Italy, Hungary, Portugal and the United Kingdom (Wales), whereas decreases of 1% to 5% were seen in Belgium (French Community), the Czech Republic, Estonia, France, Ireland, Poland, the Slovak Republic, Slovenia, Spain and the United Kingdom (Scotland). Nevertheless, seven countries/regions increased their education budgets in 2011 and/or 2012 between 1% and 5% in real terms (Austria, Belgium [French Community], Finland, Iceland, Ireland, the Slovak Republic and Sweden) even if cuts were made in many of those countries during one of the periods. Belgium (German Community), Luxembourg and Turkey had a rise in real terms of more than 5%.

Source: Eurydice (2012), *http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/147EN.pdf.*

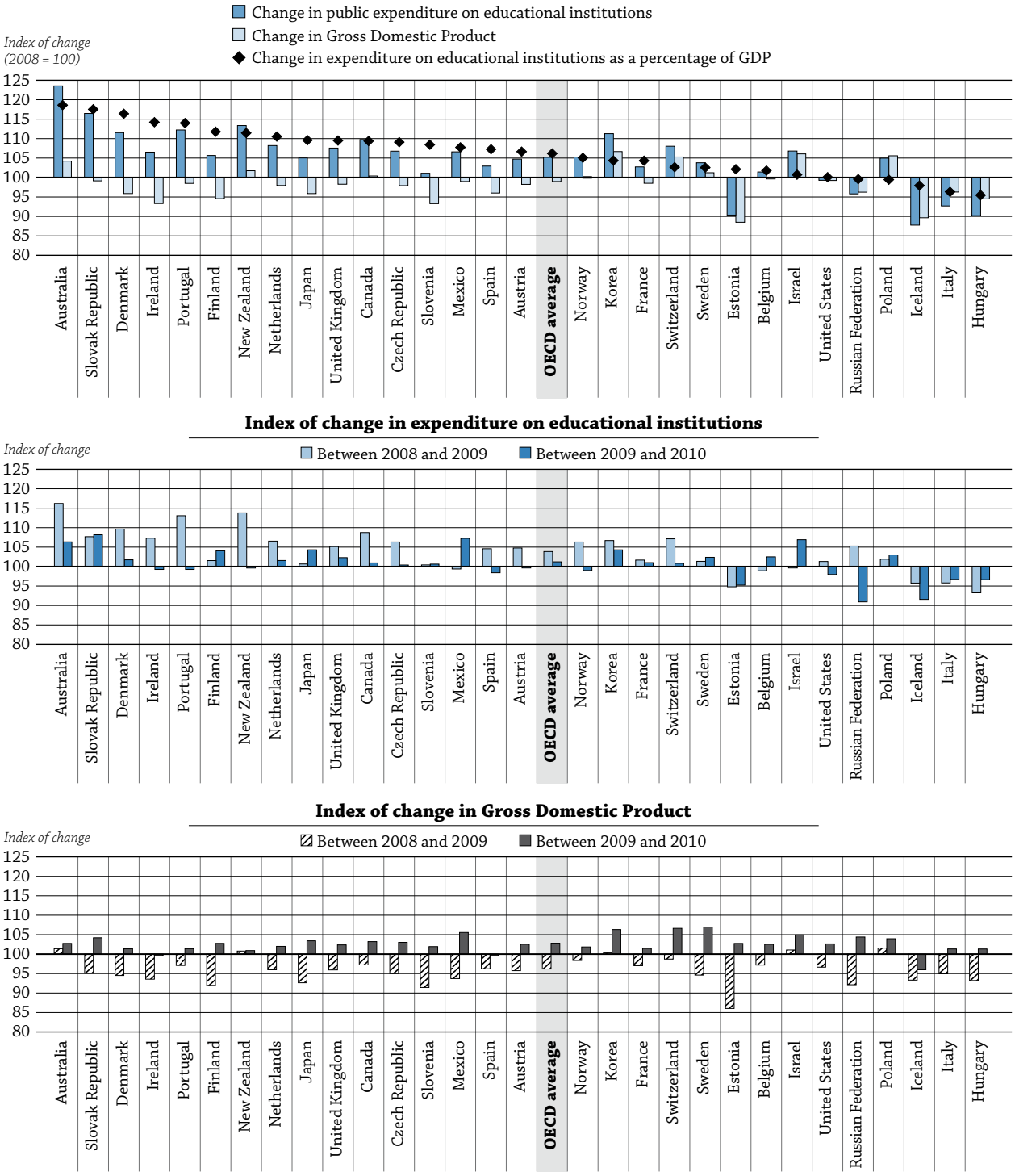
As more than three-quarters of education expenditure in most countries comes from public sources, how did the downturn in GDP growth affect public spending on education? The first available figures show that the education sector was relatively untouched by early budget cuts.

Since public budgets in most countries are approved many months before the funds are actually spent, there are certain built-in rigidities to the funding of education. Moreover, most governments try to protect education from dramatic reductions in public investment.

Among the 30 countries with available data for the 2008-10 period, only five countries cut (in real terms) public expenditure on educational institutions: Estonia (by 10%), Hungary (by 10%), Iceland (by 12%), Italy (by 7%) and the United States (by 1%). This translated into a decrease of expenditure on educational institutions as a percentage of GDP only in Hungary, Iceland and Italy, as the decrease in expenditure was larger than the decrease in GDP. In Estonia and the United States, the decrease in GDP was similar to or larger than the decrease in public expenditure on education, so public expenditure on educational institutions as a percentage of GDP remained constant (the United States) or increased slightly (Estonia) (Chart B2.3).

Chart B2.3. Impact of the economic crisis on public expenditure on education

Index of change between 2008 and 2010 in expenditure on educational institutions as a percentage of GDP, for all levels of education (2008=100, 2010 constant prices)



Countries are ranked in descending order of the change in expenditure on educational institutions as a percentage of GDP.

Source: OECD. Table B2.5. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846918

How to read this chart

The chart shows the change in public investment in education, and in the proportion of national income, between 2008 and 2010, the resulting change in public expenditure on educational institutions as a percentage of GDP, and changes in public spending on educational institutions and in GDP between 2008-09 and 2009-10.

The picture is different in other countries. While public expenditure on educational institutions increased, GDP decreased in most of these countries. As a result, the share of GDP devoted to education continued to rise between 2008 and 2010. An exception to this trend is Poland, where GDP also increased and at a faster rate than public expenditure on educational institutions, resulting in a decrease of public expenditure on educational institution as a percentage of GDP.

When the changes between 2008-09 and 2009-10 are analysed separately, however, the picture is less positive. GDP decreased between 2008 and 2009 in most of the 30 countries with available data (except Australia, Korea, Israel, New Zealand and Poland). While GDP continued to slip in Greece, Iceland, Ireland, Luxembourg and Spain between 2009 and 2010, it increased in the other countries, indicating at least a partial recovery in these countries during that period.

Meanwhile, public expenditure on educational institutions increased by an average of 4% in OECD countries between 2008 and 2009, and by more than 10% in Australia, New Zealand and Portugal. However, during the same period, seven countries reported cuts in public expenditure on educational institutions; of these, Estonia, Hungary, Iceland and Italy reported decreases of more than 4%.

While GDP rose in most countries between 2009 and 2010, public expenditure on educational institutions fell in one-third of OECD countries during that period. So while public expenditure continued to shrink in Estonia (by 4.8%), Hungary (by 3.4%), Iceland (by 8.4%) and Italy (by 3.3%) between 2009 and 2010, it was only during this period that the first impact of the financial crisis on education budgets was felt in most other OECD countries. Between 2009 and 2010 public expenditure on educational institutions decreased by 2% or less in Austria, Ireland, New Zealand, Norway, Portugal, Spain and the United States. Norway increased expenditure on educational institutions substantially in 2009 in an effort to offset the effects of the crisis, but this increase was not sustained in 2010. On average across OECD countries, public expenditure on educational institutions increased by only 1% between 2009 and 2010.

Expenditure on instruction, research and development, and ancillary services

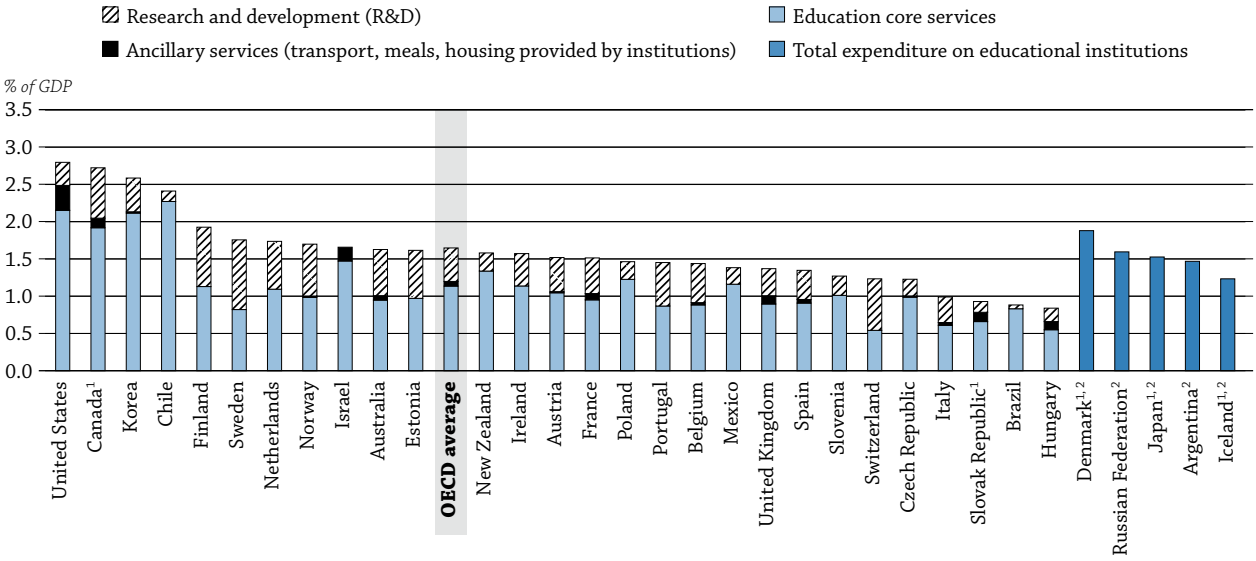
On average across OECD countries, 90% of all expenditure on primary, secondary and post-secondary non-tertiary education combined is devoted to core services. This share is significantly smaller at the tertiary level (an OECD average of 70%), because other services, particularly those related to research and development (R&D), can represent a large proportion of total spending on education.

At the tertiary level, the share of R&D expenditure as a percentage of GDP ranges from below 0.2% in Brazil (0.05%), Chile (0.14%), Hungary (0.18%) and the Slovak Republic (0.14%) to above 0.6% in Australia (0.62%), Canada (0.68%), Estonia (0.64%), Finland (0.80%), the Netherlands (0.64%), Norway (0.70%), Sweden (0.94%) and Switzerland (0.69%). These differences help to explain differences between countries in overall expenditure per tertiary student (Table B2.4 and Chart B2.4). For example, the high levels of R&D spending in the abovementioned countries imply that spending on educational institutions per student in these countries would be considerably lower if the R&D component were excluded (see Table B1.2).

In many OECD countries, schools and universities provide student welfare services, and in some cases, services for the general public. This expenditure on ancillary services is defrayed by the public sector and by fees paid by students and their families. Some 0.25% of GDP is spent on ancillary services at the primary, secondary and post-secondary non-tertiary levels of education combined, on average across OECD countries (Table B2.4). This proportion is more than 0.40% in Finland (0.43%), France (0.55%), Korea (0.46%), Sweden (0.42%) and the United Kingdom (0.71%).

Ancillary services are financed by private users more often at the tertiary level than at any other level. At the tertiary level, an average of 0.06% of GDP is devoted to ancillary services in OECD countries. This proportion is more than 0.1% in Canada (0.13%), Hungary (0.11%), Israel (0.19%), the Slovak Republic (0.13%), the United Kingdom (0.11%) and the United States (0.34%).

Chart B2.4. Expenditure on educational institutions for core services, R&D and ancillary services as a percentage of GDP, at the tertiary level of education (2010)



1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
2. Total expenditure at the tertiary level including expenditure on research and development (R&D).

Countries are ranked in descending order of total expenditure on educational institutions in tertiary institutions.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B2.4.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846937

Expenditure on educational institutions by source of funding

Education is funded from both public and private sources. Increased expenditure on educational institutions in response to enrolment growth and other factors implies a heavier financial burden for society as a whole. However, this burden does not fall entirely on public funding. On average, of the 6.5% of the combined GDP in the OECD area devoted to education, three-quarters (5.0%) come from public sources for all levels of education combined (Table B2.3). Public funds are the major source of funding for education in all countries and account for at least 60% (Chile) to nearly 98% (Finland and Sweden) of total expenditure. However, differences among countries in the breakdown of education expenditure by source of funding and by level of education are great (see Indicator B3).

Definitions

Ancillary services are services provided by educational institutions that are peripheral to the main education mission. The main component of ancillary services is student welfare services. In primary, secondary and post-secondary non-tertiary education, student welfare services include meals, school health services, and transportation to and from school. At the tertiary level, they include residence halls, dining halls and health care.

Core education services include all services that are directly related to instruction in educational institutions, including teachers, school buildings, teaching materials, books, and administration of schools.

Expenditure on R&D includes all expenditure on research performed at universities and other tertiary educational institutions, regardless of whether the research is financed from general institutional funds or through separate grants or contracts from public or private sponsors. The classification of expenditure is based on data collected from the institutions carrying out R&D, rather than on the sources of funds.

Private payments for instruction services/goods outside educational institutions include the education goods and services purchased outside the educational institutions. For example, families may purchase textbooks and materials themselves or seek private tutoring for their children.

Methodology

Data refer to the financial year 2010 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

OECD (2011), *Education at a Glance 2011: OECD Indicators*, OECD Publishing. *http://dx.doi.org/10.1787/eag-2011-en*

Indicator B2 Tables

Table B2.1	Expenditure on educational institutions as a percentage of GDP, by level of education (1995, 2000, 2005, 2010)	StatLink http://dx.doi.org/10.1787/888932849578
Table B2.2	Expenditure on educational institutions as a percentage of GDP, by level of education (2010)	StatLink http://dx.doi.org/10.1787/888932849597
Table B2.3	Expenditure on educational institutions as a percentage of GDP, by source of fund and level of education (2010)	StatLink http://dx.doi.org/10.1787/888932849616
Table B2.4	Expenditure on educational institutions as a percentage of GDP, by service category, as a percentage of GDP (2010)	StatLink http://dx.doi.org/10.1787/888932849635
Table B2.5	Change in public expenditure on educational institutions as a percentage of GDP (2008, 2009, 2010)	StatLink http://dx.doi.org/10.1787/888932849654

Table B2.1. Expenditure on educational institutions as a percentage of GDP, by level of education (1995, 2000, 2005, 2010)

From public and private sources, by year

		Primary, secondary and post-secondary non-tertiary education				Tertiary education				Total all levels of education			
		1995	2000	2005	2010	1995	2000	2005	2010	1995	2000	2005	2010
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	3.4	3.6	3.7	4.3	1.6	1.4	1.5	1.6	**5.0**	**5.2**	**5.3**	**6.1**
	Austria	4.2	3.9	3.7	3.6	1.2	1.1	1.3	1.5	**6.1**	**5.5**	**5.5**	**5.8**
	Belgium	m	4.1	4.1	4.4	m	1.3	1.2	1.4	**m**	**6.1**	**6.0**	**6.6**
	Canada[1, 2]	4.3	3.3	3.7	3.9	2.1	2.3	2.7	2.7	**6.7**	**5.9**	**6.5**	**6.6**
	Chile[3]	m	m	3.2	3.4	m	m	1.7	2.4	**m**	**m**	**5.4**	**6.4**
	Czech Republic	3.3	2.7	2.9	2.8	0.9	0.8	1.0	1.2	**4.8**	**4.0**	**4.5**	**4.7**
	Denmark[2]	4.0	4.1	4.5	4.8	1.6	1.6	1.7	1.9	**6.2**	**6.6**	**7.4**	**8.0**
	Estonia[4]	4.9	4.5	4.0	3.9	1.1	1.2	1.3	1.6	**6.7**	**6.2**	**5.8**	**6.0**
	Finland	4.0	3.6	3.9	4.1	1.9	1.7	1.7	1.9	**6.3**	**5.6**	**6.0**	**6.5**
	France	4.5	4.3	4.0	4.1	1.4	1.3	1.3	1.5	**6.6**	**6.4**	**6.0**	**6.3**
	Germany	3.4	3.3	3.2	m	1.1	1.1	1.1	m	**5.1**	**4.9**	**5.0**	**m**
	Greece[2]	2.0	2.7	2.8	m	0.6	0.8	1.5	m	**2.7**	**3.6**	**4.3**	**m**
	Hungary[4]	3.2	2.8	3.3	2.8	0.8	0.9	0.9	0.8	**4.8**	**4.4**	**5.1**	**4.6**
	Iceland	m	4.8	5.4	4.9	m	1.1	1.2	1.2	**m**	**7.1**	**8.0**	**7.7**
	Ireland	3.8	2.9	3.4	4.8	1.3	1.5	1.1	1.6	**5.2**	**4.4**	**4.5**	**6.4**
	Israel	4.6	4.3	4.1	4.3	1.7	1.9	1.9	1.7	**7.8**	**7.7**	**7.5**	**7.4**
	Italy	3.5	3.1	3.1	3.2	0.7	0.9	0.9	1.0	**4.6**	**4.5**	**4.4**	**4.7**
	Japan[2]	3.1	3.0	2.9	3.0	1.3	1.4	1.4	1.5	**4.9**	**5.0**	**4.9**	**5.1**
	Korea	m	3.5	4.1	4.2	m	2.2	2.3	2.6	**m**	**6.1**	**6.7**	**7.6**
	Luxembourg	m	m	3.7	3.5	m	m	m	m	**m**	**m**	**m**	**m**
	Mexico	3.7	3.5	4.0	4.0	1.0	1.0	1.2	1.4	**5.1**	**5.0**	**5.9**	**6.2**
	Netherlands	3.4	3.4	3.8	4.1	1.6	1.4	1.5	1.7	**5.4**	**5.1**	**5.8**	**6.3**
	New Zealand[4]	m	m	4.6	5.1	m	m	1.5	1.6	**m**	**m**	**6.5**	**7.3**
	Norway[4]	5.0	5.0	5.1	5.1	1.9	1.6	1.7	1.7	**6.9**	**6.8**	**7.5**	**7.6**
	Poland	3.6	3.9	3.7	3.7	0.8	1.1	1.6	1.5	**5.2**	**5.6**	**5.9**	**5.8**
	Portugal	3.5	3.7	3.7	3.9	0.9	1.0	1.3	1.5	**4.9**	**5.2**	**5.5**	**5.8**
	Slovak Republic[2]	3.1	2.7	2.9	3.1	0.7	0.8	0.9	0.9	**4.6**	**4.1**	**4.4**	**4.6**
	Slovenia	m	m	4.1	3.9	m	m	1.3	1.3	**m**	**m**	**6.0**	**5.9**
	Spain	3.8	3.2	2.9	3.3	1.0	1.1	1.1	1.3	**5.3**	**4.8**	**4.6**	**5.6**
	Sweden	4.1	4.2	4.2	4.0	1.5	1.6	1.6	1.8	**6.0**	**6.3**	**6.4**	**6.5**
	Switzerland[4]	3.8	4.0	4.2	4.0	1.1	1.1	1.4	1.3	**5.2**	**5.4**	**5.9**	**5.6**
	Turkey[4]	1.2	1.8	m	2.5	0.5	0.8	m	m	**1.7**	**2.5**	**m**	**m**
	United Kingdom	3.6	3.6	4.4	4.8	1.1	1.0	1.3	1.4	**5.2**	**4.9**	**5.9**	**6.5**
	United States	3.6	3.7	3.8	4.0	2.2	2.2	2.4	2.8	**6.2**	**6.2**	**6.6**	**7.3**
	OECD average	3.6	3.6	3.8	3.9	1.2	1.3	1.5	1.6	**5.4**	**5.4**	**5.8**	**6.3**
	OECD total	3.6	3.5	3.7	3.8	1.6	1.6	1.8	2.1	**5.6**	**5.6**	**6.0**	**6.5**
	EU21 average	3.7	3.5	3.6	3.8	1.1	1.1	1.3	1.4	**5.3**	**5.2**	**5.5**	**5.9**
	OECD mean for countries with 1995, 2000, 2005 and 2010 data (25 countries)	3.8	3.6	3.7	3.9	1.3	1.3	1.5	1.6	**5.7**	**5.5**	**5.7**	**6.1**
Other G20	Argentina	m	m	m	4.7	m	m	m	1.5	**m**	**m**	**m**	**6.8**
	Brazil[4]	2.6	2.4	3.2	4.3	0.7	0.7	0.8	0.9	**3.7**	**3.5**	**4.4**	**5.6**
	China	m	m	m	m	m	m	m	m	**m**	**m**	**m**	**m**
	India	m	m	m	m	m	m	m	m	**m**	**m**	**m**	**m**
	Indonesia	m	m	m	m	m	m	m	m	**m**	**m**	**m**	**m**
	Russian Federation[4]	m	1.7	1.5	2.1	m	0.5	0.6	1.6	**m**	**2.9**	**2.9**	**4.9**
	Saudi Arabia	m	m	m	m	m	m	m	m	**m**	**m**	**m**	**m**
	South Africa	m	m	m	m	m	m	m	m	**m**	**m**	**m**	**m**
	G20 average	m	m	m	m	m	m	m	m	**m**	**m**	**m**	**m**

1. Year of reference 2009 instead of 2010.
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
3. Year of reference 2011 instead of 2010. Year of reference 2006 instead of 2005.
4. Public expenditure only (for Switzerland, in tertiary education only; for Norway, in primary, secondary and post-secondary non-tertiary education only; for Estonia, New Zealand and the Russian Federation, data available for 1995 and 2000 only).

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849578

B2

Table B2.2. Expenditure on educational institutions as a percentage of GDP, by level of education (2010)

From public and private sources of funds [1]

		Pre-primary education (for children aged 3 and older)	Primary, secondary and post-secondary non-tertiary education				Tertiary education			All levels of education combined (including undistributed programmes)
			All primary, secondary and post-secondary non-tertiary education	Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary education	All tertiary education	Tertiary-type B education	Tertiary-type A education and advanced research programmes	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	0.1	4.3	3.4	0.8	0.1	1.6	0.2	1.5	**6.1**
	Austria	0.6	3.6	2.3	1.3	n	1.5	n	1.5	**5.8**
	Belgium[2]	0.6	4.4	1.6	2.8	x(4)	1.4	x(6)	x(6)	**6.6**
	Canada[3]	x(3)	3.9	2.3	1.6	x(7)	2.7	0.9	1.8	**6.6**
	Chile[4]	0.6	3.4	2.2	1.2	a	2.4	0.6	1.8	**6.4**
	Czech Republic	0.5	2.8	1.7	1.1	n	1.2	n	1.2	**4.7**
	Denmark	1.1	4.8	3.4	1.4	x(4, 6)	1.9	x(6)	x(6)	**8.0**
	Estonia	0.5	3.9	2.3	1.3	0.3	1.6	0.6	1.0	**6.0**
	Finland	0.4	4.1	2.5	1.6	x(4)	1.9	n	1.9	**6.5**
	France	0.7	4.1	2.6	1.4	n	1.5	0.3	1.2	**6.3**
	Germany	m	m	m	m	m	m	m	m	**m**
	Greece	m	m	m	m	m	m	m	m	**m**
	Hungary[5]	0.7	2.8	1.7	1.0	0.1	0.8	n	0.8	**4.6**
	Iceland	1.0	4.9	3.6	1.4	x(4)	1.2	x(6)	1.2	**7.7**
	Ireland	x(9)	4.8	3.5	1.0	0.3	1.6	x(6)	x(6)	**6.4**
	Israel	0.8	4.3	2.5	1.8	n	1.7	0.3	1.4	**7.4**
	Italy	0.5	3.2	1.9	1.2	0.1	1.0	n	1.0	**4.7**
	Japan	0.2	3.0	2.1	0.8	x(4, 6)	1.5	0.2	1.3	**5.1**
	Korea	0.3	4.2	2.8	1.5	a	2.6	0.3	2.3	**7.6**
	Luxembourg	0.8	3.5	2.6	0.9	n	m	m	m	**m**
	Mexico	0.6	4.0	3.1	0.9	a	1.4	x(6)	x(6)	**6.2**
	Netherlands	0.4	4.1	2.8	1.3	n	1.7	n	1.7	**6.3**
	New Zealand	0.6	5.1	3.2	1.6	0.2	1.6	0.3	1.3	**7.3**
	Norway[5]	0.5	5.1	3.5	1.6	x(4)	1.7	x(6)	x(6)	**7.6**
	Poland	0.7	3.7	2.6	1.1	n	1.5	n	1.5	**5.8**
	Portugal	0.4	3.9	2.7	1.2	m	1.5	x(6)	x(6)	**5.8**
	Slovak Republic	0.5	3.1	2.0	1.0	x(4)	0.9	x(4)	0.9	**4.6**
	Slovenia	0.7	3.9	2.7	1.2	x(4)	1.3	x(6)	x(6)	**5.9**
	Spain	0.9	3.3	2.5	0.8	a	1.3	0.2	1.1	**5.6**
	Sweden	0.7	4.0	2.6	1.3	n	1.8	x(6)	x(6)	**6.5**
	Switzerland[5]	0.2	4.0	2.6	1.5	x(4)	1.3	n	1.3	**5.6**
	Turkey[5]	n	2.5	1.7	0.8	a	m	m	m	**m**
	United Kingdom	0.3	4.8	3.2	1.6	a	1.4	x(6)	x(6)	**6.5**
	United States	0.5	4.0	3.0	1.1	m	2.8	x(6)	x(6)	**7.3**
	OECD average	0.6	3.9	2.6	1.3	n	1.6	0.2	1.4	**6.3**
	OECD total	0.5	3.8	2.7	1.1	n	2.1	0.2	1.4	**6.5**
	EU21 average	0.6	3.8	2.5	1.3	n	1.4	0.1	1.3	**5.9**
Other G20	Argentina	0.6	4.7	3.6	1.0	a	1.5	0.4	1.0	**6.8**
	Brazil[5]	0.4	4.3	3.5	0.8	a	0.9	x(6)	x(6)	**5.6**
	China	m	m	m	m	m	m	m	m	**m**
	India	m	m	m	m	m	m	m	m	**m**
	Indonesia	m	m	m	m	a	m	m	m	**m**
	Russian Federation	0.8	2.1	x(2)	x(2)	x(2)	1.6	0.2	1.4	**4.9**
	Saudi Arabia	m	m	m	m	m	m	m	m	**m**
	South Africa	m	m	m	m	m	m	m	m	**m**
	G20 average	m	m	m	m	m	m	m	m	**m**

1. Including international sources.
2. Column 3 only refers to primary education and column 4 refers to all secondary education.
3. Year of reference 2009.
4. Year of reference 2011.
5. Public expenditure only (for Switzerland, in tertiary education only; for Norway, in primary, secondary and post-secondary non-tertiary education only).

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table B2.3. Expenditure on educational institutions as a percentage of GDP, by source of fund and level of education (2010)

From public and private sources of funds

		Pre-primary education			Primary, secondary and post-secondary non-tertiary education			Tertiary education			Total all levels of education		
		Public[1]	Private[2]	Total	Public[1]	Private[2]	Total	Public[1]	Private[2]	Total	Public[1]	Private[2]	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	0.06	0.05	**0.11**	3.7	0.6	**4.3**	0.8	0.9	**1.6**	4.6	1.5	**6.1**
	Austria	0.60	n.	**0.61**	3.5	0.1	**3.6**	1.5	0.1	**1.5**	5.6	0.2	**5.8**
	Belgium	0.62	0.02	**0.64**	4.3	0.1	**4.4**	1.4	0.1	**1.4**	6.4	0.2	**6.6**
	Canada[3, 4]	x(4)	x(5)	**x(6)**	3.4	0.4	**3.9**	1.5	1.2	**2.7**	5.0	1.6	**6.6**
	Chile[5]	0.53	0.11	**0.64**	2.7	0.7	**3.4**	0.7	1.7	**2.4**	3.9	2.5	**6.4**
	Czech Republic	0.47	0.04	**0.51**	2.6	0.3	**2.8**	1.0	0.2	**1.2**	4.1	0.6	**4.7**
	Denmark[4]	0.93	0.14	**1.08**	4.7	0.1	**4.8**	1.8	0.1	**1.9**	7.6	0.4	**8.0**
	Estonia	0.45	0.01	**0.45**	3.9	0.1	**3.9**	1.3	0.3	**1.6**	5.6	0.4	**6.0**
	Finland	0.40	0.04	**0.44**	4.1	n	**4.1**	1.9	0.1	**1.9**	6.4	0.1	**6.5**
	France	0.68	0.05	**0.72**	3.8	0.3	**4.1**	1.3	0.2	**1.5**	5.8	0.5	**6.3**
	Germany	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	Greece	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	Hungary	0.70	m	**m**	2.8	m	**m**	0.8	m	**m**	4.6	m	**m**
	Iceland	0.73	0.23	**0.96**	4.7	0.2	**4.9**	1.1	0.1	**1.2**	7.0	0.7	**7.7**
	Ireland	m	m	**m**	4.6	0.2	**4.8**	1.3	0.3	**1.6**	6.0	0.5	**6.4**
	Israel	0.66	0.18	**0.84**	4.0	0.3	**4.3**	1.0	0.7	**1.7**	5.9	1.5	**7.4**
	Italy	0.44	0.04	**0.47**	3.1	0.1	**3.2**	0.8	0.2	**1.0**	4.3	0.4	**4.7**
	Japan[4]	0.10	0.12	**0.22**	2.8	0.2	**3.0**	0.5	1.0	**1.5**	3.6	1.5	**5.1**
	Korea	0.15	0.12	**0.27**	3.4	0.9	**4.2**	0.7	1.9	**2.6**	4.8	2.8	**7.6**
	Luxembourg	0.75	0.01	**0.76**	3.4	0.1	**3.5**	m	m	**m**	m	m	**m**
	Mexico	0.54	0.10	**0.64**	3.4	0.6	**4.0**	1.0	0.4	**1.4**	5.1	1.1	**6.2**
	Netherlands	0.41	0.01	**0.42**	3.7	0.4	**4.1**	1.3	0.5	**1.7**	5.4	0.9	**6.3**
	New Zealand	0.53	0.09	**0.62**	4.4	0.6	**5.1**	1.0	0.5	**1.6**	6.0	1.3	**7.3**
	Norway	0.43	0.08	**0.51**	5.1	m	**m**	1.6	0.1	**1.7**	7.5	m	**m**
	Poland	0.52	0.14	**0.66**	3.4	0.2	**3.7**	1.0	0.4	**1.5**	5.0	0.8	**5.8**
	Portugal	0.41	n	**0.41**	3.9	n	**3.9**	1.0	0.4	**1.5**	5.4	0.4	**5.8**
	Slovak Republic[4]	0.40	0.08	**0.48**	2.8	0.3	**3.1**	0.7	0.3	**0.9**	4.0	0.6	**4.6**
	Slovenia	0.58	0.15	**0.74**	3.6	0.3	**3.9**	1.1	0.2	**1.3**	5.2	0.7	**5.9**
	Spain	0.69	0.25	**0.94**	3.0	0.3	**3.3**	1.1	0.3	**1.3**	4.8	0.8	**5.6**
	Sweden	0.71	n	**0.71**	4.0	n	**4.0**	1.6	0.2	**1.8**	6.3	0.2	**6.5**
	Switzerland	0.19	m	**m**	3.6	0.5	**4.0**	1.3	m	**m**	5.2	m	**m**
	Turkey	0.04	m	**m**	2.5	m	**m**	m	m	**m**	m	m	**m**
	United Kingdom	0.32	n	**0.32**	4.8	n	**4.8**	0.7	0.6	**1.4**	5.9	0.6	**6.5**
	United States	0.36	0.15	**0.50**	3.7	0.3	**4.0**	1.0	1.8	**2.8**	5.1	2.2	**7.3**
	OECD average	0.47	0.08	**0.58**	3.7	0.3	**4.0**	1.1	0.5	**1.7**	5.4	0.9	**6.3**
	OECD total	0.37	0.11	**0.49**	3.5	0.3	**3.9**	1.0	1.1	**2.1**	5.0	1.5	**6.5**
	EU21 average	0.56	0.06	**0.61**	3.7	0.2	**3.9**	1.2	0.3	**1.5**	5.5	0.5	**6.0**
Other G20	Argentina	0.43	0.19	**0.62**	4.2	0.5	**4.7**	1.1	0.3	**1.5**	5.8	1.0	**6.8**
	Brazil	0.44	m	**m**	4.3	m	**m**	0.9	m	**m**	5.6	m	**m**
	China	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	India	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	Indonesia	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	Russian Federation	0.71	0.10	**0.81**	2.0	0.1	**2.1**	1.0	0.6	**1.6**	4.1	0.8	**4.9**
	Saudi Arabia	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	South Africa	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**
	G20 average	m	m	**m**	m	m	**m**	m	m	**m**	m	m	**m**

1. Including public subsidies to households attributable for educational institutions, and direct expenditure on educational institutions from international sources.
2. Net of public subsidies attributable for educational institutions.
3. Year of reference 2009.
4. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
5. Year of reference 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table B2.4. Expenditure on educational institutions, by service category, as a percentage of GDP (2010)

Expenditure on instruction, R&D and ancillary services in educational institutions and private expenditure on educational goods purchased outside educational institutions

		Primary, secondary and post-secondary non-tertiary education				Tertiary education				
		Expenditure on educational institutions			Private payments on instructional services/ goods outside educational institutions	Expenditure on educational institutions				Private payments on instruction services/ goods outside educational institutions
		Core education services	Ancillary services (transport, meals, housing provided by institutions)	Total		Core education services	Ancillary services (transport, meals, housing provided by institutions)	Research & development at tertiary institutions	Total	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	4.26	0.09	**4.35**	0.09	0.95	0.06	0.62	**1.63**	0.13
	Austria	3.47	0.17	**3.64**	m	1.05	0.01	0.46	**1.52**	m
	Belgium	4.28	0.12	**4.40**	0.15	0.88	0.03	0.52	**1.44**	0.22
	Canada[1, 2, 3]	3.66	0.20	**3.86**	m	1.92	0.13	0.68	**2.72**	0.12
	Chile[4]	3.16	0.23	**3.39**	m	2.27	x(5)	0.14	**2.41**	m
	Czech Republic	2.60	0.22	**2.81**	0.05	0.99	0.01	0.22	**1.23**	0.03
	Denmark[2]	x(3)	x(3)	**4.80**	m	x(8)	a	x(8)	**1.88**	m
	Estonia	x(3)	x(3)	**3.91**	m	0.97	x(5)	0.64	**1.62**	m
	Finland	3.71	0.43	**4.15**	m	1.13	a	0.80	**1.93**	m
	France	3.52	0.55	**4.07**	0.17	0.95	0.08	0.48	**1.51**	0.07
	Germany	m	m	**m**	m	m	m	m	**m**	m
	Greece	m	m	**m**	m	m	m	m	**m**	m
	Hungary[3]	2.50	0.30	**2.80**	m	0.55	0.11	0.18	**0.84**	m
	Iceland	x(3)	x(3)	**4.92**	n	x(8)	x(8)	x(8)	**1.23**	n
	Ireland[3]	4.69	0.08	**4.77**	0.03	1.14	m	0.43	**1.57**	m
	Israel	4.05	0.21	**4.26**	0.29	1.47	0.19	m	**1.66**	n
	Italy[3]	3.12	0.11	**3.23**	0.41	0.61	0.04	0.34	**0.99**	0.14
	Japan[2]	x(3)	x(3)	**2.96**	0.79	x(8)	x(8)	x(8)	**1.53**	0.04
	Korea	3.77	0.46	**4.24**	m	2.12	0.02	0.45	**2.59**	m
	Luxembourg	3.26	0.24	**3.50**	0.06	m	m	m	**m**	m
	Mexico	x(3)	x(3)	**3.99**	0.19	1.16	m	0.22	**1.38**	0.05
	Netherlands	4.10	n	**4.10**	0.15	1.09	n	0.64	**1.74**	0.07
	New Zealand	x(3)	x(3)	**5.08**	0.03	1.34	x(8)	0.24	**1.58**	m
	Norway	x(3)	x(3)	**5.09**	m	0.99	0.02	0.70	**1.70**	m
	Poland[3]	3.63	0.03	**3.66**	0.22	1.23	n	0.24	**1.46**	0.04
	Portugal[3]	3.83	0.07	**3.89**	0.11	0.87	x(8)	0.58	**1.45**	m
	Slovak Republic[2]	2.69	0.39	**3.08**	0.32	0.66	0.13	0.14	**0.93**	0.20
	Slovenia	3.65	0.26	**3.91**	m	1.01	n	0.26	**1.27**	m
	Spain	3.13	0.17	**3.30**	m	0.91	0.05	0.39	**1.35**	m
	Sweden	3.57	0.42	**3.98**	m	0.82	a	0.94	**1.76**	m
	Switzerland[3]	x(3)	x(3)	**4.05**	m	0.54	x(8)	0.69	**1.23**	m
	Turkey	2.41	0.10	**2.51**	m	x(8)	x(8)	m	**m**	m
	United Kingdom	4.08	0.71	**4.78**	m	0.80	0.11	0.46	**1.37**	0.11
	United States	3.71	0.32	**4.02**	a	2.15	0.34	0.31	**2.80**	a
	OECD average	3.53	0.24	**3.92**	0.18	1.13	0.06	0.45	**1.61**	0.08
	EU21 average	3.52	0.25	**3.83**	0.17	0.92	0.04	0.45	**1.44**	0.11
Other G20	Argentina	x(3)	x(3)	**4.67**	m	x(8)	x(8)	x(8)	**1.47**	m
	Brazil[3]	x(3)	x(3)	**4.33**	m	0.83	x(5)	0.05	**0.88**	m
	China	m	m	**m**	m	m	m	m	**m**	m
	India	m	m	**m**	m	m	m	m	**m**	m
	Indonesia	m	m	**m**	m	m	m	m	**m**	m
	Russian Federation	x(3)	x(3)	**2.11**	m	x(8)	x(8)	x(8)	**1.60**	m
	Saudi Arabia	m	m	**m**	m	m	m	m	**m**	m
	South Africa	m	m	**m**	m	m	m	m	**m**	m
	G20 average	m	m	**m**	m	m	m	m	**m**	m

1. Year of reference 2009.
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
3. Public institutions only (for Canada, in tertiary education only; for Italy, except in tertiary education).
4. Year of reference 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table B2.5. Change in public expenditure on educational institutions as a percentage of GDP (2008, 2009, 2010)

Index of change between 2008 and 2010 in public expenditure on educational institutions as a percentage of GDP, for all levels of education (2010 constant prices)

		Change in public[1] expenditure on educational institutions for all levels of education			Change in Gross Domestic Product			Change in expenditure on educational institutions in percentage of GDP		
		Between 2008 and 2009 (2008=100)	Between 2009 and 2010 (2009=100)	Between 2008 and 2010 (2008=100)	Between 2008 and 2009 (2008=100)	Between 2009 and 2010 (2009=100)	Between 2008 and 2010 (2008=100)	Between 2008 and 2009 (2008=100)	Between 2009 and 2010 (2009=100)	Between 2008 and 2010 (2008=100)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	116	106	**124**	101	103	**104**	115	104	**119**
	Austria	105	100	**105**	96	103	**98**	109	97	**107**
	Belgium	99	102	**101**	97	103	**100**	102	100	**102**
	Canada	109	101	**110**	97	103	**100**	112	98	**109**
	Chile	m	m	**m**	m	m	**m**	m	m	**m**
	Czech Republic	106	100	**107**	95	103	**98**	112	97	**109**
	Denmark	110	102	**112**	95	101	**96**	116	100	**116**
	Estonia	95	95	**90**	86	103	**88**	110	93	**102**
	Finland	102	104	**106**	92	103	**95**	110	101	**112**
	France	102	101	**103**	97	101	**98**	105	100	**104**
	Germany	104	m	**m**	95	104	**99**	110	m	**m**
	Greece	m	m	**m**	97	95	**92**	m	m	**m**
	Hungary	93	97	**90**	93	101	**94**	100	95	**95**
	Iceland	96	92	**88**	93	96	**90**	103	95	**98**
	Ireland	107	99	**107**	94	100	**93**	115	100	**114**
	Israel	100	107	**107**	101	105	**106**	99	102	**101**
	Italy	96	97	**93**	95	101	**96**	101	95	**96**
	Japan	101	104	**105**	93	103	**96**	109	101	**110**
	Korea	107	104	**111**	100	106	**107**	106	98	**104**
	Luxembourg	m	m	**m**	94	99	**94**	m	m	**m**
	Mexico	99	107	**107**	94	106	**99**	106	102	**108**
	Netherlands	107	102	**108**	96	102	**98**	111	100	**111**
	New Zealand	114	100	**113**	101	101	**102**	113	99	**111**
	Norway	106	99	**105**	98	102	**100**	108	97	**105**
	Poland	102	103	**105**	102	104	**106**	100	99	**99**
	Portugal	113	99	**112**	97	101	**98**	116	98	**114**
	Slovak Republic	108	108	**116**	95	104	**99**	113	104	**118**
	Slovenia	100	101	**101**	91	102	**93**	110	99	**108**
	Spain	105	98	**103**	96	100	**96**	109	99	**107**
	Sweden	101	102	**104**	95	107	**101**	107	96	**103**
	Switzerland	107	101	**108**	99	107	**105**	109	95	**103**
	Turkey	m	m	**m**	95	109	**104**	m	m	**m**
	United Kingdom	105	102	**108**	96	102	**98**	110	100	**110**
	United States	101	98	**99**	97	103	**99**	105	95	**100**
	OECD average	104	101	**105**	96	103	**98**	108	99	**107**
	EU21 average	103	101	**104**	95	102	**97**	109	98	**107**
Other G20	Argentina	m	m	**m**	m	m	**m**	m	m	**m**
	Brazil	102	111	**113**	m	m	**m**	m	m	**m**
	China	m	m	**m**	m	m	**m**	m	m	**m**
	India	m	m	**m**	m	m	**m**	m	m	**m**
	Indonesia	m	m	**m**	m	m	**m**	m	m	**m**
	Russian Federation	105	91	**96**	92	104	**96**	114	87	**100**
	Saudi Arabia	m	m	**m**	m	m	**m**	m	m	**m**
	South Africa	m	m	**m**	m	m	**m**	m	m	**m**
	G20 average	m	m	**m**	m	m	**m**	m	m	**m**

1. Excluding subsidies attributable to payments to educational institutions received from public sources.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

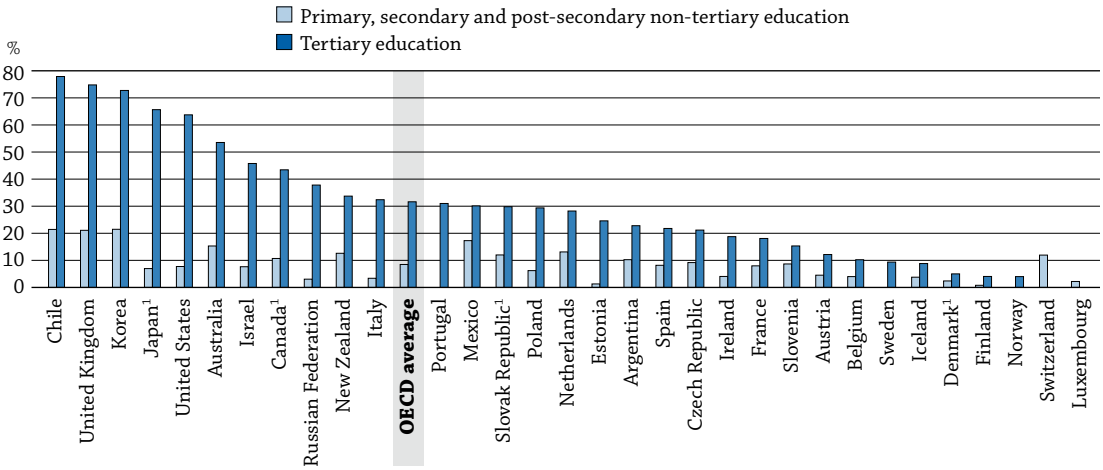
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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HOW MUCH PUBLIC AND PRIVATE INVESTMENT IN EDUCATION IS THERE?

- Public funding accounts for 84% of all funds for educational institutions, on average across OECD countries.
- Some 92% of the funds for primary, secondary and post-secondary non-tertiary educational institutions come from public sources, on average across OECD countries; only in Chile, Korea and the United Kingdom is this share less than 80%.
- Tertiary institutions and, to a lesser extent, pre-primary institutions obtain the largest proportions of funds from private sources: 32% and 18%, respectively. Public funding on educational institutions, for all levels combined, increased between 2000 and 2010 in all countries for which comparable data are available. However, with more households sharing the cost of education, private funding increased at an even greater rate in more than three-quarters of countries.

Chart B3.1. Share of private expenditure on educational institutions (2010)



1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Countries are ranked in descending order of the share of private expenditure on educational institutions for tertiary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Tables B3.2a and b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932846956

How to read this chart

The chart shows private spending on educational institutions as a percentage of total spending on educational institutions. This includes all money transferred to educational institutions from private sources, including public funding via subsidies to households, private fees for education services, or other private spending (e.g. on room and board) that goes through the educational institution.

Context

More people are participating in a wider range of educational programmes offered by increasing numbers of providers than ever before. As a result, the question of who should support an individual's efforts to acquire more education – governments or the individuals themselves – is becoming increasingly important. In the current economic environment, many governments are finding it difficult to provide the necessary resources to support the increased demand for education in their countries through public funds alone. In addition, some policy makers assert that those who benefit the most from education – the individuals who receive it – should bear at least some of the costs. While public funding still represents a very large part of countries' investment in education, the role of private sources of funding is becoming increasingly prominent.

The balance between public and private financing of education is an important policy issue in many OECD countries, especially at the pre-primary and tertiary levels of education, for which full or nearly full public funding is less common. At these levels, private funding comes mainly from households, raising concerns about equity of access to education. The debate is particularly intense with respect to funding for tertiary education. Some stakeholders are concerned that the balance between public and private funding should not become so tilted as to discourage potential students from entering tertiary education. Others believe that countries should significantly increase public support to students, while still others support efforts to increase the amount of funding to tertiary education provided by private enterprises. By contrast, primary, secondary and post-secondary non-tertiary education, which is mainly compulsory, is usually conceived as a public good and is thus mainly financed by public funds.

Other findings

- Public funds are mainly allocated to public institutions, but also to private institutions to varying degrees. **For all levels of education combined, public expenditure on public institutions, per student, is nearly twice the level of public expenditure on private institutions, on average across OECD countries.** However, the ratio varies from less than twice for primary, secondary and post-secondary non-tertiary education (1.7) and at the pre-primary level (1.8), to three times (3.0) at the tertiary level.

- **The countries with the lowest amounts of public expenditure per student in public and private tertiary institutions are also those with the fewest students enrolled in public tertiary institutions**, except for Poland.

- **In most countries for which data are available, individual households account for most of the private expenditure on tertiary education.** Austria, Belgium, Canada, the Czech Republic, the Slovak Republic and Sweden are the exceptions, where private expenditure from entities other than households (e.g. private businesses and non-profit organisations) is more significant than private expenditure from households, mainly because tuition fees charged by tertiary institutions are low or negligible in these countries, with the exception of Canada.

Trends

Between 1995 and 2010, the share of public funding for tertiary institutions decreased from 77% in 1995, to 76% in 2000, to 71% in 2005 and then to 68% in 2010 (on average across the OECD countries for which trend data are available for all years) (Table B3.3). This trend is mainly influenced by non-European countries, where tuition fees are generally higher and enterprises participate more actively in providing grants to finance tertiary institutions.

Between 2000 and 2010, the share of private funding for tertiary education increased in more than three-quarters of the countries for which comparable data are available (20 out of 24 countries). The share increased by seven percentage points, on average, and by more than nine percentage points in Italy, Mexico, Portugal, the Slovak Republic and the United Kingdom (Table B3.2b). The share of private funding also rose at the primary, secondary, post-secondary non-tertiary levels and at all levels of education combined, on average across OECD countries, most significantly in the Slovak Republic and the United Kingdom (Table B3.2a).

Analysis

Public and private expenditure on educational institutions

Educational institutions in OECD countries are mainly publicly funded, although there is a substantial – and growing – level of private funding at the tertiary level. On average across OECD countries, 84% of all funds for educational institutions come directly from public sources; 16% come from private sources (Table B3.1).

However, the share of public and private funding varies widely among countries. Comparing expenditure on all levels of education, the share of private funds exceeds 19% in Canada, Israel and Mexico, 25% in Australia, Japan, the United Kingdom and the United States, and 35% in Chile and Korea. By contrast, less than 3% of expenditure on education comes from private sources in Finland (2.4%) and Sweden (2.5%) (Table B3.1).

Private spending on education for all levels of education combined increased between 2000 and 2010; and in most countries, private expenditure as a percentage of total expenditure on educational institutions also increased. As a result, the share of public funding for educational institutions decreased by at least 4 percentage points in Canada, Italy, Mexico and Portugal and by more than 10 percentage points in the Slovak Republic and the United Kingdom. These decreases are mainly due to significant increases in the level of private expenditure during this period. For example, in Portugal and the United Kingdom, the tuition fees charged by tertiary educational institutions increased substantially (Table B3.1).

However, decreases in the public share of total expenditure on educational institutions (and consequent increases in the share of private expenditure) have not generally gone hand-in-hand with cuts (in real terms) in public expenditure on educational institutions (Table B3.1). In fact, many of the OECD countries with the greatest growth in private spending have also had the largest increases in public funding. This indicates that an increase in private spending tends to complement public investment, rather than replace it. However, the share of private expenditure on educational institutions varies across countries and by level of education.

Public and private expenditure on primary, secondary and post-secondary non-tertiary educational institutions

Public funding dominates primary, secondary and post-secondary non-tertiary education in all countries. Less than 10% of funding for these levels of education comes from private sources, except in Australia, Canada, Chile, Korea, Mexico, the Netherlands, New Zealand, the Slovak Republic, Switzerland and the United Kingdom (Table B3.2a and Chart B3.2). In most countries, the largest share of private expenditure at these levels comes from households and goes mainly towards tuition. In the Netherlands and Switzerland, however, most private expenditure takes the form of contributions from the business sector to the dual system of apprenticeship in upper secondary and post-secondary non-tertiary education (see Box B3.1 in *Education at a Glance 2011*).

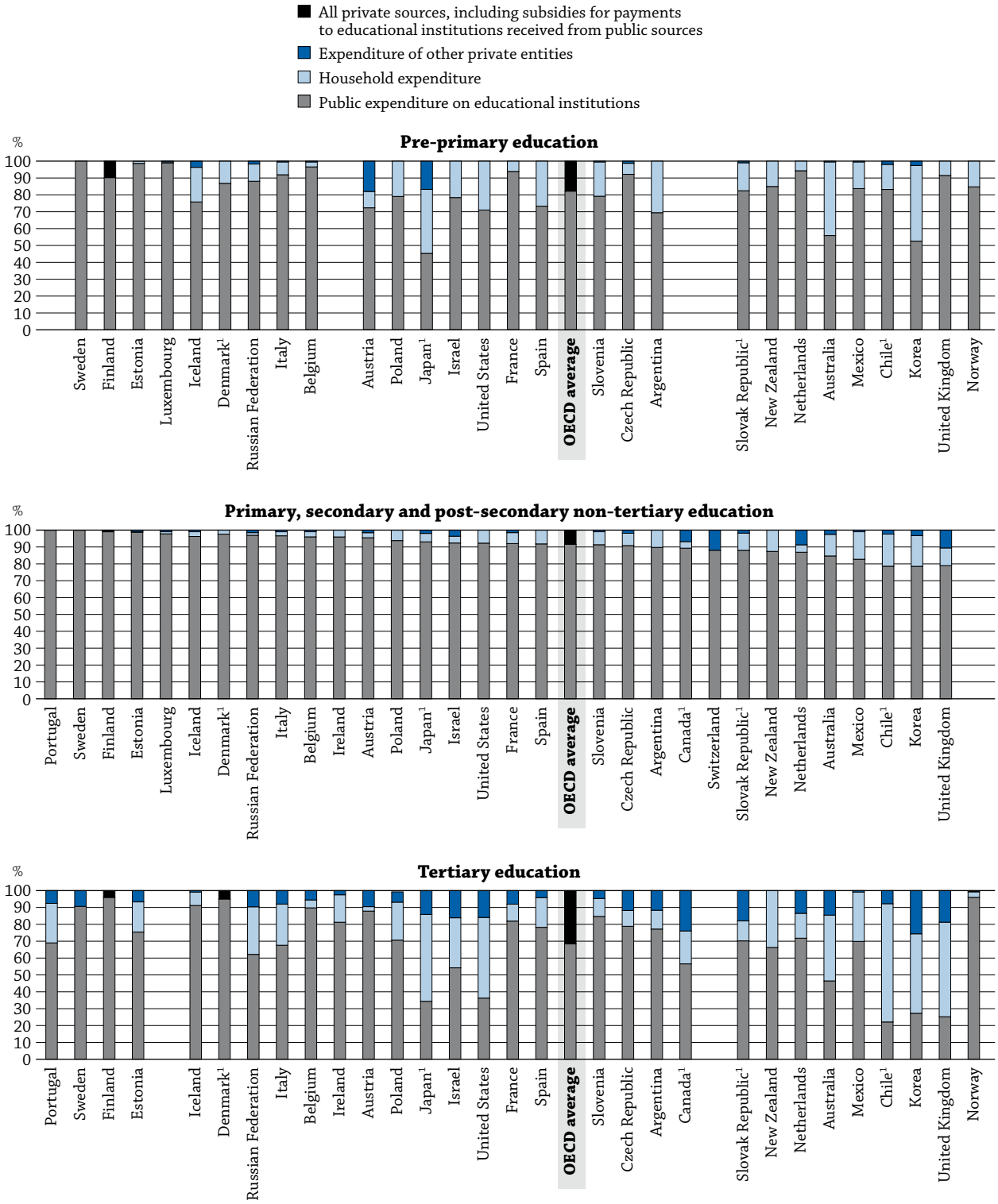
Between 2000 and 2010, more than two-thirds of the countries for which comparable data are available (17 of 25 countries) showed a decrease in the share of public funding for primary, secondary and post-secondary non-tertiary education. However, among these countries, the corresponding increase in the private share is three percentage points or more only in Canada (from 7.6% to 10.7%), Mexico (from 13.9% to 17.3%), the Slovak Republic (from 2.4% to 12.0%) and the United Kingdom (from 11.3% to 21.1%). In the other countries, shifts in the opposite direction, i.e. towards public funding, exceeded three percentage points between 2000 and 2010 only in Japan (from 10.2% to 7.0%). In spite of these differences, between 2000 and 2010 the amount of public expenditure on educational institutions at primary, secondary and post-secondary non-tertiary education increased in all countries with comparable data (Table B3.2a).

Public and private expenditure on tertiary educational institutions

High private returns to tertiary education (see Indicator A7) suggest that a greater contribution to the costs of education by individuals and other private entities may be justified, as long as there are ways to ensure that funding is available to students regardless of their economic backgrounds (see Indicator B5). In all countries, the proportion of private expenditure on education is far higher for tertiary education – an average of 32% of total expenditure at this level – than it is for primary, secondary and post-secondary non-tertiary education (Tables B3.2a and b).

Chart B3.2. Distribution of public and private expenditure on educational institutions (2010)

By level of education



1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Countries are ranked in descending order of the proportion of public expenditure on educational institutions in primary, secondary and post-secondary non-tertiary education.

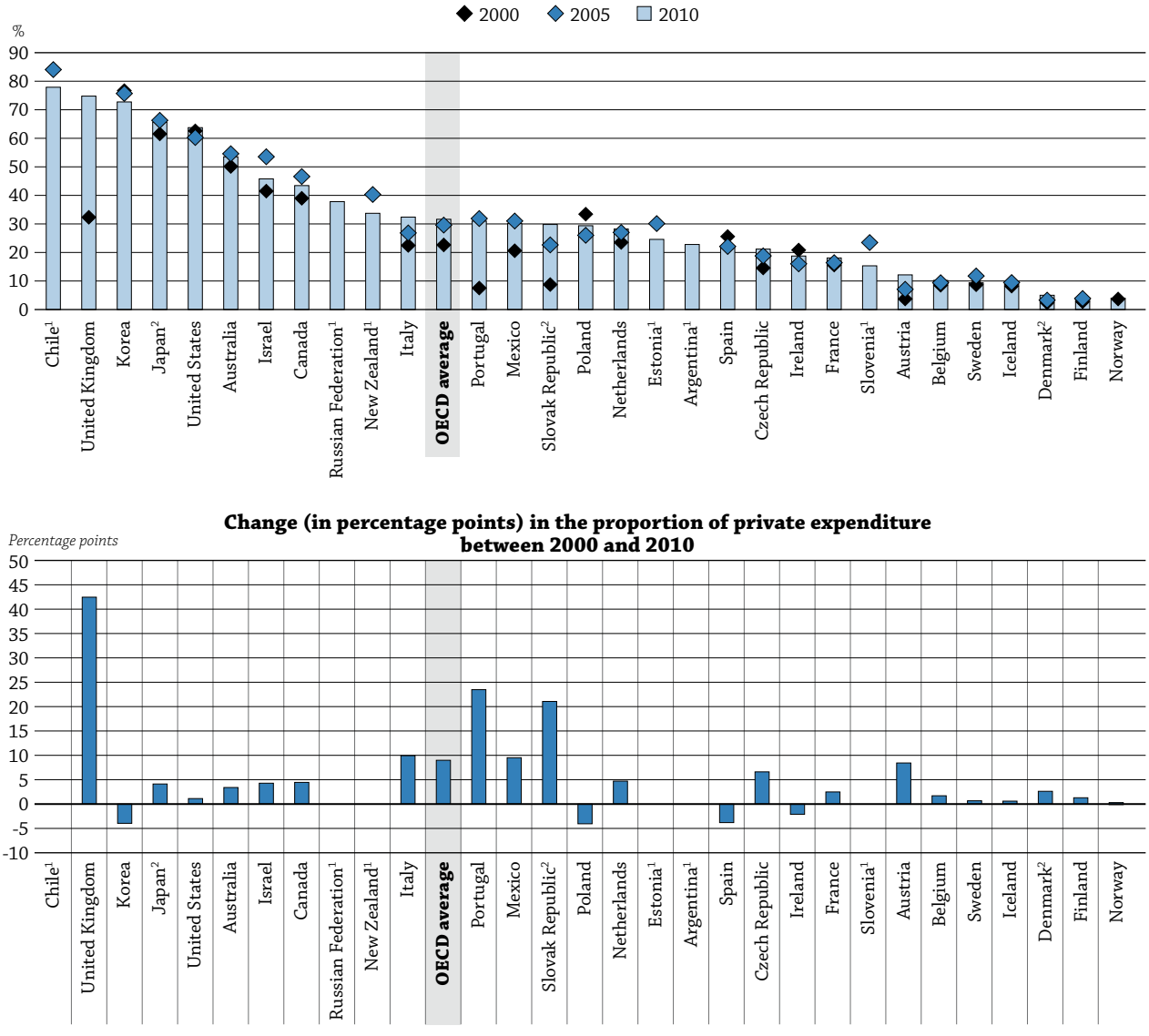
Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Tables B3.2a and b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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The proportion of expenditure on tertiary institutions covered by individuals, businesses and other private sources, including subsidised private payments, ranges from 5% or less in Denmark, Finland and Norway (tuition fees charged by tertiary institutions are low or negligible in these countries), to more than 40% in Australia, Canada, Israel, Japan and the United States, and to over 70% in Chile, Korea and the United Kingdom (Chart B3.2 and Table B3.2b). Of these countries, in Korea and the United Kingdom, most students are enrolled in private institutions (around 80% in private universities in Korea; 100% in government-dependent private institutions in the United Kingdom), and most of the budget of educational institutions comes from tuition fees (more than 70% in Korea, and more than 50% in the United Kingdom).

Chart B3.3. Share of private expenditure on tertiary educational institutions (2000, 2005 and 2010) and change, in percentage points, in the share of private expenditure between 2000 and 2010



1. The change between 2000 and 2010 is not available as the value for 2000 is missing.
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Countries are ranked in descending order of the share of private expenditure on educational institutions in 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B3.3. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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The contribution from private entities other than households to financing educational institutions is higher for tertiary education than for other levels of education, on average across OECD countries. In Australia, Austria, Canada, the Czech Republic, Israel, Japan, Korea, the Netherlands, the Slovak Republic, Sweden, the United Kingdom and the United States, 9% or more of expenditure on tertiary institutions is covered by private entities other than households. In Sweden, these contributions are largely directed to sponsoring research and development.

In many OECD countries, greater participation in tertiary education (see Indicator C1) reflects strong individual and social demand. The increases in enrolment have been accompanied by increases in investment from both public and private sources, and changes in the proportions of public and private expenditure. On average across the OECD countries for which trend data are available for all reference years, the share of public funding for tertiary institutions decreased slightly from 77% in 1995, to 76% in 2000, and then more rapidly to 71% in 2005 and 68% in 2010. This trend is apparent primarily in non-European countries, where tuition fees are generally higher and enterprises participate more actively, largely through grants to tertiary institutions (Table B3.3, Chart B3.3 and Indicator B5).

Twenty of the 24 countries for which comparable data are available for 2000 and 2010 showed an increase in the share of private funding for tertiary education. Similarly, in 11 of the 20 countries with comparable data for 1995 and 2010, the private share of expenditure on tertiary education increased by at least three percentage points during this period. This increase exceeded 10 percentage points in Australia, Italy, Portugal and the Slovak Republic, and exceeded 50 percentage points in the United Kingdom. In Australia, this increase was largely due to changes to the Higher Education Contribution Scheme/Higher Education Loan Programme implemented in 1997. In the United Kingdom, the huge increase is the result of successive increases in tuition fees during the past decade (for more details, see Indicator B5 and Annex 3).

Only the Czech Republic and Ireland – and, to a lesser extent, Norway and Spain – show a significant decrease in the share of private expenditure on tertiary educational institutions between 1995 and 2010 (Table B3.3 and Chart B3.3). In Ireland, tuition fees for tertiary first-degree programmes were gradually eliminated over the past decade, leading to a reduction in the share of private spending at this level.

Private expenditure on educational institutions generally increased faster than public expenditure between 2000 and 2010. Nevertheless, public investment in tertiary education also increased in all countries for which 2000 and 2010 data are available, regardless of the changes in private spending (Table B3.2b). Five of the nine countries with the largest increases in private expenditure during this period (Austria, the Czech Republic, Mexico, Poland and the Slovak Republic) are also among the ten countries with the largest increases in public expenditure (Table B3.2b).

Public expenditure on educational institutions per student, by type of institution

The level of public expenditure partly shows the degree to which governments value education (see Indicators B2 and B4). Naturally, public funds go to public institutions; but in some cases a significant part of the public budget may be devoted to private educational institutions.

Table B3.4 shows public investment in educational institutions relative to the size of the education system, focusing on public expenditure, per student, on public and private educational institutions (private funds are excluded from Table B3.4, although in some countries they represent a significant share of the resources of educational institutions, especially at the tertiary level). This can be considered a measure that complements public expenditure relative to national income (see Indicator B2).

On average across OECD countries, at all levels of education combined, public expenditure, per student, on public institutions is nearly twice the public expenditure, per student, on private institutions (USD 8 382 and USD 4 435, respectively). However, the difference varies according to the level of education. At the pre-primary level, public expenditure, per student, on public institutions is around twice that on private institutions (USD 6 275 and USD 3 494, respectively) as it is for primary, secondary and post-secondary non-tertiary

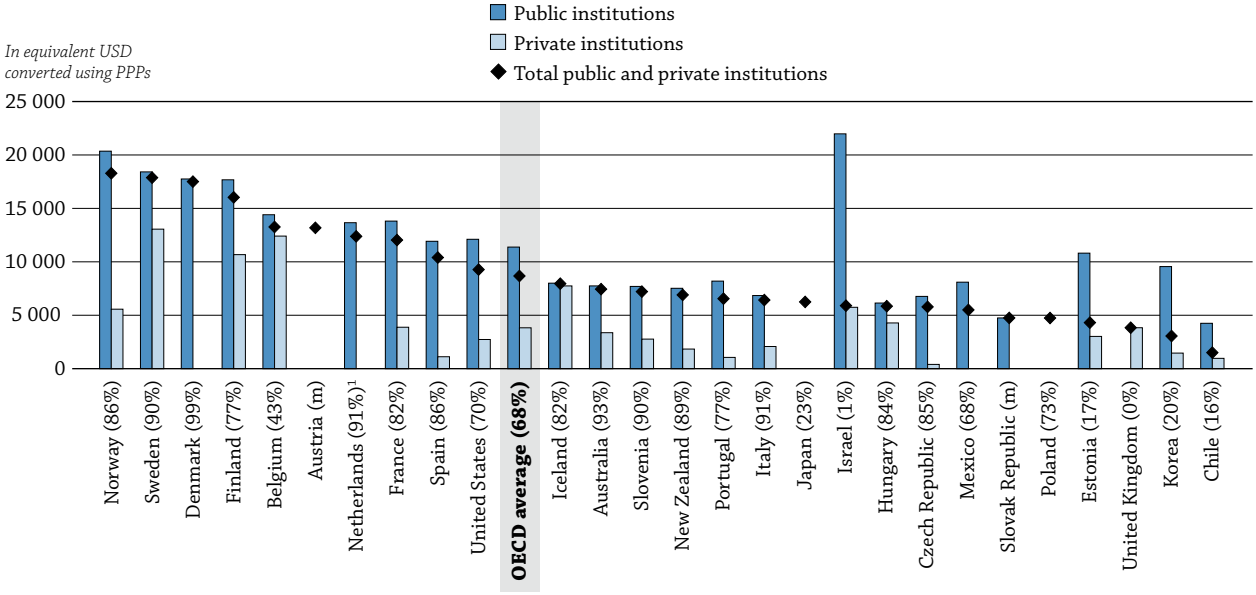
education (USD 8 412 and USD 5 029, respectively). At the tertiary level, public expenditure, per student, on public institutions is three times that on private institutions (USD 11 382 and USD 3 826, respectively).

At the pre-primary level, public expenditure per student on both public and private institutions averages USD 5 643 in OECD countries, but varies from USD 1 906 in Mexico to more than USD 20 000 in Luxembourg. Public expenditure per pupil is usually higher for public institutions than for private institutions, but private institutions generally enrol fewer pupils than public institutions. For example, in Mexico and the Netherlands, public expenditure per pupil on private institutions is negligible, and a relatively small proportion of pupils is enrolled in private institutions. In contrast, nearly all pupils in New Zealand are enrolled in private institutions, and public expenditure per student on private institutions is higher than average (USD 9 892) (Tables B3.4 and C2.2).

At the primary, secondary and post-secondary non-tertiary levels of education (the levels with the largest proportion of public funds, Table B3.2a), public expenditure per student on both public and private institutions averages USD 7 705 in OECD countries, but varies from USD 2 019 in Turkey to more than USD 10 000 in Austria, Denmark, Luxembourg, Norway, Sweden and the United States. At this level, most students are enrolled in public institutions, and public expenditure per student is usually higher on public than on private institutions, except in Finland, Iceland, Israel, Norway and Turkey. In these five OECD countries, between 7% and 25% of pupils are enrolled in private institutions. In Mexico and the Netherlands, the amount of public expenditure, per student, on private institutions is small or negligible, as the private sector is marginal and receives little or no public funds (Table C1.4).

At the tertiary level, public expenditure per student on both public and private institutions averages USD 8 676 in OECD countries, but varies from about USD 1 500 in Chile to more than USD 17 000 in Denmark, Norway and Sweden, three countries in which the level of private expenditure is small or negligible. In all countries with available data, public expenditure per student is higher on public than on private institutions (Table B3.4 and Chart B3.4).

Chart B3.4. Annual public expenditure on educational institutions per student in tertiary education, by type of institution (2010)



Note: The figures into brackets represent the percentage of students enrolled in public institutions in tertiary education, based on full-time equivalents.
1. Government-dependent private institutions are included with public institutions.
Countries are ranked in descending order of public expenditure on public and private educational institutions per student.
Source: OECD. Table B3.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
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At this level, patterns in the allocation of public funds to public and private institutions differ. In Denmark and the Netherlands, at least 90% of students are enrolled in public institutions, and most public expenditure goes to these institutions. Public expenditure, per student, on public institutions is higher than the OECD average, and public expenditure per student on private institutions is negligible. In these countries, private funds complement public funds to varying degrees: private expenditure is less than 5% of total expenditure for public and private educational institutions in Denmark and above 28% in the Netherlands (Chart B3.4 and Table B3.2b).

In Belgium, Estonia, Finland, Hungary, Iceland and Sweden, public expenditure goes to both public and private institutions, and public expenditure, per student, on private institutions represents at least 59% – and up to nearly 100% – of the level of public expenditure, per student, on public tertiary institutions (Table B3.4). However, these countries show different participation patterns. In Finland, Hungary, Iceland and Sweden, at least 80% of students are enrolled in public institutions, whereas in Belgium and Estonia, tertiary students are mainly enrolled in government-dependent private institutions. In all these countries, the share of private expenditure on tertiary institutions is below the OECD average. In the remaining countries, public expenditure goes mainly to public institutions (Chart B3.4 and Table B3.4).

Definitions

Other private entities include private businesses and non-profit organisations, e.g. religious organisations, charitable organisations and business and labour associations.

Private spending includes all direct expenditure on educational institutions, whether partially covered by public subsidies or not. Expenditure by private companies on the work-based element of school- and work-based training of apprentices and students is also taken into account. Public subsidies attributable to households, included in private spending, are shown separately.

The **public and private proportions of expenditure on educational institutions** are the percentages of total spending originating in, or generated by, the public and private sectors.

Public expenditure is related to all students at public and private institutions, whether these institutions receive public funding or not.

Methodology

Data refer to the financial year 2010 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

Not all spending on instructional goods and services occurs within educational institutions. For example, families may purchase commercial textbooks and materials or seek private tutoring for their children outside educational institutions. At the tertiary level, students' living expenses and foregone earnings can also account for a significant proportion of the costs of education. All expenditure outside educational institutions, even if publicly subsidised, is excluded from this indicator. Public subsidies for educational expenditure outside institutions are discussed in Indicators B4 and B5.

A portion of the budgets of educational institutions is related to ancillary services offered to students, including student welfare services (student meals, housing and transport). Part of the cost of these services is covered by fees collected from students and is included in the indicator.

The data on expenditure for 1995 and 2000 were obtained by a survey updated in 2012, in which expenditure for 1995 and 2000 were adjusted to the methods and definitions used in the current UOE data collection.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator B3 Tables

Table B3.1	Relative proportions of public and private expenditure on educational institutions for all levels of education (2000, 2010)	StatLink http://dx.doi.org/10.1787/888932849692
Table B3.2a	Relative proportions of public and private expenditure on educational institutions, by level of education (2000, 2010)	StatLink http://dx.doi.org/10.1787/888932849711
Table B3.2b	Relative proportions of public and private expenditure on educational institutions, for tertiary education (2000, 2010)	StatLink http://dx.doi.org/10.1787/888932849730
Table B3.3	Trends in relative proportions of public expenditure on educational institutions and index of change between 1995 and 2010, for tertiary education	StatLink http://dx.doi.org/10.1787/888932849749
Table B3.4	Annual public expenditure on educational institutions per student, by type of institution (2010)	StatLink http://dx.doi.org/10.1787/888932849768

Table B3.1. Relative proportions of public and private expenditure on educational institutions for all levels of education (2000, 2010)

Distribution of public and private sources of funds for educational institutions after transfers from public sources, by year

		2010					2000		Index of change between 2000 and 2010 in expenditure on educational institutions (2000 = 100, constant prices)	
			Private sources							
		Public sources	Household expenditure	Expenditure of other private entities	All private sources[1]	Private: of which, subsidised	Public sources	All private sources[1]	Public sources	All private sources[1]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	**74.1**	20.2	5.7	**25.9**	1.1	74.1	25.9	159	159
	Austria	**91.0**	3.6	5.4	**9.0**	6.0	94.0	6.0	118	183
	Belgium	**94.8**	3.9	1.3	**5.2**	1.9	94.3	5.7	126	114
	Canada[2]	**75.8**	10.3	13.9	**24.2**	0.5	79.9	20.1	124	158
	Chile[3]	**57.9**	37.8	4.4	**42.1**	2.7	m	m	m	m
	Czech Republic	**87.7**	7.9	4.3	**12.3**	n	89.9	10.1	158	198
	Denmark	**94.5**	4.4	m	**5.5**	m	96.0	4.0	125	174
	Estonia	**93.0**	5.2	1.8	**7.0**	m	m	m	143	m
	Finland	**97.6**	x(4)	x(4)	**2.4**	n	98.0	2.0	136	159
	France	**89.8**	7.3	2.9	**10.2**	m	91.2	8.8	109	128
	Germany	**m**	m	m	**m**	m	86.1	13.9	m	m
	Greece	**m**	m	m	**m**	m	93.8	6.2	m	m
	Hungary	**m**	m	m	**m**	m	m	m	126	m
	Iceland	**90.4**	8.4	1.3	**9.6**	a	90.0	10.0	136	131
	Ireland	**92.5**	6.9	0.6	**7.5**	n	90.5	9.5	194	151
	Israel	**77.6**	15.4	7.0	**22.4**	2.1	79.8	20.2	130	148
	Italy	**90.1**	8.1	1.8	**9.9**	1.9	94.3	5.7	100	184
	Japan	**70.2**	20.4	9.4	**29.8**	m	71.0	29.0	109	113
	Korea	**61.6**	27.7	10.8	**38.4**	1.2	59.2	40.8	195	177
	Luxembourg	**m**	m	m	**m**	m	m	m	m	m
	Mexico	**80.5**	19.3	0.2	**19.5**	1.3	85.3	14.7	139	196
	Netherlands	**83.3**	7.3	9.4	**16.7**	2.6	84.1	15.9	137	146
	New Zealand	**82.6**	17.4	x(2)	**17.4**	m	m	m	138	m
	Norway	**m**	m	m	**m**	m	95.0	5.0	142	m
	Poland	**86.2**	x(4)	x(4)	**13.8**	m	89.0	11.0	147	190
	Portugal	**92.6**	5.6	1.8	**7.4**	m	98.6	1.4	112	615
	Slovak Republic	**84.2**	10.9	4.9	**15.8**	2.0	96.4	3.6	159	790
	Slovenia	**88.4**	10.2	1.4	**11.6**	n	m	m	m	m
	Spain	**85.4**	13.6	1.0	**14.6**	0.4	87.4	12.6	140	167
	Sweden	**97.5**	n	2.5	**2.5**	a	97.0	3.0	127	104
	Switzerland	**m**	m	m	**m**	m	91.8	8.2	122	m
	Turkey	**m**	m	m	**m**	m	98.6	1.4	m	m
	United Kingdom	**68.6**	19.7	11.7	**31.4**	22.4	85.2	14.8	120	317
	United States	**69.4**	24.5	6.1	**30.6**	m	72.0	28.0	131	148
	OECD average	**83.6**	~	~	**16.4**	2.4	87.9	12.1	136	211
	EU21 average	**89.3**	~	~	**10.7**	3.1	92.1	7.9	134	241
Other G20	Argentina	**85.2**	12.3	2.5	**14.8**	n	m	m	m	m
	Brazil	**m**	m	m	**m**	m	m	m	239	m
	China	**m**	m	m	**m**	m	m	m	m	m
	India	**m**	m	m	**m**	m	m	m	m	m
	Indonesia	**m**	m	m	**m**	m	m	m	m	m
	Russian Federation	**84.2**	11.6	4.1	**15.8**	a	m	m	222	m
	Saudi Arabia	**m**	m	m	**m**	m	m	m	m	m
	South Africa	**m**	m	m	**m**	m	m	m	m	m
	G20 average	**m**	m	m	**m**	m	m	m	m	m

1. Including subsidies attributable to payments to educational institutions received from public sources.
2. Year of reference 2009 instead of 2010.
3. Year of reference 2011 instead of 2010.

Source: OECD. Argentina : UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table B3.2a. Relative proportions of public and private expenditure on educational institutions, by level of education (2000, 2010)

Distribution, in percentage, of public and private sources of funds for educational institutions after transfers from public sources, by year

		Pre-primary education (for children 3 years and older)					Primary, secondary and post-secondary non-tertiary education								
		2010					2010					2000		Index of change between 2000 and 2010 in expenditure on educational institutions (2000 = 100, constant prices)	
			Private sources					Private sources							
		Public sources	Household expenditure	Expenditure of other private entities	All private sources[1]	Private: of which, subsidised	Public sources	Household expenditure	Expenditure of other private entities	All private sources[1]	Private: of which, subsidised	Public sources	All private sources[1]	Public sources	All private sources[1]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD	Australia	**55.8**	43.9	0.3	**44.2**	0.9	**84.7**	12.8	2.5	**15.3**	1.4	83.7	16.3	164	152
	Austria	**72.2**	9.7	18.1	**27.8**	27.0	**95.5**	3.0	1.5	**4.5**	1.7	95.8	4.2	108	117
	Belgium	**96.4**	3.5	0.1	**3.6**	0.8	**96.0**	3.8	0.2	**4.0**	1.3	94.7	5.3	124	93
	Canada[2, 3]	**x(6)**	x(7)	x(8)	**x(9)**	x(6)	**89.3**	3.9	6.8	**10.7**	x(6)	92.4	7.6	131	191
	Chile[4]	**83.1**	14.8	2.1	**16.9**	n	**78.6**	19.1	2.4	**21.4**	a	m	m	m	m
	Czech Republic	**92.0**	6.5	1.4	**8.0**	n	**90.8**	7.3	1.9	**9.2**	n	91.7	8.3	144	161
	Denmark[3]	**86.7**	13.3	n	**13.3**	m	**97.6**	2.4	n	**2.4**	n	97.8	2.2	124	138
	Estonia	**98.5**	1.3	n	**1.5**	m	**98.7**	1.0	0.3	**1.3**	m	m	m	142	m
	Finland	**90.1**	x(4)	x(4)	**9.9**	n	**99.2**	x(9)	x(9)	**0.8**	n	99.3	0.7	137	162
	France	**93.7**	6.2	n	**6.3**	m	**92.0**	6.5	1.5	**8.0**	m	92.6	7.4	104	113
	Germany	**m**	m	m	**m**	m	**m**	m	m	**m**	m	87.1	12.9	m	m
	Greece	**x(6)**	x(7)	x(8)	**x(9)**	m	**m**	m	n	**m**	m	91.7	8.3	m	m
	Hungary	**m**	m	m	**m**	m	**m**	m	m	**m**	n	m	m	123	m
	Iceland	**75.7**	20.5	3.8	**24.3**	a	**96.2**	3.5	0.2	**3.8**	a	96.4	3.6	128	134
	Ireland	**m**	m	m	**m**	m	**95.9**	4.1	m	**4.1**	n	96.0	4.0	213	216
	Israel	**78.3**	21.7	n	**21.7**	0.1	**92.4**	4.0	3.6	**7.6**	1.2	94.1	5.9	135	179
	Italy	**91.8**	8.1	0.1	**8.2**	n	**96.6**	3.2	0.1	**3.4**	n	97.8	2.2	104	162
	Japan[3]	**45.2**	37.9	16.9	**54.8**	m	**93.0**	5.0	2.0	**7.0**	m	89.8	10.2	110	72
	Korea	**52.5**	44.8	2.7	**47.5**	2.6	**78.5**	18.2	3.2	**21.5**	0.7	80.8	19.2	177	204
	Luxembourg	**98.8**	1.0	0.2	**1.2**	n	**97.8**	1.9	0.3	**2.2**	m	m	m	m	m
	Mexico	**83.6**	16.3	0.1	**16.4**	0.2	**82.7**	17.2	0.1	**17.3**	1.5	86.1	13.9	131	170
	Netherlands	**94.2**	5.8	a	**5.8**	3.1	**86.9**	4.4	8.7	**13.1**	3.5	85.7	14.3	139	126
	New Zealand	**84.8**	15.2	x(2)	**15.2**	m	**87.4**	12.6	x(7)	**12.6**	m	m	m	130	m
	Norway	**84.6**	15.4	m	**15.4**	n	**m**	m	m	**m**	m	99.0	1.0	130	m
	Poland	**79.0**	21.0	m	**21.0**	n	**93.8**	6.2	m	**6.2**	m	95.4	4.6	135	188
	Portugal	**m**	m	m	**m**	m	**100.0**	n	m	**n**	m	99.9	0.1	111	88
	Slovak Republic[3]	**82.3**	16.6	1.1	**17.7**	0.5	**88.0**	10.2	1.8	**12.0**	2.2	97.6	2.4	165	924
	Slovenia	**79.1**	20.8	0.1	**20.9**	n	**91.3**	8.1	0.6	**8.7**	n	m	m	m	m
	Spain	**73.2**	26.8	m	**26.8**	n	**91.8**	8.2	m	**8.2**	a	93.0	7.0	126	149
	Sweden	**100.0**	n	n	**n**	n	**99.9**	n	a	**n**	n	99.9	0.1	117	63
	Switzerland	**m**	m	m	**m**	m	**88.1**	n	11.9	**11.9**	0.7	88.9	11.1	120	130
	Turkey	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m
	United Kingdom	**91.4**	8.6	n	**8.6**	8.4	**78.9**	10.5	10.6	**21.1**	22.2	88.7	11.3	137	289
	United States	**70.9**	29.1	a	**29.1**	a	**92.3**	7.7	m	**7.7**	a	91.7	8.3	131	118
	OECD average	**82.1**	~	~	**17.9**	2.1	**91.5**	~	~	**8.5**	1.7	92.9	7.1	134	181
	EU21 average	**88.7**	~	~	**11.3**	2.2	**93.9**	~	~	**6.1**	0.7	94.4	5.6	136	198
Other G20	Argentina	**69.3**	30.7	n	**30.7**	m	**89.8**	10.2	a	**10.2**	m	m	m	m	m
	Brazil	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	259	m
	China	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m
	India	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m
	Indonesia	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m
	Russian Federation	**87.9**	10.2	1.9	**12.1**	a	**96.9**	1.5	1.5	**3.1**	a	m	m	196	m
	Saudi Arabia	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m
	South Africa	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m
	G20 average	**m**	m	m	**m**	m	**m**	m	m	**m**	m	m	m	m	m

1. Including subsidies attributable to payments to educational institutions received from public sources.
To calculate private funds net of subsidies, subtract public subsidies (columns 5, 10) from private funds (columns 4, 9).
To calculate total public funds, including public subsidies, add public subsidies (columns 5, 10) to direct public funds (columns 1, 6).
2. Year of reference 2009 instead of 2010.
3. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
4. Year of reference 2011 instead of 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849711

Table B3.2b. Relative proportions of public and private expenditure on educational institutions, for tertiary education (2000, 2010)

Distribution, in percentage, of public and private sources of funds for educational institutions after transfers from public sources, by year

		Tertiary education								
		2010					2000		Index of change between 2000 and 2010 in expenditure on educational institutions (2000 = 100, constant prices)	
			Private sources							
		Public sources	Household expenditure	Expenditure of other private entities	All private sources[1]	Private: of which, subsidised	Public sources	All private sources[1]	Public sources	All private sources[1]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	**46.5**	39.0	14.5	**53.5**	0.5	49.9	50.1	142	163
	Austria	**87.8**	2.6	9.5	**12.2**	7.7	96.3	3.7	153	549
	Belgium	**89.8**	4.7	5.6	**10.2**	4.4	91.5	8.5	124	151
	Canada[2, 3]	**56.6**	19.5	23.9	**43.4**	1.1	61.0	39.0	126	151
	Chile[4]	**22.1**	70.1	7.8	**77.9**	7.3	m	m	m	m
	Czech Republic	**78.8**	9.4	11.8	**21.2**	n	85.4	14.6	195	308
	Denmark[3]	**95.0**	x(4)	x(4)	**5.0**	m	97.6	2.4	121	261
	Estonia	**75.4**	17.9	6.7	**24.6**	n	m	m	150	m
	Finland	**95.9**	x(4)	x(4)	**4.1**	n	97.2	2.8	133	198
	France	**81.9**	10.1	8.0	**18.1**	m	84.4	15.6	122	145
	Germany	**m**	m	m	**m**	m	88.2	11.8	m	m
	Greece	**m**	m	m	**m**	m	99.7	0.3	m	m
	Hungary	**m**	m	m	**m**	m	m	m	119	m
	Iceland	**91.2**	8.2	0.6	**8.8**	a	91.8	8.2	144	156
	Ireland	**81.2**	16.3	2.5	**18.8**	n	79.2	20.8	145	127
	Israel	**54.2**	29.6	16.1	**45.8**	5.8	58.5	41.5	111	132
	Italy	**67.6**	24.4	8.0	**32.4**	9.0	77.5	22.5	103	171
	Japan[3]	**34.4**	51.5	14.1	**65.6**	m	38.5	61.5	105	125
	Korea	**27.3**	47.1	25.6	**72.7**	1.0	23.3	76.7	204	166
	Luxembourg	**m**	m	m	**m**	m	m	m	m	m
	Mexico	**69.9**	29.8	0.4	**30.1**	1.3	79.4	20.6	152	252
	Netherlands	**71.8**	14.7	13.5	**28.2**	0.3	76.5	23.5	133	169
	New Zealand	**66.3**	33.7	m	**33.7**	m	m	m	151	m
	Norway	**96.0**	3.3	m	**4.0**	m	96.3	3.7	127	138
	Poland	**70.6**	22.5	6.9	**29.4**	m	66.6	33.4	215	178
	Portugal	**69.0**	23.4	7.6	**31.0**	m	92.5	7.5	114	632
	Slovak Republic[3]	**70.2**	11.8	18.0	**29.8**	2.2	91.2	8.8	147	651
	Slovenia	**84.7**	10.6	4.7	**15.3**	n	m	m	m	m
	Spain	**78.2**	17.6	4.2	**21.8**	1.7	74.4	25.6	151	122
	Sweden	**90.6**	n	9.4	**9.4**	a	91.3	8.7	133	144
	Switzerland	**m**	m	m	**m**	m	m	m	131	m
	Turkey	**m**	m	m	**m**	m	95.4	4.6	m	m
	United Kingdom	**25.2**	56.1	18.7	**74.8**	26.5	67.7	32.3	101	359
	United States	**36.3**	47.8	15.9	**63.7**	m	37.4	62.6	145	152
	OECD average	**68.4**	~	~	**31.6**	3.4	77.4	22.6	139	233
	EU21 average	**77.3**	~	~	**22.7**	2.1	85.7	14.3	139	278
Other G20	Argentina	**77.2**	11.1	11.7	**22.8**	m	m	m	m	m
	Brazil	**m**	m	m	**m**	m	m	m	188	m
	China	**m**	m	m	**m**	m	m	m	m	m
	India	**m**	m	m	**m**	m	m	m	m	m
	Indonesia	**m**	m	m	**m**	m	m	m	m	m
	Russian Federation	**62.2**	28.2	9.6	**37.8**	a	m	m	334	m
	Saudi Arabia	**m**	m	m	**m**	m	m	m	m	m
	South Africa	**m**	m	m	**m**	m	m	m	m	m
	G20 average	**m**	m	m	**m**	m	m	m	m	m

1. Including subsidies attributable to payments to educational institutions received from public sources.
To calculate private funds net of subsidies, subtract public subsidies (column 5) from private funds (column 4).
To calculate total public funds, including public subsidies, add public subsidies (column 5) to direct public funds (column 1).
2. Year of reference 2009 instead of 2010.
3. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
4. Year of reference 2011 instead of 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table B3.3. Trends in relative proportions of public expenditure[1] on educational institutions and index of change between 1995 and 2010, for tertiary education

2000 = 100

		Share of public expenditure on tertiary educational institutions (%)						Index of change between 1995 and 2010 in public expenditure on tertiary educational institutions (2000=100, constant prices)					
		1995	2000	2005	2008	2009	2010	1995	2000	2005	2008	2009	2010
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	64.6	49.9	45.4	44.9	45.4	46.5	116	100	110	121	134	142
	Austria	96.1	96.3	92.9	84.7	87.7	87.8	96	100	129	131	142	153
	Belgium	m	91.5	90.6	89.8	89.7	89.8	m	100	101	118	123	124
	Canada[2, 3]	56.6	61.0	53.4	58.7	62.9	56.6	69	100	108	121	130	126
	Chile[4]	m	m	15.9	14.6	23.4	22.1	m	m	m	m	m	m
	Czech Republic	71.5	85.4	81.2	79.1	79.9	78.8	84	100	148	190	202	195
	Denmark[2]	99.4	97.6	96.7	95.5	95.4	95.0	93	100	115	114	121	121
	Estonia	m	m	69.9	78.8	80.2	75.4	69	100	109	149	164	150
	Finland	97.8	97.2	96.1	95.4	95.8	95.9	90	100	115	122	127	133
	France	85.3	84.4	83.6	81.7	83.1	81.9	93	100	106	116	121	122
	Germany	89.2	88.2	85.3	85.4	84.4	m	96	100	102	118	120	m
	Greece[2]	m	99.7	96.7	m	m	m	63	100	229	m	m	m
	Hungary	m	m	78.5	m	m	m	m	m	m	m	m	m
	Iceland[2]	m	91.8	90.5	92.2	92.0	91.2	m	100	142	165	159	144
	Ireland	69.7	79.2	84.0	82.6	83.8	81.2	48	100	106	143	156	145
	Israel	62.5	58.5	46.5	51.3	58.2	54.2	75	100	89	97	109	111
	Italy	82.9	77.5	73.2	70.7	68.6	67.6	85	100	101	110	104	103
	Japan[2]	35.1	38.5	33.7	33.3	35.3	34.4	80	100	94	101	106	105
	Korea	m	23.3	24.3	22.3	26.1	27.3	m	100	132	155	183	204
	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m
	Mexico	77.4	79.4	69.0	70.1	68.7	69.9	75	100	119	136	146	152
	Netherlands	79.4	76.5	73.0	71.5	71.1	71.8	99	100	113	121	127	133
	New Zealand	m	m	59.7	70.4	67.9	66.3	103	100	119	158	157	151
	Norway	93.7	96.3	m	96.9	96.1	96.0	93	100	120	122	128	127
	Poland	m	66.6	74.0	69.6	69.7	70.6	89	100	193	202	211	215
	Portugal	96.5	92.5	68.1	62.1	70.9	69.0	77	100	102	99	109	114
	Slovak Republic[2]	95.4	91.2	77.3	73.1	70.0	70.2	86	100	127	145	139	147
	Slovenia	m	m	76.5	83.8	85.1	84.7	m	m	m	m	m	m
	Spain	74.4	74.4	77.9	78.9	79.1	78.2	72	100	119	143	149	151
	Sweden	93.6	91.3	88.2	89.1	89.8	90.6	84	100	111	117	125	133
	Switzerland	m	m	m	m	m	m	90	100	129	117	128	131
	Turkey	96.3	95.4	m	m	m	m	55	100	m	m	m	m
	United Kingdom	80.0	67.7	m	45.7	42.2	25.2	115	100	m	114	117	101
	United States	38.6	37.4	39.7	39.1	37.8	36.3	85	100	135	148	150	145
	OECD average	78.9	77.4	70.4	69.4	70.4	68.4	84	100	122	132	139	140
	OECD average for countries with data available for all reference years	76.7	75.6	70.9	68.8	69.8	68.0	84	100	114	126	133	135
	EU21 average	86.3	85.5	81.5	77.7	78.3	76.4	84	100	116	129	135	138
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	84	100	127	159	162	188
	China	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	62.2	m	100	226	333	379	334
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m

1. Excluding international funds in public and total expenditure on educational institutions.
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
3. Year of reference 2009 instead of 2010.
4. Year of reference 2011 instead of 2010.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849749

Table B3.4. Annual public expenditure on educational institutions per student, by type of institution (2010)

In equivalent USD converted using PPPs for GDP, by level of education and type of institution

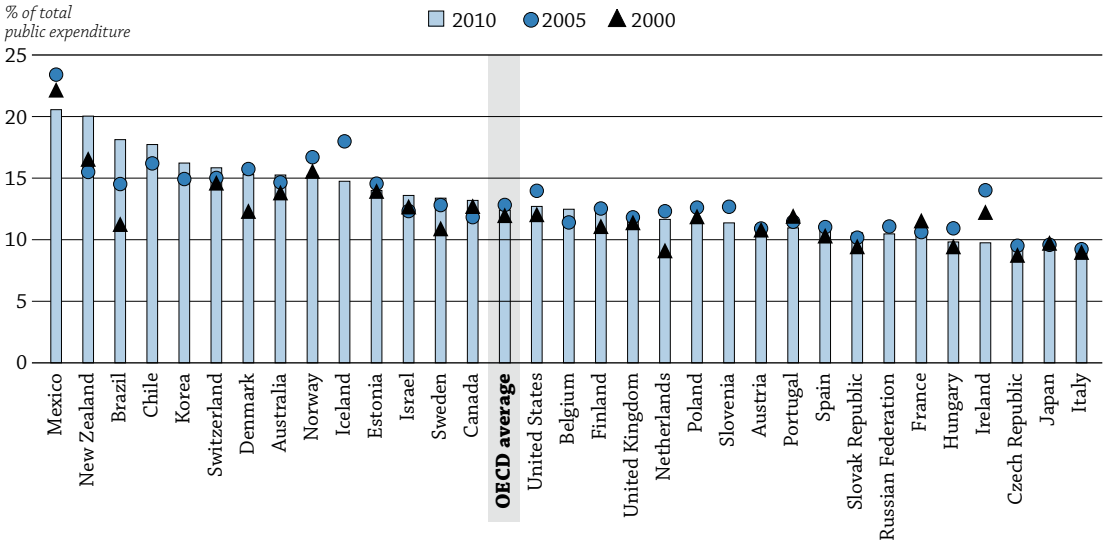
		Pre-primary education			Primary, secondary and post-secondary non-tertiary education			Tertiary education				Total all levels of education		
		Public institutions	Private institutions	Total public and private	Public institutions	Private institutions	Total public and private	Public institutions	Private institutions	Total public and private	of which: R&D activities	Public institutions	Private institutions	Total public and private
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
OECD	Australia	x(3)	x(3)	**4 965**	9 036	7 648	**8 581**	7 749	3 368	**7 445**	5 290	x(13)	x(13)	**8 366**
	Austria	x(3)	x(3)	**6 423**	x(6)	x(6)	**11 164**	x(9)	x(9)	**13 184**	4 519	x(13)	x(13)	**10 915**
	Belgium	6 336	5 337	**5 809**	10 723	9 025	**9 715**	14 411	12 411	**13 266**	4 369	10 953	9 020	**9 833**
	Canada[1]	x(4)	m	**m**	9 213	m	**m**	13 974	m	**m**	m	10 305	m	**m**
	Chile[2]	3 495	2 636	**2 944**	3 626	1 737	**2 517**	4 248	968	**1 502**	232	3 676	1 617	**2 339**
	Czech Republic	3 928	2 764	**3 909**	5 160	3 284	**5 024**	6 766	401	**5 784**	1 252	5 453	2 161	**5 187**
	Denmark	8 272	5 846	**8 197**	11 847	6 347	**11 130**	17 757	a	**17 510**	x(9)	12 443	6 176	**11 834**
	Estonia	2 505	2 006	**2 492**	5 963	4 212	**5 895**	10 815	3 021	**4 310**	2 056	5 517	3 129	**4 992**
	Finland	4 949	3 698	**4 839**	8 425	9 568	**8 522**	17 680	10 675	**16 036**	5 663	9 346	9 405	**9 352**
	France	6 430	2 677	**5 965**	9 105	5 455	**8 383**	13 814	3 880	**12 041**	4 481	9 339	4 893	**8 530**
	Germany	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**
	Greece	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**
	Hungary	x(3)	x(3)	**4 366**	x(6)	x(6)	**4 202**	6 144	4 281	**5 849**	1 265	4 801	4 316	**4 738**
	Iceland	6 853	3 971	**6 514**	8 228	8 523	**8 242**	8 005	7 747	**7 958**	x(9)	8 579	7 345	**8 478**
	Ireland	m	m	**6 121**	9 311	m	**m**	12 928	m	**m**	3 737	9 906	m	**m**
	Israel	3 716	2 096	**3 208**	5 185	5 248	**5 200**	21 982	5 746	**5 897**	m	5 273	4 741	**5 076**
	Italy[3]	6 887	777	**4 997**	8 247	1 014	**7 686**	6 847	2 075	**6 424**	3 053	7 835	1 063	**7 061**
	Japan	x(3)	x(3)	**2 806**	x(6)	x(6)	**8 643**	x(9)	x(9)	**6 249**	x(9)	x(13)	x(13)	**8 120**
	Korea	8 383	2 223	**3 671**	6 758	5 445	**6 523**	9 556	1 459	**3 058**	1 223	8 158	2 744	**6 034**
	Luxembourg	21 935	5 470	**20 530**	19 964	6 542	**18 089**	m	m	**m**	m	m	m	**m**
	Mexico	2 217	8	**1 906**	2 278	10	**2 038**	8 097	a	**5 502**	1 262	2 762	8	**2 408**
	Netherlands[4]	7 196	3 554	**7 073**	8 825	n	**8 622**	13 665	n	**12 385**	4 969	9 452	326	**9 121**
	New Zealand	2 213	9 892	**9 752**	7 066	2 238	**6 712**	7 524	1 837	**6 905**	1 602	7 142	5 626	**6 936**
	Norway	5 903	5 220	**5 594**	13 066	13 088	**13 067**	20 360	5 569	**18 289**	6 801	13 791	10 592	**13 414**
	Poland	x(3)	x(3)	**3 906**	x(6)	x(6)	**4 993**	x(9)	x(9)	**4 742**	917	x(13)	x(13)	**4 801**
	Portugal	5 977	m	**m**	7 415	m	**m**	8 197	1 056	**6 553**	3 552	7 574	m	**m**
	Slovak Republic	3 577	2 682	**3 545**	4 493	4 088	**4 458**	4 751	m	**4 751**	1 032	4 585	3 989	**4 545**
	Slovenia	6 196	1 933	**6 084**	7 766	5 455	**7 736**	7 699	2 769	**7 212**	1 520	7 543	3 399	**7 407**
	Spain	7 293	2 050	**5 421**	9 559	3 675	**7 742**	11 925	1 118	**10 403**	2 820	9 608	3 066	**7 704**
	Sweden	6 651	6 225	**6 582**	10 071	9 868	**10 044**	18 421	13 060	**17 879**	8 070	10 720	9 404	**10 547**
	Switzerland	5 186	m	**m**	11 726	m	**m**	21 893	m	**m**	m	12 808	m	**m**
	Turkey	2 467	2 597	**2 490**	2 008	2 413	**2 019**	m	m	**m**	m	m	m	**m**
	United Kingdom	6 979	4 867	**6 438**	8 623	4 885	**7 875**	a	3 834	**3 834**	3 537	8 488	4 416	**7 196**
	United States	11 326	1 845	**7 105**	11 859	923	**10 912**	12 112	2 732	**9 275**	x(9)	11 870	1 871	**10 172**
	OECD average	6 275	3 494	**5 643**	8 412	5 029	**7 705**	11 382	3 826	**8 676**	3 184	8 382	4 435	**7 504**
	EU21 average	7 007	3 563	**6 261**	9 094	5 244	**8 311**	10 739	4 184	**9 539**	3 342	8 348	4 507	**7 735**
Other G20	Argentina	2 427	m	**m**	3 398	m	**m**	4 680	m	**m**	m	3 500	m	**m**
	Brazil	2 111	m	**m**	2 653	m	**m**	13 137	m	**m**	756	2 964	m	**m**
	China	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**
	India	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**
	Indonesia	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**
	Russian Federation	m	m	**m**	3 978	m	**m**	4 980	m	**m**	m	m	m	**m**
	Saudi Arabia[2]	m	m	**m**	m	m	**m**		m	**m**	m	m	m	**m**
	South Africa	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**
	G20 average	m	m	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**

1. Year of reference 2009.
2. Year of reference 2011.
3. Excluding post-secondary non-tertiary education.
4. Government-dependent private institutions are included with public institutions.
Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932849768

WHAT IS THE TOTAL PUBLIC SPENDING ON EDUCATION?

- Education accounts for 13% of total public spending, on average across OECD countries, ranging from less than 10% in the Czech Republic, Hungary, Ireland, Italy and Japan, to more than 20% in Mexico and New Zealand.
- The proportion of public expenditure devoted to education increased between 1995 and 2005 in most countries with available data for both. Only Canada, France, Israel, Japan, New Zealand and Portugal show a different pattern.
- The proportion of public expenditure devoted to education decreased in around two-thirds of countries between 2005 and 2010, as public expenditure on education and total public expenditure did not evolve at the same pace.
- While there was no clear global trend in how the proportion of public expenditure on education evolved during the economic crisis, in 14 out of the 30 countries with available data, public expenditure on education grew at a faster rate than public expenditure on all other services between 2008 and 2010.

Chart B4.1. Total public expenditure on education as a percentage of total public expenditure (1995, 2005, 2010)



Countries are ranked in descending order of total public expenditure on education at all levels of education as a percentage of total public expenditure in 2010.

Source: OECD. Table B4.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847032

How to read this chart

This chart shows direct public expenditure on educational institutions, plus public support to households (which includes subsidies for living costs, such as scholarships and grants to students/households and student loans) and to other private entities, as a percentage of total public expenditure, by year.

Context

Countries' decisions concerning budget allocations to various sectors, including education, health care, social security or defence, depend not only on their priorities, but also on whether markets, alone, can provide those services adequately, especially at the tertiary level. Markets may fail to do so if the public benefits are greater than the private benefits. For example, government funding can help increase access to education for members of society. However, the

economic crisis has put pressure on public budgets to the extent that fewer public resources may be allocated to education. This, in turn, may affect access to or the outcomes and quality of education. On the other hand, the demand for education and training from people who are not in work may increase, requiring more spending on education. Still, higher expenditure is not necessarily associated with better outcomes or the quality of education. In addition, expenditure levels are affected by many factors (see Indicator B7) that need to be taken into account when comparing countries.

This indicator presents total public spending on education, relative to both the country's total public spending and to its gross domestic product, to account for the relative sizes of public budgets. In addition, it includes data on the different sources of public funding invested in education (central, regional and local government) and on the transfers of funds between these levels of government.

Other findings

- Most OECD countries **spend more than twice as much on primary, secondary and post-secondary non-tertiary education than on tertiary education**.
- **Public funding is more decentralised at the primary, secondary and post-secondary non-tertiary levels than at the tertiary level**. On average, more than 50% of the initial public funds for these levels of education comes from the central government in OECD countries.
- **Some 87% of public funding for tertiary education comes from the central government**, before transfers of public funds from central to regional and local levels of government are taken into account.
- **At the primary, secondary and post-secondary non-tertiary levels of education, only New Zealand had an entirely centralised public funding system**, while nine countries (Chile, Estonia, Hungary, Iceland, Ireland, the Netherlands, New Zealand, Norway and the Slovak Republic) had an entirely centralised funding system for tertiary education.

Trends

Between 1995 and 2010, the percentage of total public expenditure devoted to education (all levels of education combined) increased slightly in two-thirds of countries with available data. But in the period between 2005 and 2010, public expenditure on education as a percentage of total public expenditure decreased in just under two-thirds of countries with available data. The decrease was especially substantial (1 percentage point or more) in Hungary, Iceland, Ireland, Mexico, Norway, Poland, Slovenia and the United States (Table B4.2).

Similar changes were observed in public expenditure on education as a percentage of GDP between 1995 and 2010; yet, again, the evolution was markedly different in the period 2005-10. Whereas the share of public expenditure devoted to education decreased in most countries between 2005 and 2010, expenditure on education as a percentage of GDP increased in almost all countries during this period. On average across OECD countries with available data for both years, it increased by nearly 0.4 percentage point – the result of an increase in public expenditure at the same time that GDP fell (see Indicator B2).

Between 2008 and 2010, in all countries except Estonia, Hungary, Iceland and Italy, both public expenditure on education and total public expenditure for all services increased. However, in 16 of 30 countries, public expenditure on all services grew faster than public expenditure on education (Table B4.2).

B4

Analysis

Overall level of public resources invested in education

In 2010, total public expenditure on education as a percentage of total public expenditure for all services averaged 13.0% in OECD countries, ranging from less than 10% in the Czech Republic (9.7%), Hungary (9.8%), Ireland (9.7%), Italy (8.9%), and Japan (9.3%) to 20% or more in Mexico (20.6%) and New Zealand (20.0%) (Chart B4.1 and Table B4.1).

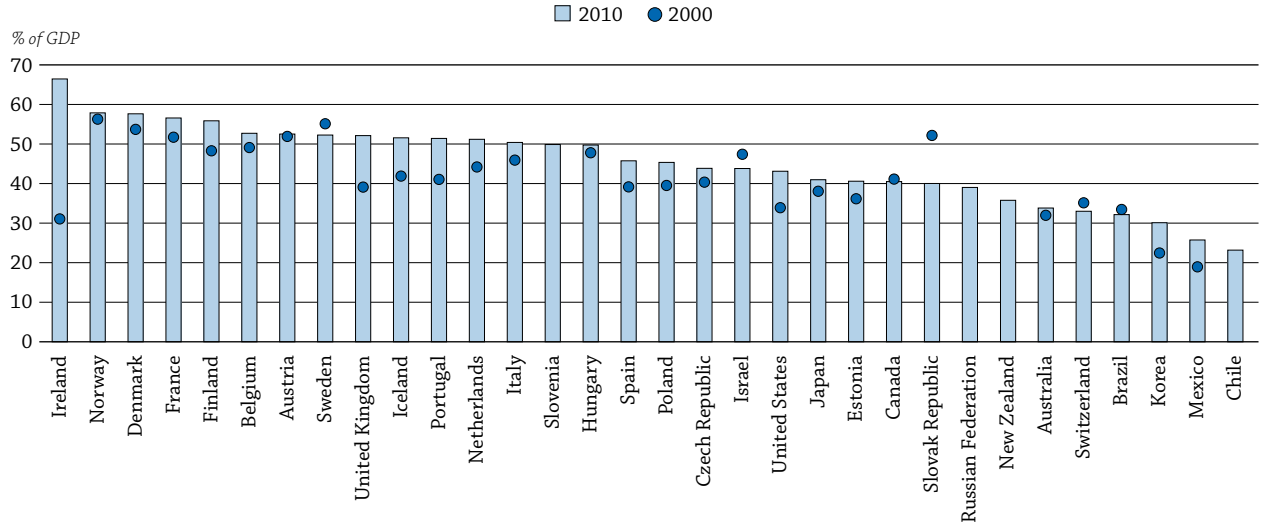
In most countries, about two-thirds of total public expenditure on education as a percentage of total public expenditure is devoted to primary, secondary and post-secondary non-tertiary education. This is primarily explained by the near-universal enrolment rates at these levels of education (see Indicator C1) and the demographic structure of the population.

Public expenditure devoted to tertiary education amounts to less than one-quarter (23.5%) of total public expenditure on education, on average across OECD countries. In OECD and G20 countries, the percentages range from less than 16% in Korea (15.8%) to over 30% in Canada (35.4%) and Finland (31.8%).

When public expenditure on education is considered as a proportion of total public spending, the relative sizes of public budgets must be taken into account. Indeed, the picture is different when looking at public expenditure on education as a percentage of GDP for all levels of education combined, compared with public expenditure on education as a percentage of total public expenditure. The OECD countries Chile (4.1%), the Czech Republic (4.2%), Italy (4.5%), Japan (3.8%) and the Slovak Republic (4.2%) were among those with the lowest rates of public expenditure on education as a proportion of GDP in 2010, as was the G20 country, the Russian Federation (4.1%). At the other end of the spectrum, only Denmark and Norway spend more than 8% of their GDP on education (8.8% each) – well above the OECD average of 5.8% (Table B4.1).

Contrary to expectations, the countries with the highest total public expenditure on education as a percentage of total public expenditure in 2010 – namely Brazil, Korea, New Zealand and Switzerland (Chart B4.1) – are at the bottom end of the spectrum in total public expenditure on all services as a percentage of GDP (Chart B4.2). Denmark and Iceland are the exceptions, with high rates on both proportions (Chart B4.2).

Chart B4.2. Total public expenditure on all services as a percentage of GDP (2000, 2010)



Note: This chart represents public expenditure on all services and not simply public expenditure on education.
Countries are ranked in descending order of total public expenditure as a percentage of GDP in 2010.
Source: OECD. Annex 2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847051

When looking at total public expenditure on all services (e.g. health, social security, environment), and not simply public expenditure on education, as a proportion of GDP, rates differ greatly among countries. In 2010, more than one-third of the countries reported that the proportion of total public expenditure on all services in relation to GDP was more than 50%; in five countries, the proportion was more than 55% (57.6% in Denmark, 55.8% in Finland, 56.5% in France, 66.4% in Ireland and 57.8% in Norway). At the other extreme, in Mexico, total public expenditure on all services accounts for 25.7% of GDP (Chart B4.2 and Annex 2).

Changes in total public expenditure on education as a percentage of total public expenditure between 1995 and 2010

A significant increase was observed between 1995 and 2005…

Over a period of 10 years (1995-2005), public expenditure on education (all levels combined) as a percentage of total public expenditure increased in 20 of the 26 OECD countries with available data for both 1995 and 2005 (on average, by 0.8 percentage points in these 26 countries). Only Canada, France, Israel, Japan, New Zealand and Portugal show different patterns.

Between 1995 and 2005, the evolution of public expenditure on education as a percentage of GDP differed from that of public expenditure on education as a percentage of total public expenditure. On average, public expenditure on education as a percentage of GDP decreased by 0.1 percentage point between 1995 and 2005 while public expenditure on education as a percentage of total public expenditure increased by 0.8 percentage point over the same period. Relative to GDP, public expenditure on education increased by more than half a percentage point in Brazil, Denmark, Greece, Mexico and the United States, and decreased by more than half a percentage point in Austria, Canada, Estonia, France, Israel and the Slovak Republic (Table B4.2).

…but a drop from 2005 with the impact of the 2008 financial crisis

Spending patterns changed considerably between 2005 and 2010. During this six-year period, public expenditure on education as a percentage of total public expenditure decreased in just under two-thirds of countries with available data (19 of 32 countries) by an average of 0.4 percentage point (from 12.8% in 2005 to 12.4% in 2010). The largest changes were seen in Iceland (-3.3 percentage points), Ireland (-4.2 percentage points) and Mexico (-2.9 percentage points). The changes were also substantial in Hungary, Norway, Poland, Slovenia and the United States (-1 percentage point or more). Exceptions to this pattern are Canada, Israel and New Zealand, all of which showed a decrease in expenditure on education as a percentage of total public expenditure between 1995 to 2005 followed by an increase in expenditure from 2005 to 2010.

Comparing 2010 with 2005 data shows a different pattern because GDP was also affected by the financial crisis. As a result, public expenditure on education as a percentage of GDP increased or remained stable in all countries except Hungary, Norway, Poland, and Switzerland between those two years. On average across OECD countries with available data for all years, the increase was 0.3 percentage point (Table B4.2 and Box B2.1 in Indicator B2).

First effect of the financial crisis: Public expenditure on education increased at a slower rate than public expenditure for all services in more than half of the countries

The variations observed between 2008 and 2010 are probably linked to the first effects of the global economic crisis, which began in 2008. The crisis put more pressure on overall public budgets, requiring governments to prioritise allocations among education and other key public sectors, such as health and social security (Table B4.2 and Chart B4.3).

During this period, 2008 to 2010, there is no clear global trend concerning the evolution of public expenditure on education as a percentage of total public expenditure as was the case for the period 1995-2005.

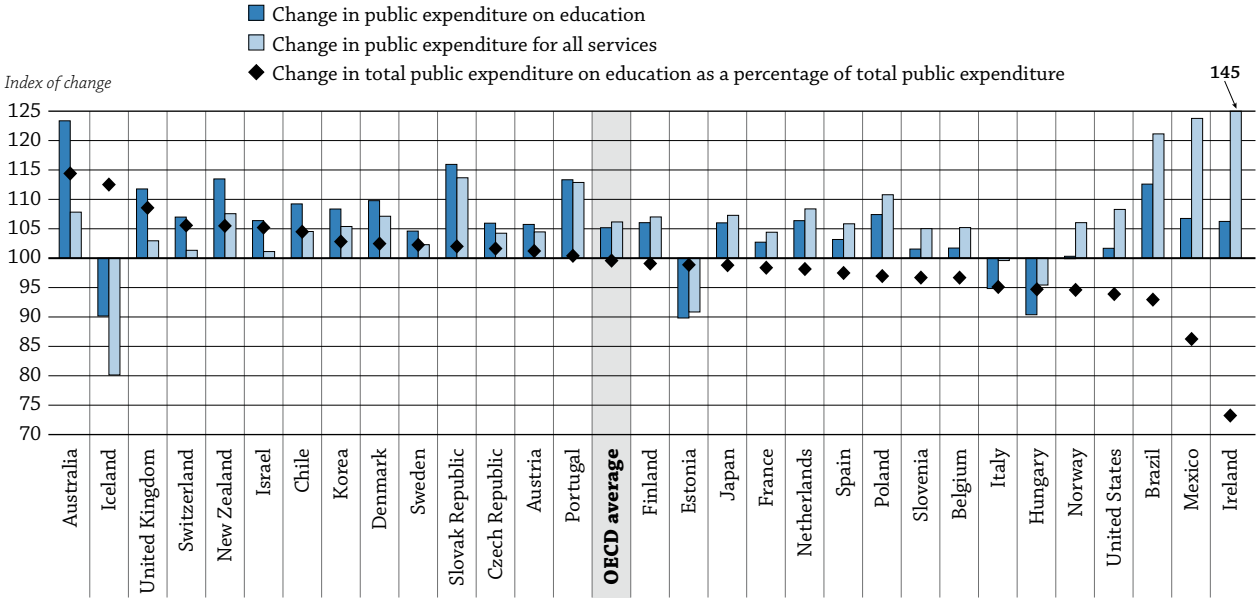
Nevertheless, in 26 of 30 countries, public expenditure on education and total public expenditure for all services both increased between 2008 and 2010. In 16 of these 30 countries, public expenditure on all services grew faster than public expenditure on education (Table B4.2 and Chart B4.3). The differences are greatest in Brazil,

Ireland, Mexico, Norway and the United States. In Ireland, the 27% decrease in public expenditure on education as a percentage of total public expenditure for all services between 2008 and 2010 is largely attributable to large-scale capital transfers to Irish banks in 2010, which had an enormous impact on government net lending figures.

In the 14 other countries, public expenditure on education grew faster than public expenditure for all services. Growth in public expenditure for all services ranged from 1% in Israel and Switzerland to 14% in the Slovak Republic. In Australia, public expenditure for all services increased by 8%, while expenditure on education rose by 23%.

Only in Estonia, Hungary, Iceland and Italy did public expenditure on all services decline between 2008 and 2010. In Iceland, where public expenditure on all services shrank by as much as 20%, public expenditure on education also fell, but not as steeply. In the other three countries, public expenditure on education declined more steeply than public expenditure on all services (Table B4.2 and Chart B4.3).

Chart B4.3. Index of change between 2008 and 2010 in total public expenditure on education as a percentage of total public expenditure for all levels of education combined
(2008 = 100, 2010 constant prices)



Countries are ranked in descending order of the change in total public expenditure on education as a percentage of total public expenditure.
Source: OECD. Tables B4.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847070

Sources of public funding invested in education

All government sources (apart from international sources) of expenditure on education are classified in three different levels of government: central, regional and local. In some countries the funding of education is centralised; in others, funding can become very decentralised after transfers among the different levels of government.

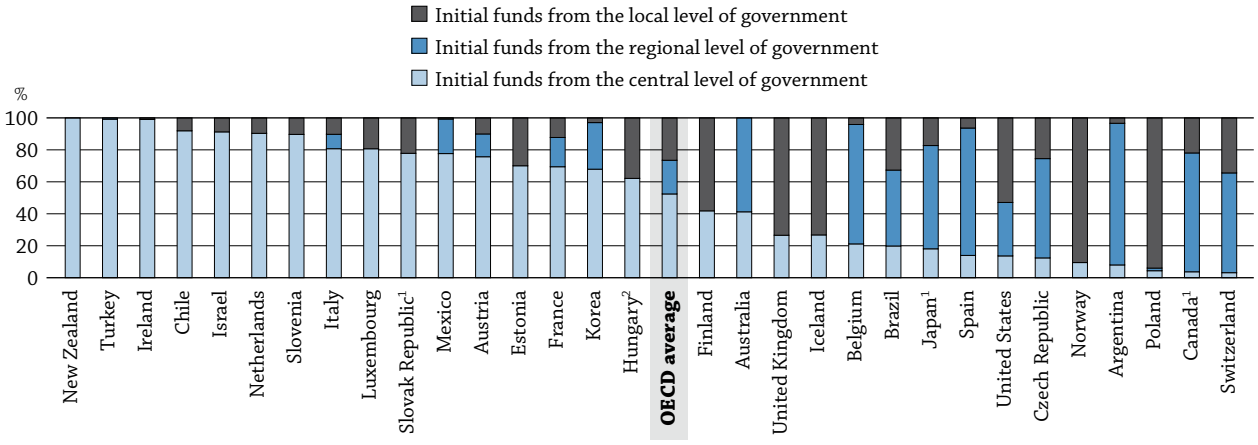
In recent years, many schools have become more autonomous and decentralised organisations; they have also become more accountable to students, parents and the public at large for their outcomes. The results from the OECD Programme for International Student Assessment (PISA) suggest that when autonomy and accountability are intelligently combined, they tend to be associated with better student performance.

Public funding is more centralised at the tertiary level than at lower levels of education. In 2010, on average across OECD countries, 53.8% of public funds for primary, secondary and post-secondary non-tertiary education combined came from the central government, before transfers. For tertiary education, 86.8% of public funds came from the central government (Table B4.3 and Table B4.4, available on line).

For primary, secondary and post-secondary non-tertiary education combined, the share of initial public funds from the central government differed greatly among countries. Four countries reported a share of less than 10%, namely Canada (3.7%), Norway (9.5%), Poland (4.4%) and Switzerland (3.2%). In Canada, the federal government plays no role in primary and secondary education; funding for these levels of education is provided at the provincial/territorial level.

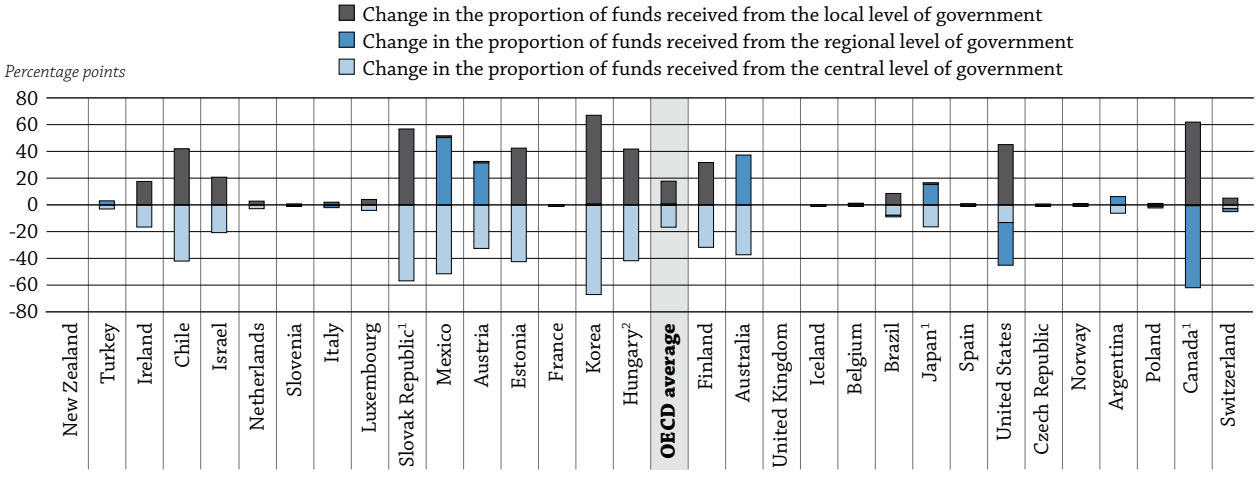
Chart B4.4. Distribution of initial sources of public educational funds, by level of government in primary, secondary and post-secondary non-tertiary education (2010)

In percentage



Change in the proportion of educational funds received from the different levels of governement between initial and final purchasers of educational resources, at the primary, secondary and post-secondary non-tertiary levels (2010)

In percentage points



1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
2. Funds from the local level include funds from regional level of governement.

Countries are ranked in descending order of the share of initial sources of funds from the central level of government.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B4.3.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847089

At the other extreme, public funds came nearly exclusively from the central government in Ireland, New Zealand and Turkey, and more than 90% of initial public funds came from the central government in Chile (91.9%), Israel (91.2%) and the Netherlands (90.3%). Nevertheless, this picture changes when transfers among levels of government are taken into account. After these transfers, less than 5% of public funds came from central sources in Canada (3.1%), Poland (3.3%) and Switzerland (0.3%), but this was also the case in Australia (3.9%), Japan (1.7%), Korea (0.9%) and the United States (0.5%). Only New Zealand had an entirely centralised funding system even after taking transfers into account (Chart B4.4 and Table B4.3).

The transfers of funds from central to regional and local levels of government at the primary, secondary and post-secondary non-tertiary levels combined are larger than at the tertiary level, on average across OECD countries, extending the scope of decentralisation at these levels of education. At the primary, secondary and post-secondary non-tertiary levels combined, on average across OECD countries, 44.2% of public funds came from local sources after transfers, compared with 27.2% before transfers. At the tertiary level, public funds from local sources represented less than 3% of the funds before and after transfers, on average across OECD countries (Table B4.3 and Table B4.4, available on line).

At the primary, secondary and post-secondary non-tertiary levels combined, the extent of transfers from central to lower sources of public funds vary widely between countries. The difference after transfers from central to lower sources represents more than 40 percentage points in Chile, Estonia, Hungary, Korea, Mexico and the Slovak Republic. In Australia, Canada, Mexico and the United States, the difference after transfers from regional to local sources of public funds exceeds 30 percentage points (Chart B4.4).

At the tertiary level of education, the proportions of public funds coming from the central government are relatively high, both before and after transfers among levels of government. Shares of public funds from central government are the lowest in Belgium (26.6% and 25.3%, before and after transfers, respectively), and Spain (16.0% and 15.8%). At the other extreme, in ten countries these shares reach nearly 100% both before and after transfers: Chile, Estonia, Hungary, Iceland, the Netherlands, New Zealand, Norway, Portugal, the Slovak Republic and the United Kingdom (Table B4.4, available on line).

Definitions

Public expenditure on education covers expenditure on educational institutions and support for students' living costs and for other private expenditure outside institutions. It includes expenditure by all public entities, including ministries other than ministries of education, local and regional governments, and other public agencies. OECD countries differ in the ways in which they use public money for education. Public funds may flow directly to institutions or may be channelled to institutions via government programmes or via households. They may also be restricted to the purchase of educational services or be used to support student living costs.

All government sources (apart from international sources) for expenditure on education can be classified into three levels: central (national) government, regional government (province, state, *Bundesland*, etc.), local government (municipality, district, commune, etc.). The terms "regional" and "local" apply to governments whose responsibilities are exercised within certain geographical subdivisions of a country. They do not apply to government bodies whose roles are not geographically circumscribed but are defined in terms of responsibility for particular services, functions, or categories of students.

Total public expenditure, also referred to as total public spending, corresponds to the non-repayable current and capital expenditure of all levels of government: central, regional and local. It includes direct public expenditure on educational institutions as well as public support to households (e.g. scholarships and loans to students for tuition fees and student living costs) and to other private entities for education (e.g. subsidies to companies or labour organisations that operate apprenticeship programmes).

Methodology

Data refer to the financial year 2010 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

Figures for total public expenditure have been taken from the OECD National Accounts Database (see Annex 2) and use the System of National Accounts 1993.

Educational expenditure is expressed as a percentage of a country's total public sector expenditure and as a percentage of GDP.

Though expenditure on debt servicing (e.g. interest payments) is included in total public expenditure, it is excluded from public expenditure on education. The reason is that some countries cannot separate interest payments for education from those for other services. This means that public expenditure on education as a percentage of total public expenditure may be underestimated in countries in which interest payments represent a large proportion of total public expenditure on all services.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Indicator B4 Tables

Table B4.1	**Total public expenditure on education (2010)**	StatLink http://dx.doi.org/10.1787/888932849806
Table B4.2	**Total public expenditure on education (1995, 2000, 2005 and 2010)**	StatLink http://dx.doi.org/10.1787/888932849825
Table B4.3	**Sources of public educational funds, for primary, secondary and post-secondary non-tertiary education, by level of government (2010)**	StatLink http://dx.doi.org/10.1787/888932849844
WEB Table B4.4	**Sources of public educational funds, before and after transfers, by level of government for tertiary education (2010)**	StatLink http://dx.doi.org/10.1787/888932849863
WEB Table B4.5	**Distribution of total public expenditure on education (2010)**	StatLink http://dx.doi.org/10.1787/888932849882

B4

Table B4.1. Total public expenditure on education (2010)

Direct public expenditure on educational institutions plus public subsidies to households[1] and other private entities, as a percentage of total public expenditure and as a percentage of GDP, by level of education

		Public expenditure[1] on education as a percentage of total public expenditure				Public expenditure[1] on education as a percentage of GDP			
		Pre-primary education	All Primary, secondary and post-secondary non-tertiary education	Tertiary education	All levels of education combined	Pre-primary education	Primary, secondary and post-secondary non-tertiary education	Tertiary education	All levels of education combined
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia	0.2	11.5	3.4	**15.2**	0.1	3.9	1.1	**5.2**
	Austria	1.2	7.0	3.1	**11.2**	0.6	3.6	1.6	**5.9**
	Belgium	1.2	8.2	2.8	**12.5**	0.6	4.3	1.5	**6.6**
	Canada[2, 3]	x(2)	8.5	4.7	**13.2**	x(6)	3.4	1.9	**5.3**
	Chile[4]	2.3	11.6	3.9	**17.7**	0.5	2.7	0.9	**4.1**
	Czech Republic	1.1	6.1	2.2	**9.7**	0.5	2.7	1.0	**4.2**
	Denmark[3]	1.8	8.9	4.2	**15.3**	1.0	5.1	2.4	**8.8**
	Estonia	1.1	9.8	3.0	**14.0**	0.4	4.0	1.2	**5.7**
	Finland	0.7	7.6	3.9	**12.3**	0.4	4.3	2.2	**6.8**
	France	1.2	6.8	2.3	**10.4**	0.7	3.9	1.3	**5.9**
	Germany	m	m	m	**m**	m	m	m	**m**
	Greece	m	m	m	**m**	m	m	m	**m**
	Hungary	1.4	5.9	2.0	**9.8**	0.7	2.9	1.0	**4.9**
	Iceland	1.4	9.4	3.2	**14.7**	0.7	4.8	1.6	**7.6**
	Ireland	0.2	7.4	2.2	**9.7**	0.1	4.9	1.4	**6.5**
	Israel	1.5	9.1	2.3	**13.6**	0.7	4.0	1.0	**5.9**
	Italy	0.9	6.4	1.7	**8.9**	0.4	3.2	0.8	**4.5**
	Japan[3]	0.2	6.7	1.8	**9.3**	0.1	2.8	0.7	**3.8**
	Korea	0.5	11.2	2.6	**16.2**	0.1	3.4	0.8	**4.9**
	Luxembourg	1.7	7.9	m	**m**	0.7	3.4	m	**m**
	Mexico	2.1	13.6	4.0	**20.6**	0.5	3.5	1.0	**5.3**
	Netherlands	0.8	7.6	3.3	**11.6**	0.4	3.9	1.7	**6.0**
	New Zealand	1.5	13.1	5.5	**20.0**	0.5	4.7	2.0	**7.2**
	Norway	0.7	9.4	4.5	**15.2**	0.4	5.5	2.6	**8.8**
	Poland	1.1	7.7	2.6	**11.4**	0.5	3.5	1.2	**5.2**
	Portugal	0.8	7.8	2.2	**11.0**	0.4	4.0	1.1	**5.6**
	Slovak Republic[3]	1.0	7.1	2.1	**10.6**	0.4	2.9	0.8	**4.2**
	Slovenia	1.2	7.5	2.7	**11.4**	0.6	3.7	1.4	**5.7**
	Spain	1.5	6.8	2.5	**10.9**	0.7	3.1	1.2	**5.0**
	Sweden	1.4	8.1	3.9	**13.4**	0.7	4.2	2.0	**7.0**
	Switzerland	0.6	11.0	4.0	**15.8**	0.2	3.6	1.3	**5.2**
	Turkey	0.1	6.5	m	**m**	n	2.5	m	**m**
	United Kingdom	0.6	9.4	2.0	**12.0**	0.3	4.9	1.0	**6.3**
	United States	0.8	8.6	3.3	**12.7**	0.4	3.7	1.4	**5.5**
	OECD average	1.1	8.6	3.1	**13.0**	0.6	3.8	1.4	**5.8**
	EU21 average	1.1	7.6	2.7	**11.4**	0.6	3.8	1.4	**5.8**
Other G20	Argentina	m	m	m	**m**	0.4	4.2	1.1	**5.8**
	Brazil	1.4	13.8	3.0	**18.1**	0.4	4.4	1.0	**5.8**
	China	m	m	m	**m**	m	m	m	**m**
	India	m	m	m	**m**	n			
	Indonesia	m	m	m	**m**	m	m	m	**m**
	Russian Federation	1.8	5.2	2.5	**10.5**	0.7	2.0	1.0	**4.1**
	Saudi Arabia	m	m	m	**m**	m	m	m	**m**
	South Africa	m	m	m	**m**	m	m	m	**m**
	G20 average	m	m	m	**m**	m	m	m	**m**

1. Public expenditure presented in this table includes public subsidies to households for living costs (scholarships and grants to students/households and students loans), which are not spent on educational institutions. Therefore the figures presented here exceed those on public spending on institutions found in Table B2.4.
2. Year of reference 2009 instead of 2010.
3. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
4. Year of reference 2011 instead of 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
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Table B4.2. Total public expenditure on education (1995, 2000, 2005 and 2010)

Direct public expenditure on educational institutions plus public subsidies to households[1] and other private entities, as a percentage of total public expenditure and as a percentage of GDP, for all levels of education combined, by year

		Public expenditure[1] on education as a percentage of total public expenditure				Public expenditure[1] on education as a percentage of GDP				Index of change between 2008 and 2010 in (2008 = 100, 2010 constant prices)		
		1995	2000	2005	2010	1995	2000	2005	2010	Public expenditure on education	Public expenditure for all services	Total public expenditure on education as a percentage of total public expenditure
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	13.8	14.3	14.6	15.2	4.8	4.6	4.5	5.2	123	108	114
	Austria	10.8	10.7	10.9	11.2	6.1	5.6	5.4	5.9	106	104	101
	Belgium	m	12.0	11.4	12.5	m	5.9	5.9	6.6	102	105	97
	Canada[2, 3]	12.7	12.4	11.8	13.2	6.2	5.1	5.1	5.3	m	m	m
	Chile[4]	m	m	16.2	17.7	m	m	3.0	4.1	109	105	104
	Czech Republic	8.7	9.5	9.5	9.7	4.5	3.8	4.1	4.2	106	104	102
	Denmark[3]	12.3	15.4	15.7	15.3	7.3	8.3	8.3	8.8	110	107	102
	Estonia	13.9	14.8	14.5	14.0	5.8	5.4	4.9	5.7	90	91	99
	Finland	11.1	12.5	12.5	12.3	6.8	6.0	6.3	6.8	106	107	99
	France	11.5	11.6	10.6	10.4	6.3	6.0	5.7	5.9	103	104	98
	Germany	8.6	10.2	10.1	m	4.7	4.6	4.8	m	m	107	m
	Greece	5.6	7.3	m	m	2.6	3.4	4.1	m	m	94	m
	Hungary	9.4	10.4	10.9	9.8	5.3	5.0	5.5	4.9	90	95	95
	Iceland	m	15.9	18.0	14.7	m	6.7	7.6	7.6	90	80	113
	Ireland	12.2	13.7	14.0	9.7	5.0	4.2	4.7	6.5	106	145	73
	Israel	12.7	13.4	12.3	13.6	6.5	6.3	5.6	5.9	106	101	105
	Italy	9.0	9.8	9.2	8.9	4.7	4.5	4.4	4.5	95	100	95
	Japan[3]	9.7	9.5	9.6	9.3	3.5	3.6	3.5	3.8	106	107	99
	Korea	m	16.6	14.9	16.2	m	3.7	4.0	4.9	108	105	103
	Luxembourg	m	m	m	m	m	m	m	m	m	108	m
	Mexico	22.2	23.4	23.4	20.6	4.2	4.4	5.0	5.3	107	124	86
	Netherlands	9.1	11.2	12.3	11.6	5.1	5.0	5.5	6.0	106	108	98
	New Zealand	16.5	m	15.5	20.0	5.6	6.7	6.0	7.2	113	108	105
	Norway	15.6	14.0	16.7	15.2	9.3	7.8	9.3	8.8	100	106	95
	Poland	11.9	12.7	12.6	11.4	5.2	5.0	5.5	5.2	107	111	97
	Portugal	11.9	12.7	11.4	11.0	4.9	5.2	5.2	5.6	113	113	100
	Slovak Republic[3]	9.4	7.5	10.1	10.6	4.6	3.9	3.8	4.2	116	114	102
	Slovenia	m	m	12.6	11.4	m	m	5.7	5.7	102	105	97
	Spain	10.3	10.9	11.0	10.9	4.6	4.3	4.2	5.0	103	106	97
	Sweden	10.9	13.0	12.8	13.4	7.1	7.2	6.9	7.0	105	102	102
	Switzerland	14.6	14.4	15.0	15.8	5.3	5.1	5.5	5.2	107	101	106
	Turkey	m	m	m	m	m	m	m	m	m	116	m
	United Kingdom	11.4	11.0	11.8	12.0	5.0	4.3	5.2	6.3	112	103	109
	United States	12.0	13.8	13.9	12.7	4.5	4.7	5.1	5.5	102	108	94
	OECD average	11.8	12.6	13.1	13.0	5.4	5.2	5.3	5.8	105	106	100
	EU21 average	10.4	11.4	11.8	11.4	5.3	5.1	5.3	5.8	104	106	98
	OECD average (countries with available data for all years)	12.0	12.6	12.8	12.4	5.5	5.2	5.4	5.7			
Other G20	Argentina	m	m	m	m	m	m	m	5.8	m	m	m
	Brazil	11.2	10.5	14.5	18.1	3.9	3.5	4.5	5.8	113	121	93
	China	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	10.6	11.0	10.5	m	m	m	4.1	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m

1. Public expenditure presented in this table includes public subsidies to households for living costs (scholarships and grants to students/households and students loans), which are not spent on educational institutions. Therefore the figures presented here exceed those on public spending on institutions found in Table B2.4.

2. Year of reference 2009 instead of 2010.

3. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

4. Year of reference 2011 instead of 2010. Data refer to 2009-2011 instead of 2008-2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table B4.3. Sources of public educational funds, for primary, secondary and post-secondary non-tertiary education, by level of government (2010)

		Initial funds (before transfers between levels of government)				Final funds (after transfers between levels of government)			
		Central	Regional	Local	Total	Central	Regional	Local	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia	41.2	58.8	m	100.0	3.9	96.1	m	100.0
	Austria	75.7	14.3	10.0	100.0	43.1	46.5	10.4	100.0
	Belgium	21.2	74.7	4.1	100.0	22.3	73.5	4.1	100.0
	Canada[1, 2]	3.7	74.3	21.9	100.0	3.1	13.0	83.9	100.0
	Chile[3]	91.9	a	8.1	100.0	49.9	a	50.1	100.0
	Czech Republic	12.4	62.1	25.5	100.0	11.7	62.8	25.5	100.0
	Denmark[2]	m	m	m	100.0	41.4	n	58.6	100.0
	Estonia	70.0	a	30.0	100.0	27.6	a	72.4	100.0
	Finland	41.8	a	58.2	100.0	10.1	a	89.9	100.0
	France	69.4	18.3	12.3	100.0	69.3	18.3	12.4	100.0
	Germany	m	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m	m
	Hungary	62.1	x(3)	37.9	100.0	20.4	x(7)	79.6	100.0
	Iceland	26.8	a	73.2	100.0	26.5	a	73.5	100.0
	Ireland	99.0	a	1.0	100.0	82.5	a	17.5	100.0
	Israel	91.2	a	8.8	100.0	70.5	a	29.5	100.0
	Italy	80.7	9.0	10.3	100.0	80.2	7.5	12.3	100.0
	Japan[2]	18.1	64.6	17.3	100.0	1.7	81.0	17.3	100.0
	Korea	67.9	29.1	3.0	100.0	0.9	29.9	69.2	100.0
	Luxembourg	80.7	a	19.3	100.0	76.6	a	23.4	100.0
	Mexico	77.7	22.1	0.2	100.0	26.1	73.7	0.2	100.0
	Netherlands	90.3	n	9.7	100.0	87.5	n	12.5	100.0
	New Zealand	100.0	n	n	100.0	100.0	n	n	100.0
	Norway	9.5	n	90.5	100.0	8.4	n	91.6	100.0
	Poland	4.4	1.7	94.0	100.0	3.3	1.6	95.1	100.0
	Portugal	m	m	m	m	m	m	m	m
	Slovak Republic[2]	77.8	a	22.2	100.0	21.0	a	79.0	100.0
	Slovenia	89.7	a	10.3	100.0	88.9	a	11.1	100.0
	Spain	14.0	79.7	6.4	100.0	13.0	80.6	6.4	100.0
	Sweden	m	m	m	m	m	m	m	m
	Switzerland	3.2	62.4	34.4	100.0	0.3	60.2	39.5	100.0
	Turkey	99.3	0.7	m	100.0	96.2	3.8	m	100.0
	United Kingdom	26.6	a	73.4	100.0	26.6	a	73.4	100.0
	United States	13.7	33.4	52.9	100.0	0.5	1.5	98.0	100.0
	OECD average	53.8	21.6	27.2	100.0	37.1	22.4	44.2	100.0
	EU21 average	57.2	17.3	26.5	100.0	42.7	18.2	40.2	100.0
Other G20	Argentina	8.0	88.6	3.4	100.0	1.8	94.8	3.4	100.0
	Brazil	19.9	47.5	32.7	100.0	12.1	46.7	41.2	100.0
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	2.1	32.4	65.5	100.0
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m

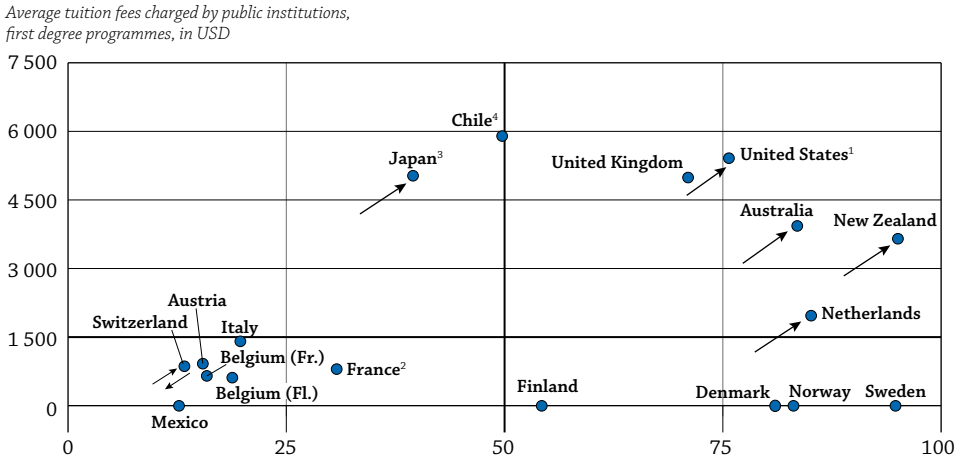
1.Year of reference 2009.
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
3. Year of reference 2011.
Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.
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HOW MUCH DO TERTIARY STUDENTS PAY AND WHAT PUBLIC SUPPORT DO THEY RECEIVE?

- OECD and G20 countries differ significantly in the amount of tuition fees charged by their tertiary institutions. In eight OECD countries, public institutions charge no tuition fees, but in one-third of the 26 OECD countries with available data, public institutions charge annual tuition fees in excess of USD 1 500 for national students.
- Countries with high levels of tuition fees tend to be those where private entities (e.g. enterprises) contribute the most to funding tertiary institutions.
- An increasing number of OECD countries charge higher tuition fees for international students than for national students. An average of 22% of public spending on tertiary education is devoted to supporting students, households and other private entities.

Chart B5.1. Relationship between average tuition fees charged by public institutions and proportion of students who benefit from public loans and/or scholarships/grants in tertiary-type A education (2011)

For full-time national students, in USD converted using PPPs for GDP, academic year 2010-11



1. Figures are reported for all students (full-time national and full-time non-national/foreign students)
2. Average tuition fees from USD 200 to 1 402 for university programmes dependent on the Ministry of Education.
3. Tuition fees refer to public institutions but more than two-thirds of students are enrolled in private institutions.
4. If only public institutions are taken into account, the proportion of students who benefit from public loans and/or scholarships/grants should be 68%.

Source: OECD. Tables B5.1 and B5.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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How to read this chart

This graph shows the relationships, at the tertiary-type A level of education, between annual tuition fees charged by educational institutions and public support to households for students' living costs. The arrow show how the average tuition fees and the proportion of students who benefit from public support have changed since 1995 following reforms.

Context

Policy decisions relating to tuition fees affect both the cost of tertiary education to students and the resources available to tertiary institutions. Public support to students and their families also enables governments to encourage participation in education – particularly among low-income students – by covering part of the cost of education and related expenses. In this way, governments can address issues of access and equality of opportunity. The impact of such support must therefore be judged, at least partly, by examining participation and retention in, and completion of, tertiary education.

Public support to students also indirectly funds tertiary institutions. Channelling funding to institutions through students may also help increase competition among institutions. Since aid for students' living costs can serve as a substitute for income from work, public subsidies may enhance educational attainment by allowing students to work less. This support comes in many forms, including means-based subsidies, family allowances for students, tax allowances for students or their parents, or other household transfers. Governments should strike the right balance among these different subsidies, especially in a period of financial crisis. Based on a given amount of subsidies, public support, such as tax reductions or family allowances, may provide less support for low-income students than means-tested subsidies, as the former are not targeted specifically to support low-income students. However, they may still help to reduce financial disparities among households with and without children in education.

Other findings

- **Around half of the 26 OECD countries with available data differentiate tuition fees by field of education** in first-degree programmes. There is no common pattern across these countries between the level of tuition fees charged and the field of education students pursue. The main criteria for differentiating fees in these countries are **the public cost of the field of study and labour-market opportunities**.
- Across OECD countries, **tuition fees for second and further degree programmes are generally not much higher than those for first-degree programmes** for public institutions and government-dependant private institutions. Exceptions to this pattern are found in Australia, Chile and the United Kingdom.
- **The high entry rates into tertiary education in some countries that charge no tuition fees are also probably due to these countries' highly developed financial support systems for students, and not just to the absence of tuitions fees.**
- **OECD countries in which students are required to pay tuition fees but can benefit from sizeable financial support do not have below-average levels of access to tertiary-type A education.**
- **Student financial support systems that offer loans with income-contingent repayment to all students combined with means-tested grants can help to promote access and equity** while sharing the costs of higher education between the state and students.

Trends

As reported in *Education at a Glance 2012*, since 1995, 14 of the 25 countries with available information implemented reforms to tuition fees. In all of these 14 countries except Iceland and the Slovak Republic, the reforms were combined with a change in the level of public support available to students.

Since 2009, further changes have been made to tuition fees and public support systems in various countries. For example, in the United Kingdom, tuition fees doubled – and nearly tripled in some universities – in 2012, as part of a government plan to stabilise university finances. However, the data presented here, which are for 2010-11, do not reflect these more recent changes. Similarly, in 2011, Korea implemented reforms to increase the level of public support for higher education, with the goal of expanding access to and improving equity in tertiary-type A education.

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Analysis

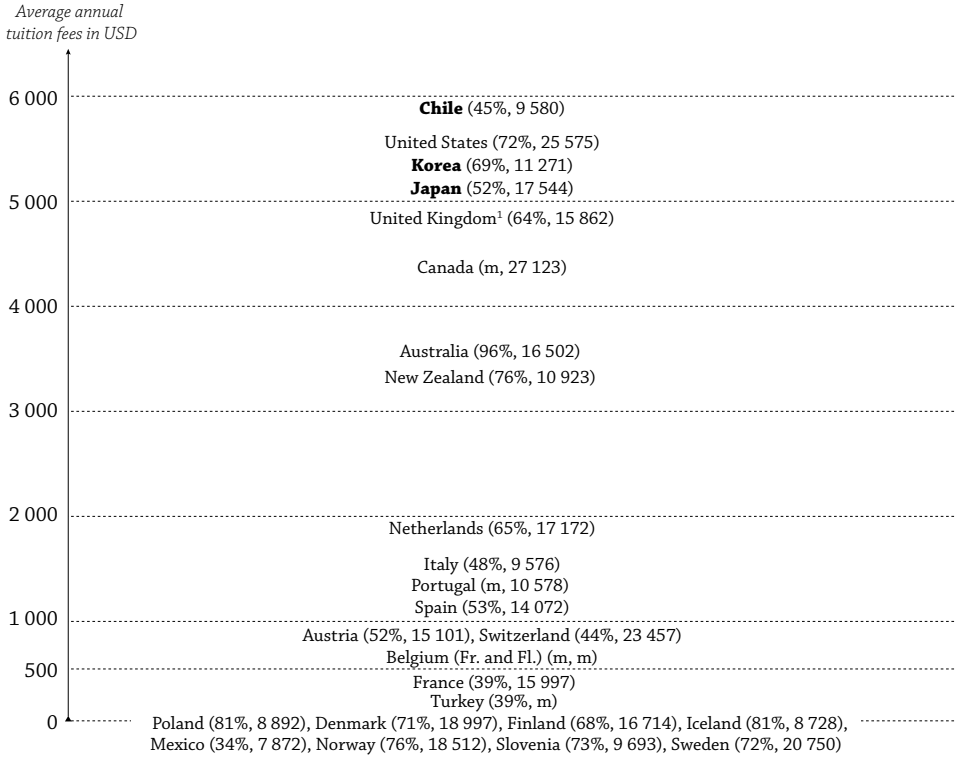
Annual tuition fees charged by tertiary-type A institutions for national students

The cost of higher education, and the best way to support students in paying for it, are among the most hotly debated public-policy topics in education today. The level of tuition fees charged by tertiary institutions – as well as the level and type of financial assistance countries provide through their student support systems – can greatly influence the access to and equity in tertiary education.

Striking the right balance between providing sufficient support to institutions through tuition fees and maintaining access and equity is challenging. On the one hand, higher tuition fees increase the resources available to educational institutions, support their efforts to maintain quality academic programmes and develop new ones, and can help institutions accommodate increases in student enrolment. However, tuition fees may also restrict access to higher education for students – particularly those from low-income backgrounds – in the absence of a strong system of public support to help them pay or reimburse the cost of their studies. In addition, when labour-market opportunities are not sufficient, high tuition fees may prevent some students from pursuing fields that require extended periods of study.

Chart B5.2. Average annual tuition fees charged by tertiary-type A public institutions for full-time national students (2011)

Converted in USD using PPPs for GDP, academic year 2010-11



Note: This chart shows the annual tuition fees charged in equivalent USD converted using PPPs. Countries in bold indicate that tuition fees refer to public institutions but more than two-thirds of students are enrolled in private institutions. The net entry rate and expenditure per student (in USD) in tertiary-type A programmes are added next to country names.

This chart does not take into account grants, subsidies or loans that partially or fully offset the student's tuition fees.

1. Public institutions do not exist at this level of education and almost all students are enrolled in government-dependent private institutions.

Source: OECD. Tables B1.1a, B5.1 and Indicator C3. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing the missing data.

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On the other hand, lower tuition fees can help promoting student access and equity in higher education, particularly among disadvantaged populations. However, they may also constrain the ability of tertiary institutions to maintain an appropriate quality of education, especially in light of the massive expansion of tertiary education in all OECD countries in recent years. Moreover, budgetary pressures stemming from the global economic crisis may make it more difficult for countries that have lower tuition fees to sustain this model in the future.

There are large differences among countries in the average tuition fees charged by tertiary-type A institutions for national students in first-degree programmes. In the five Nordic countries with more progressive tax structures (Denmark, Finland, Iceland, Norway and Sweden), and in Mexico, Poland, and Slovenia, public institutions do not charge tuition fees. By contrast, tuition fees are higher than USD 1 500 in one-third of the countries with available data for public institutions, and they reach more than USD 5 000 in Chile, Japan, Korea and the United States. Meanwhile, in Austria, Belgium, France, Italy, Spain, Switzerland and Turkey, students pay small tuition fees for tertiary-type A education. Among the EU21 countries for which data are available, only the Netherlands, the Slovak Republic and the United Kingdom have annual tuition fees that exceed USD 1 500 per full-time national student (Table B5.1 and Chart B5.2).

The tuition fees charged for national students in second and further degree programmes are generally not much higher than those charged for first-degree programmes. In the majority of the countries with available data, the fees charged are stable or slightly higher than those for first-degree programmes. Exceptions to this pattern are found in Australia, Chile, Ireland, New Zealand and the United Kingdom. Thus, for public institutions in Australia, the amount charged increases by 55% between the two types of degrees, from USD 3 924 to USD 6 099, while it decreases slightly in independent private institutions. Australia, Chile and the United Kingdom also differentiate fees by field of education in first-degree programmes. On the contrary, Turkey is the only example where the fees are lower in second and further degree programmes for public institutions (Tables B5.1 and B5.3).

Non-national students are often charged a higher level of tuition fees

National policies regarding tuition fees and financial aid to students generally cover all students studying in the country's educational institutions. Countries' policies also take international students into account. Differences between national and international students in terms of the fees they are charged or the financial help they may receive from the country in which they study, can, along with other factors, have an impact on the flows of international students. These differences can attract students to study in some countries or discourage students from studying in others (see Indicator C4), especially in a context where an increasing number of OECD countries are charging higher tuition fees for international students.

In the majority of countries with available data, the tuition fees charged by public educational institutions may differ between national and international students enrolled in the same programme. In Austria, for example, the average tuition fees charged by public institutions for students who are not citizens of EU or European Economic Area (EEA) countries are twice the fees charged for citizens of these countries. Similar policies are found in Canada, Denmark (as of 2006-07), Ireland, the Netherlands, New Zealand (except for foreign doctoral students), Poland, the Slovak Republic, Slovenia, Sweden (as of 2011), Switzerland, Turkey, the United Kingdom and the United States. In these countries, the level of tuition fees varies based on citizenship or on an individual's residence (see Indicator C4 and Box C4.3). In Australia, international students are not eligible for the support that is available to national students.

There is no common pattern across countries between the level of tuition fees and the field of education students pursue

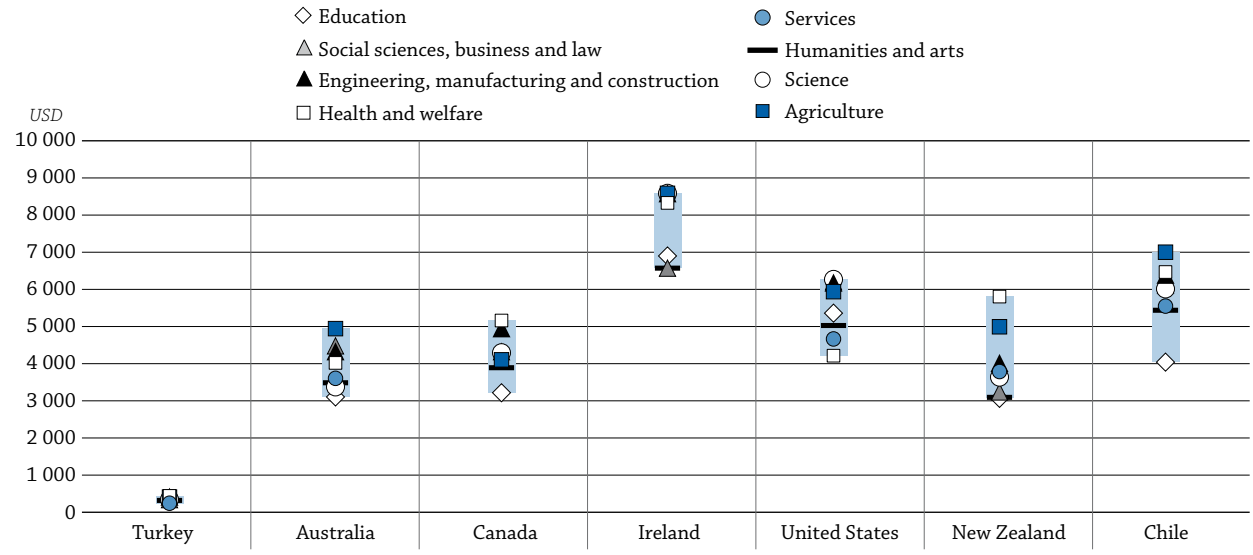
Around half of the 26 countries with available data differentiate tuition fees by field of education in first-degree programmes of public tertiary-type A education. Chile and New Zealand show the widest spectrum of fees, with differences between the lowest and highest fees of up to USD 2 963 in Chile and USD 2 744 in New Zealand. In Chile, a student studying education is charged USD 4 034 a year, while a student studying agriculture is charged USD 6 997 (Table B5.3 and Chart B5.3).

The main rationale for differentiating fees in Ireland, New Zealand and the United Kingdom is the public cost of the field of study. In these countries, the higher the cost of the field of study, the higher the level of tuition fees charged by educational institutions. In other countries, the basis for differentiating tuition fees by field of education is the priority given by the country to specific fields. In Australia, for example, differences in tuition fees are linked to skills shortages in the labour market and the level of salaries that graduates in certain disciplines can expect to receive (see Box B5.1 in *Education at a Glance 2012*). In the United States, differences in tuition fees by field of education reflect the differences in tuition fees among institutions, not among fields of education within an institution. Generally, within an institution, tuition fees are the same for all tertiary-type A first degrees, regardless of the field of education.

Contrary to what one might expect, tuition fees for studies in fields like science and engineering are only markedly higher in Ireland. The only pattern that emerges when comparing countries' tuition fees based on fields of study is that tuition fees for the field of education are the lowest among all fields of study in five of the seven countries for which these data are available. These seven countries are part of the group of countries with relatively high tuition fees and well-developed student-support systems (model 2 below). Turkey is a notable exception, with differences in fees despite having relatively low tuition fees of between USD 290 and USD 428 (Table B5.3 and Chart B5.3).

Chart B5.3. Tuition fees spectrum in first degree programmes of public tertiary-type A education (2011)

Gross amount of tuition fees in USD, by field of education, converted based on PPPs for GDP (academic year 2010-11)



Countries are ranked in ascending order of the difference between the lowest and highest amount of fees.

Source: OECD. Table B5.3. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847146

OECD countries use different mixes of grants and loans to support students' education costs

A key question in many OECD countries is whether financial support for households should be provided primarily in the form of grants or loans in tertiary-type A education. Governments subsidise students' living or educational costs through different combinations of these two types of support. Tax reductions and/or tax credits for education are not included in this indicator. Advocates of student loans argue that loans allow available resources to be spread further. If the amount spent on grants were used to guarantee or subsidise loans instead, aid would be available to more students, and overall access to higher education would increase.

Loans also shift some of the cost of education to those who benefit most from higher education, namely, the individual student. Opponents of loans argue that student loans are less effective than grants in encouraging low-income students to pursue their education. They also argue that loans may be less efficient than anticipated because of the various types of support provided to borrowers or lenders and the costs of administration and servicing.

OECD countries spend an average of about 22% of their public budgets for tertiary education on support to households and other private entities (Chart B5.4). In Australia, Chile, Denmark, Iceland, Japan, the Netherlands, New Zealand, Norway, the United Kingdom and the United States, public support accounts for more than 25% of public spending on tertiary education. Only, the Czech Republic, Mexico and Switzerland spend less than 7% of total public spending on tertiary education support. However, in the Czech Republic, subsidies for students' grants are sent directly to institutions, which are responsible for distributing them among students (Table B5.4).

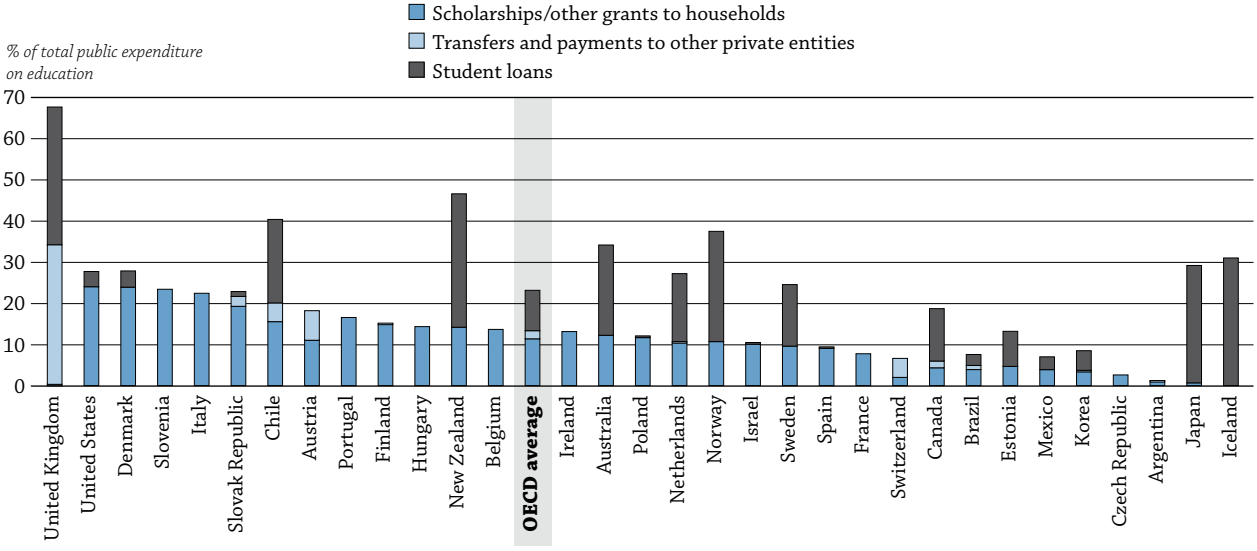
OECD research (see OECD, 2008) suggests that having a robust financial support system is important for ensuring good outcomes for students in higher education, and that the type of aid is also critical. Chart B5.4 presents the proportion of public tertiary education expenditure dedicated to loans, grants and scholarships, and other types of support given to households.

More than one-third of the 31 countries for which data are available rely exclusively on scholarships/grants and transfers/payments to other private entities. Iceland provides only student loans, while other countries make a combination of grants and loans available. Both types of support are used extensively in Australia, Chile, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States.

In general, the countries that offer student loans are also those in which public support to households accounts for the largest proportion of all public expenditure on tertiary education. In most cases, these countries also spend an above-average proportion of their tertiary education budgets on grants and scholarships (Chart B5.4 and Table B5.4).

Graphique B5.4. Public support for tertiary education (2010)

Public support for education to households and other private entities as a percentage of total public expenditure on tertiary education, by type of subsidy



Countries are ranked in descending order of the share of scholarships/other grants to households and transfers and payments to other private entities in total public expenditure on tertiary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table B5.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847165

Country approaches to funding tertiary education

Many countries have similar goals for tertiary education, such as strengthening the knowledge economy, increasing access for students, encouraging high completion rates, and ensuring the financial stability of their higher education systems. Yet OECD countries differ dramatically in the way the cost of higher education is shared among governments, students and their families, and other private entities – and in the financial support they provide to students.

As noted above, the cost of tertiary education, and the level of support available to students, varies markedly across OECD countries. This section provides a taxonomy of approaches to funding tertiary education in countries with available data, and analyses the impact of these models on access to tertiary education. Countries are grouped in four models, according to two factors: the level of tuition fees, and the financial support available through the country's student financial aid system for tertiary education.

There is no single model for financing tertiary-type A education. Countries in which tertiary-type A institutions charge similar tuition fees may vary in the proportion of students benefiting from public support and/or in the average amount of these subsidies (Tables B5.1, B5.2, B5.3, B5.4 and Table B5.5, available on line, and Chart B5.1). Since arrangements regarding the tuition fees charged by tertiary educational institutions have been the subject of reforms in many OECD countries since 1995, some countries have moved from one model to another over this period (Box B5.1 in *Education at a Glance 2012* and Chart B5.1).

Model 1: Countries with no or low tuition fees but generous student support systems

This group is composed of the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). These countries have more progressive tax structures (OECD, 2011), and students pay no tuition fees and benefit from generous public support for higher education. However, individuals face high income tax rates. The average entry rate into tertiary-type A education for this group – 75% – is significantly above the OECD average of 60% (see Indicator C3, Table C3.1a). These high entry rates may also reflect the attractiveness of these countries' highly-developed student financial support systems, not just the absence of tuition fees. For instance, in these countries, more than 55% of students benefit from public grants, public loans, or a combination of the two (Tables B5.1 and B5.2 and Chart B5.1).

The approach to funding tertiary education in this model reflects these countries' deeply rooted social values, such as equality of opportunity and social equity. The notion that government should provide its citizens with tertiary education at no charge to the individual is a salient feature of the culture of education in these countries: the funding of both institutions and students is based on the principle that access to tertiary education is a right, rather than a privilege. However, during the past decade, Denmark and Sweden (as of 2011) decided to introduce tuition fees for international students to increase the resources available for their tertiary institutions; Iceland also considered doing so. The risk is that this approach may discourage some international students from studying in these countries. Sweden has seen a reduction in the number of international students in the country since it introduced this reform: between autumn 2010 and autumn 2011 the number of students who were not part of an exchange programme and came from outside the European Economic Area and Switzerland decreased by almost 80% (Swedish National Agency for Higher Education, 2012).

Model 2: Countries with high tuition fees and well-developed student-support systems

The second group includes Australia, Canada, the Netherlands, New Zealand, the United Kingdom and the United States. These countries have potentially high financial obstacles to entry into tertiary-type A education, but they also offer significant public support to students. The average entry rate to tertiary-type A education for this group of countries is 76%, significantly above the OECD average and higher than most countries with low tuition fees (except the Nordic countries). The Netherlands and, to a lesser extent, the United Kingdom, have moved from Model 4 (countries with lower tuition fees and less-developed student support systems) to Model 2 since 1995 (Chart B5.1). Countries in Model 2 tend to be those where private entities (e.g. private

businesses and non-profit organisations) contribute the most to financing tertiary institutions. In other words, in Model 2 countries, the cost of education is shared among government, households and private companies (Chart B3.2 and Table B3.2b).

Tuition fees charged by public tertiary-type A institutions exceed USD 1 500 in all these countries, but more than 75% of tertiary-type A students receive public support (in Australia, the Netherlands, New Zealand, the United Kingdom and the United States, the five countries for which data are available; Tables B5.1 and B5.2). Student support systems are well-developed and mostly accommodate the needs of the entire student population. As a result, the share of public expenditure on tertiary education that is devoted to public support in these countries is higher than the OECD average (22%) in four of the six countries: Australia (34%), the Netherlands (27%), New Zealand (47%) and the United Kingdom (68%), and nearly at the average for Canada (19%) and the United States (28%) (Table B5.4).

In this group of countries, access to tertiary-type A education is similar to that found in other groups. For example, Australia and New Zealand have among the highest entry rates into tertiary-type A education (96% and 76%, respectively), although these rates also reflect the high proportion of international students enrolled in tertiary-type A education. Entry rates into tertiary-type A education were also above the OECD average (60%) in the Netherlands (65%), the United Kingdom (64%) and the United States (72%) in 2010. These countries spend more on core services per tertiary student than the OECD average and have a relatively high level of revenue from income tax as a percentage of GDP, compared to the OECD average. The Netherlands is an outlier, as its level of income taxation is below the OECD average (Table B1.1b, available on line, and Table C3.1).

OECD research (OECD, 2008) suggests that, in general, this model can be an effective way for countries to increase access to higher education. However, during periods of economic crisis, high tuition fees impose a considerable financial burden on students and their families and can discourage some of them from entering tertiary education, even when relatively high levels of student support are available. This is a hotly debated topic in Canada, the United Kingdom and the United States.

Model 3: Countries with high tuition fees but less-developed student support systems

In Chile, Japan and Korea, most students are charged high tuition fees (on average, more than USD 4 500 in tertiary-type A institutions), but student support systems are somewhat less developed than those in Models 1 and 2. This approach can impose a heavy financial burden on students and their families. Entry rates into tertiary-type A institutions are below the OECD average in Chile (45%) and Japan (52%), but above it significantly in Korea (69%). In Japan and Korea, some students who excel academically but have difficulty financing their studies can benefit from reduced tuition and/or admission fees or receive total exemptions.

Japan and Korea are among the countries with the lowest levels of public expenditure allocated to tertiary education as a percentage of GDP (Table B4.1). This partially explains the small proportion of students who benefit from public loans. It should be noted, however, that both countries have recently implemented reforms to improve their student-support systems. As a result, these countries are moving closer to Model 2.

Model 4: Countries with low tuition fees and less-developed student-support systems

The fourth group includes all other European countries for which data are available (Austria, Belgium, the Czech Republic, France, Ireland, Italy, Poland, Portugal, Switzerland and Spain) and Mexico. All of these countries charge moderate tuition fees compared to those in Models 2 and 3, although since 1995, reforms were implemented in some of these countries – particularly Austria and Italy – to increase tuition fees in public institutions (Chart B5.1 and Box B5.1). Model 4 countries have relatively low financial barriers to entry into tertiary education (or no tuition fees, as in Ireland and Mexico), combined with relatively low levels of support for students, which are mainly targeted to specific groups. Tuition fees charged by public institutions in this group never exceed USD 1 300, and in countries for which data are available, less than 40% of students benefit from public support (Tables B5.1 and B5.2).

In Model 4 countries, tertiary institutions usually depend heavily on the state for funding, and participation levels in tertiary education are typically below the OECD average. The average tertiary-type A entry rate in this group of countries – 56% – is relatively low. In Belgium, this low rate is counterbalanced by high entry rates into tertiary-type B education. Similarly, expenditure per student for tertiary-type A education is also comparatively low (see Indicator B1 and Chart B5.2). While high tuition fees can raise potential barriers to student participation, Model 4 suggests that lower tuition fees, which are assumed to ease access to education, do not necessarily guarantee greater access to, or better quality of tertiary-type A education.

In these countries, students and their families can benefit from support provided by sources other than the ministry of education (e.g. housing allowances, tax reductions and/or tax credits for education) but these are not covered in this analysis. In France, for example, among the State funding, housing allowances represent about 90% of scholarships/grants, and about one-third of students benefit from them. Poland is notable in that most students enrolled in public institutions have their studies fully subsidised by the state, while students enrolled in part-time studies pay the full costs of tuition.

In Model 4 countries, loan systems, such as public loans or loans guaranteed by the state, are not available or are only available to a small proportion of students in these countries (Table B5.2). At the same time, the level of public spending and the tax revenue from income as a percentage of GDP vary significantly more among this group of countries than in the other groups.

Definitions

Average tuition fees charged in public and private tertiary-type A institutions does not distinguish tuition fees by type of programme. This indicator gives an overview of tuition fees at this level by type of institution and shows the proportions of students who do or do not receive scholarships/grants that fully or partially cover tuition fees. Levels of tuition fees and associated proportions of students should be interpreted with caution as they are derived from the weighted average of the main tertiary-type A programmes and do not cover all educational institutions.

Public spending transferred to students, families and other private entities includes funds that may go indirectly to educational institutions, such as the support that covers tuition fees, and funds that do not go, even indirectly, to educational institutions, such as subsidies for students' living costs.

Public subsidies to households include: grants/scholarships (non-repayable subsidies); public student loans, which must be repaid; family or child allowances contingent on student status; public support in cash or in kind, specifically for housing, transport, medical expenses, books and supplies, social, recreational and other purposes; and interest-related support for private loans.

However, public support does not distinguish among different types of grants or loans, such as scholarships, family allowances and in-kind subsidies. Governments can also support students and their families by providing housing allowances, tax reductions and/or tax credits for education. These subsidies are not covered here. Financial aid to students in some countries may therefore be substantially underestimated.

It is also common for governments to guarantee the repayment of loans to students made by private lenders. In some OECD countries, this indirect form of support is as significant as, or even more significant than, direct financial aid to students. However, for reasons of comparability, the indicator only takes into account the amounts relating to public transfers for private loans that are made to private entities, not the total value of loans generated. Some qualitative information is nevertheless presented in some of the tables to give some insight on this type of support.

Student loans refer to the full range of student loans in order to provide information on the level of support received by students. The gross amount of loans provides an appropriate measure of the financial aid to current participants in education. Interest payments and repayments of principal by borrowers should be taken into account when assessing the net cost of student loans to public and private lenders. However, such payments are usually made by former students rather than by current students and are not covered in this indicator. In most countries, loan repayments do not flow to education authorities, and the money is not available to them to cover

other expenditures on education. OECD indicators take the full amount of scholarships and loans (gross) into account when discussing financial aid to current students. Some OECD countries also have difficulty quantifying the amount of loans to students. Therefore, data on student loans should be treated with some caution.

Methodology

Data refer to the financial year 2010 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

Data on tuition fees charged by educational institutions, financial aid to students and on reforms implemented since 1995 were collected through a special survey undertaken in 2012 and refer to the academic year 2010-11. Amounts of tuition fees and amounts of loans in national currency are converted into equivalent USD by dividing the national currency by the purchasing power parity (PPP) index for GDP. Amounts of tuition fees and associated proportions of students should be interpreted with caution as they represent the weighted average of the main tertiary-type A programmes and do not cover all educational institutions.

Public costs related to private loans guaranteed by governments are included as subsidies to other private entities. Unlike public loans, only the net cost of these loans is included.

The value of tax reductions or credits to households and students is not included.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator B5 Tables

Table B5.1	**Estimated annual average tuition fees charged by tertiary-type A educational institutions for national students (2011)**	StatLink http://dx.doi.org/10.1787/888932849920
Table B5.2	**Distribution of financial aid to students compared to amount of tuition fees charged in tertiary-type A education, national students and first-degree programmes (2011)**	StatLink http://dx.doi.org/10.1787/888932849939
Table B5.3	**Average tuition fees charged by institutions, by field of education (2011)**	StatLink http://dx.doi.org/10.1787/888932849958
Table B5.4	**Public support for households and other private entities as a percentage of total public expenditure on education and GDP, for tertiary education (2010)**	StatLink http://dx.doi.org/10.1787/888932849977
WEB Table B5.5	**Public support for households and other private entities as a percentage of total public expenditure on education and GDP, for primary, secondary and post-secondary non-tertiary education (2010)**	StatLink http://dx.doi.org/10.1787/888932849996

B5

Table B5.1. [1/2] Estimated annual average tuition fees charged by tertiary-type A educational institutions[1] for national students (2011)

In equivalent USD converted using PPPs, by type of institutions and degree structure, based on full-time students, academic year 2010-11

Note: Tuition fees and associated proportions of students should be interpreted with caution as they result from the weighted average of the main tertiary-type A programmes and do not cover all educational institutions. However, the figures reported can be considered as good proxies and show the difference among countries in tuition fees charged by main educational institutions and for the majority of students.

		Percentage of tertiary-type A students enrolled full-time in tertiary-type A education	Percentage of tertiary-type A full-time students enrolled in:			Annual average tuition fees in USD charged by institutions (for full-time students)						Index of change in the amount of tuition fees between 2005 and 2011 (first degree, public institutions, 2005=100)
			Public institutions	Government dependent private institutions	Independent private institutions	Public institutions		Government dependent private institutions		Independent private institutions		
			All programmes	All programmes	All programmes	1st degree programmes	2nd and further degree programmes	1st degree programmes	2nd and further degree programmes	1st degree programmes	2nd and further degree programmes	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	71	96	a	4	3 924	6 099	a	a	10 110	9 635	128
	Austria[2]	m	84	13	3	860	860	860	860	Up to 11 735	Up to 11 735	m
	Belgium (Fl.)	75	52	48	m	576 to 653	576 to 653	576 to 653	576 to 653	m	m	m
	Belgium (Fr.)	84	33	67	m	653	696	754	785	m	m	m
	Canada	82	m	m	m	4 288	m	x(5)	m	x(5)	m	124
	Chile	m	23	18	59	5 885	6 345	6 924	8 757	6 230	8 357	m
	Czech Republic	97	m	m	m	m	m	m	m	m	m	m
	Denmark[3]	90	m	m	m	No tuition fees	No tuition fees	m	m	a	a	m
	Estonia	87	m	93	7	m	m	3 527	3 786	5 322	6 699	m
	Finland	56	74	26	a	No tuition fees	No tuition fees	No tuition fees	No tuition fees	a	a	m
	France	m	86	5	9	200 to 1 402	273 to 1 402	1 138 to 8 290	x(7)	m	m	116
	Germany	94	96	4	x	m	m	m	m	m	m	m
	Greece	100	m	m	m	m	m	m	m	m	m	m
	Hungary	65	m	m	m	m	m	m	m	m	m	m
	Iceland	71	m	m	m	m	m	m	m	m	m	m
	Ireland	87	m	a	m	6 450	7 036	a	a	m	m	136
	Israel	82	m	m	m	m	m	m	m	m	m	m
	Italy	100	90	a	10	1 407	x(5)	a	a	4 406	x(9)	m
	Japan	91	25	a	75	5 019	5 106	a	a	8 039	7 423	109
	Korea	m	23	a	77	5 395	m	a	a	9 383	m	m
	Luxembourg	95	m	m	m	m	m	m	m	m	m	m
	Mexico	95	67	a	33	No tuition fees	No tuition fees	a	a	5 684	x(9)	m
	Netherlands	86	m	a	m	1 966	x(5)	a	a	m	m	113
	New Zealand	60	m	m	m	3 645	x(5)	m	m	m	m	135
	Norway	71	85	5	10	No tuition fees	No tuition fees	m	m	5 868	7 296	m
	Poland	45	90	a	10	n	n	a	a	1 242	1 335	m
	Portugal[3]	m	m	m	m	m	m	m	m	m	m	m
	Slovak Republic	64	93	a	7	Maximum 2 916	x(5)	a	a	m	m	m
	Slovenia	75	94	6	1	n	n	n	n	11 040	12 144	m
	Spain	76	88	a	12	1 129	m	a	a	m	m	m
	Sweden	48	93	7	n	No tuition fees	No tuition fees	No tuition fees	No tuition fees	m	m	m
	Switzerland	89	95	3	2	863	863	863	863	m	m	m
	Turkey	100	94	a	6	332	270	a	a	m	m	136
	United Kingdom	76	a	100	n	a	a	4 980	7 814	m	m	m
	United States	66	70	a	30	5 402	m	a	a	17 163	m	116
Other G20	Brazil	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	49	m	m	m	m	m	m	m	m	m	m

1. Scholarships/grants that the student may receive are not taken into account.
2. Includes students in advanced research programmes
3. Tuition fees in total tertiary education.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849920

Table B5.1. [2/2] Estimated annual average tuition fees charged by tertiary-type A educational institutions[1] for national students (2011)

In equivalent USD converted using PPPs, by type of institutions and degree structure, based on full-time students, academic year 2010-11

Note: Tuition fees and associated proportions of students should be interpreted with caution as they result from the weighted average of the main tertiary-type A programmes and do not cover all educational institutions. However, the figures reported can be considered as good proxies and show the difference among countries in tuition fees charged by main educational institutions and for the majority of students.

		Comment
		(12)
OECD	Australia	93% of national students in public institutions are in subsidised places and pay an average USD 3 817 tuition fee, including HECS/HELP subsidies. There was a significant increase (~50%) in scholarships for domestic students from 2007 to 2009 as a result of government reforms aimed at doubling the number of Commonwealth Scholarships by 2012. The new scholarships were mostly targeted towards students studying national priority subjects, students who needed to relocate to study specialist subjects, and Indigenous students.
	Austria[2]	As of summer term 2009, tuition fees have to be paid by national students and students from EU/EEA countries when they exceed the theoretical duration of the study programme by two semesters and by students from non-EU/EEA countries (except students from least-developed countries)
	Belgium (Fl.)	Tuition fees refer to the minimum and maximum amount that institutions may charge according to the decree (indexed figures). They refer to those for students enrolled in first (bachelor) and second (master) degree programmes. The information does not refer to further degree programmes (for example master after master). This information refers to students without scholarship (student with a scholarship benefit from lower tuition fees, see more details in Annex 3).
	Belgium (Fr.)	Tuition fees charged for programmes are the same in public as in private institutions but the distribution of students differs between public and private institutions, so the weighted average is not the same.
	Canada	
	Chile	
	Czech Republic	
	Denmark[3]	Only university students. The proportion of students receiving grants/scholarships is estimated. National students include student from EU/EEA-countries and Switzerland.
	Estonia	There is a dual track tuition system in Estonia. Those students who are admitted to state-funded places at the universities do not pay tuition. Universities can charge tuition from students admitted beyond state-commissioned study places. Universities can decide upon both the amount of the tuition fee as well as the number of students to charge. In case of advanced research programmes, for example, universities create most of the additional study places without tuition. To some extent, this is also the case for second and further degree programmes.
	Finland	Excluding membership fees to student unions.
	France	Tuition fees in public institutions refer to Universities programmes dependent from the Ministry of higher Education for the lowest level of tuition fees and refer to the State diploma of Psychomotrician (EUR 1 218) for the highest level of tuition fees in public institutions. For the government-dependant private institutions, the lowest level of tuitions fess mentioned in the table refers to Catholic University and the highest level refers to arts schools.
	Germany	
	Greece	
	Hungary	
	Iceland	
	Ireland	The tuition fees charged by public institutions are paid directly by the government in respect of full-time, undergraduate students from the European Union, only. About one half of all tuition fee income is derived from households (mainly for part-time or postgraduate or non-EU students). This means that in 2010-11 students paid only EUR 1 500 of the fee level above.
	Israel	
	Italy	Each institution fixes scales for tuition fees dependent on the economic circumstances of the student's family, according to equity and solidarity criteria that respects the general rules determined at national level. The annual average tuition fees are calculated on the basis of the actual tuition fee paid by each student; students totally exempted from fees are not included in the calculation of the average.
	Japan	Annual average tuition fees exclude admission fees charged by the schools for the first year.
	Korea	
	Luxembourg	
	Mexico	
	Netherlands	
	New Zealand	
	Norway	Student fees are representative of the dominant private ISCED 5 institution in Norway.
	Poland	
	Portugal[3]	
	Slovak Republic	Generally, full-time students do not pay the tuition fees, but students who are simultaneously enrolled in one academic year in two or more study programmes offered by a public university in the same level, are required to pay annual tuition fees for the second and the other study programmes in the academic year. In addition, students studying longer than the standard duration of study are required to pay annual tuition for each additional year of study.
	Slovenia	In public and government dependent private institutions: first and second level full-time students do not pay tuition fees. But second cycle students who already obtained a qualification/degree equivalent to the second cycle pay tuition fees.
	Spain	
	Sweden	
	Switzerland	
	Turkey	
	United Kingdom	
	United States	Figures are reported for all students (full-time national and full-time non-national/foreign students).
Other G20	Brazil	
	Russian Federation	

1. Scholarships/grants that the student may receive are not taken into account.
2. Includes students in advanced research programmes
3. Tuition fees in total tertiary education.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849920

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Table B5.2. Distribution of financial aid to students compared to amount of tuition fees charged in tertiary-type A education, national students and first degree programmes (2011)

Based on full-time students, academic year 2010-11

		Distribution of financial aid to students. Percentage of students who:				Distribution of scholarships/grants in support of tuition fees. Percentage of students who:			
		benefit from public loans only	benefit from scholarships/ grants only	benefit from public loans AND scholarships/ grants	DO NOT benefit from public loans OR scholarships/ grants	receive scholarships/ grants that are higher than the tuition fees	receive scholarships/ grants whose amount is equivalent to the tuition fees	receive scholarships/ grants that partially cover the tuition fees	DO NOT receive scholarships/ grants in support of tuition fees
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia[1]	81	n	2	16	n	n	3	97
	Austria	a	15	a	85	15	n	n	85
	Belgium (Fl.)[1]	a	19	a	81	19	x(5)	x(5)	81
	Belgium (Fr.)[2]	n	x(3)	16	84	16	x(5)	x(5)	84
	Canada	m	m	m	m	m	m	m	m
	Chile	32	13	4	50	n	3	14	82
	Czech Republic	m	m	a	m	m	m	m	m
	Denmark[3]	n	53	28	m	81	m	m	m
	Estonia	m	m	m	m	0	0	10	89
	Finland	a	54	a	46	a	a	a	a
	France[3, 4]	a	31	a	69	24	7	a	69
	Germany	m	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m	m
	Hungary	m	m	m	m	m	m	m	m
	Iceland[2]	63	m	m	37	a	a	a	100
	Ireland[4]	m	37	m	m	37	m	m	m
	Israel	m	m	m	m	m	m	m	m
	Italy	n	19	n	80	8	4	7	81
	Japan	37	3	m	m	n	x(7)	3	m
	Korea	m	m	m	m	a	2	41	57
	Luxembourg	m	m	m	m	m	m	m	m
	Mexico[2, 3]	1	12	m	87	m	m	m	m
	Netherlands[4]	a	a	85	15	68	n	17	15
	New Zealand	53	6	37	5	m	m	m	m
	Norway	12	4	67	m	m	m	m	m
	Poland	m	m	m	m	m	m	m	m
	Portugal	m	m	m	m	m	m	m	m
	Slovak Republic	m	m	m	m	m	m	m	m
	Slovenia[5, 6]	a	26	n	m	m	m	m	m
	Spain	m	m	m	m	23	3	9	65
	Sweden	n	24	70	5	a	a	a	a
	Switzerland	2	10	1	87	13	n	n	87
	Turkey	m	m	m	m	25	n	n	75
	United Kingdom[2]	x(3)	6	65	29	n	n	n	100
	United States[3]	13	26	37	24	m	m	m	37
Other G20	Brazil	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m

1. Excludes foreign students.
2. Data refer to academic year 2008-2009.
3. Distribution of students in total tertiary education (only Public University, including tertiary-type B in France).
4. Public institutions only.
5. Column 2 only includes scholarships.
6. Data refer to academic year 2009-2010.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849939

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Table B5.3. Average tuition fees charged by institutions, by field of education (2011)

Gross amount of tuition fees in USD, converted based on PPPs for GDP, for full-time national students in tertiary-type A first degrees, academic year 2010-11

Note: Countries without differentation of tuition fees by field of education are not reported in this table: Austria, Belgium (Fl.), Belgium (Fr.), Denmark, Finland, France, Italy, Korea, the Netherlands, Norway, the Slovak Republic, Slovenia, Sweden, Switzerland.

			Annual average tuition fees charged for full-time national students[1] in tertiary-type A first degree programmes								
			2011								
			Total: All fields of education	Education (ISC 14)	Humanities and Arts (ISC 2)	Social sciences, business and law (ISC 3)	Science (ISC 4)	Engineering, manufacturing and construction (ISC 5)	Agriculture (ISC 6)	Health and welfare (ISC 7)	Services (ISC 8)
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	**Australia**	Public institutions	3 924	3 095	3 477	4 472	3 367	4 325	4 937	4 013	3 597
		Government dependent private institutions	a	a	a	a	a	a	a	a	a
		Independent private institutions	10 110	5 803	10 617	10 497	11 017	15 494	15 227	9 771	10 787
	Canada	Public institutions	4 288	3 208	3 883	4 314	4 286	4 945	4 095	5 155	m
		Government dependent private institutions	m	m	m	m	m	m	m	m	m
		Independent private institutions	m	m	m	m	m	m	m	m	m
	Chile	Public institutions	5 885	4 034	5 432	6 109	6 008	6 388	6 997	6 463	5 544
		Government dependent private institutions	6 924	4 383	6 972	7 223	7 222	7 623	7 643	7 238	6 212
		Independent private institutions	6 230	4 543	6 285	6 511	5 983	6 945	6 668	6 690	5 815
	Estonia	Public institutions	m	m	m	m	m	m	m	m	m
		Government dependent private institutions	3 527	3 081	3 439	3 706	3 145	3 271	2 927	3 888	3 284
		Independent private institutions	m	m	m	m	m	m	m	m	m
	Ireland	Public institutions (Universities)	7 730	6 895	6 567	6 567	8 584	8 584	8 584	8 326	a
		Public institutions (IoTs)	4 603	a	4 480	4 480	4 480	5 218	a	4 480	4 478
		Government dependent private institutions	m	m	m	m	m	m	m	m	a
		Independent private institutions	m	m	m	m	m	m	m	m	a
	Japan	Public institutions	5 019	a	a	a	a	a	a	a	a
		Government dependent private institutions	a	a	a	a	a	a	a	a	a
		Independent private institutions	8 039	m	m	m	m	m	m	m	a
	New Zealand	Public institutions	3 645	3 057	3 084	3 229	3 630	4 011	4 987	5 801	3 780
		Government dependent private institutions	m	m	m	m	m	m	m	m	a
		Independent private institutions	m	m	m	m	m	m	m	m	a
	Poland	Public institutions	n	m	m	m	m	m	m	m	a
		Government dependent private institutions	a	m	m	m	m	m	m	m	a
		Independent private institutions	1 242	m	m	m	m	m	m	m	a
	Spain	Public institutions	1 129	m	m	m	m	m	m	m	a
		Government dependent private institutions	a	a	a	a	a	a	a	a	a
		Independent private institutions	m	m	m	m	m	m	m	m	a
	Turkey	Public institutions	332	290	306	327	331	405	396	428	231
		Government dependent private institutions	a	a	a	a	a	a	a	a	a
		Independent private institutions	m	m	m	m	m	m	m	m	m
	United Kingdom	Public institutions	a	a	a	a	a	a	a	a	a
		Government dependent private institutions	4 980	m	m	m	m	m	m	m	m
		Independent private institutions	m	m	m	m	m	m	m	m	m
	United States[1]	Public institutions	5 402	5 354	5 021	6 203	6 263	6 176	5 933	4 207	4 659
		Government dependent private institutions	a	a	a	a	a	a	a	a	a
		Independent private institutions	17 163	17 840	22 736	17 333	18 584	19 347	19 192	12 549	13 800

1. Figures are reported for all students (full-time national and full-time non-national/foreign students).

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932849958

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Table B5.4. Public support for households and other private entities as a percentage of total public expenditure on education and GDP, for tertiary education (2010)

Direct public expenditure on educational institutions and subsidies for households and other private entities

		Direct public expenditure for institutions	Public support for education to private entities						Public support for education to private entities as a percentage of GDP
			Financial aid to students					Total	
			Scholarships/ other grants to households	Student loans	Total	Scholarships/ other grants to households attributable for educational institutions	Transfers and payments to other private entities		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia	**65.9**	12.2	21.9	34.2	0.7	n	**34.1**	0.39
	Austria	**81.8**	11.0	a	11.0	m	7.2	**18.2**	0.30
	Belgium	**86.3**	13.7	n	13.7	4.2	n	**13.7**	0.20
	Canada[1]	**81.3**	4.3	12.7	17.1	m	1.6	**18.7**	0.35
	Chile[2]	**59.6**	15.5	20.3	35.8	15.2	4.6	**40.4**	0.36
	Czech Republic	**97.4**	2.6	a	2.6	m	n	**2.6**	0.02
	Denmark[3]	**72.1**	23.9	3.9	27.9	n	n	**27.9**	0.67
	Estonia	**86.8**	4.7	8.5	13.2	m	n	**13.2**	0.16
	Finland	**84.8**	14.9	n	14.9	a	0.3	**15.2**	0.33
	France	**92.3**	7.7	m	7.7	2.8	a	**7.7**	0.10
	Germany	**m**	m	m	m	m	m	**m**	m
	Greece	**m**	m	m	m	m	m	**m**	m
	Hungary	**85.7**	14.3	m	14.3	n	n	**14.3**	0.14
	Iceland	**69.0**	m	31.0	31.0	a	n	**31.0**	0.51
	Ireland	**86.9**	13.1	n	13.1	n	n	**13.1**	0.19
	Israel	**89.5**	10.1	0.4	10.5	9.7	n	**10.5**	0.11
	Italy	**77.5**	22.4	n	22.5	10.3	n	**22.5**	0.19
	Japan[3]	**70.8**	0.7	28.5	29.2	m	n	**29.2**	0.22
	Korea	**91.5**	3.4	4.8	8.1	3.0	0.3	**8.5**	0.07
	Luxembourg	**m**	m	m	m	m	m	**m**	m
	Mexico	**93.0**	3.9	3.1	7.0	1.8	a	**7.0**	0.07
	Netherlands	**72.8**	10.4	16.5	26.9	n	0.3	**27.2**	0.45
	New Zealand	**53.4**	14.2	32.4	46.6	m	n	**46.6**	0.91
	Norway	**62.5**	10.7	26.8	37.5	m	n	**37.5**	0.98
	Poland	**87.8**	11.7	0.4	12.1	m	n	**12.2**	0.14
	Portugal	**83.4**	16.6	m	16.6	m	m	**16.6**	0.19
	Slovak Republic[3]	**77.1**	19.3	1.2	20.5	m	2.4	**22.9**	0.19
	Slovenia	**76.6**	23.4	n	23.4	m	n	**23.4**	0.32
	Spain	**90.6**	9.2	0.3	9.4	2.0	n	**9.4**	0.11
	Sweden	**75.5**	9.6	14.9	24.5	a	a	**24.5**	0.50
	Switzerland	**93.4**	2.0	n	2.0	m	4.6	**6.6**	0.09
	Turkey	**m**	m	m	m	m	m	**m**	m
	United Kingdom	**32.3**	0.3	33.5	33.8	x(4)	33.9	**67.7**	0.69
	United States	**72.3**	24.0	3.7	27.7	m	m	**27.7**	0.39
	OECD average	**78.3**	11.4	9.8	19.8	3.1	2.0	**21.7**	0.31
Other G20	Argentina	**98.8**	1.2	n	1.2	m	0.1	**1.2**	0.01
	Brazil	**92.4**	3.9	2.7	6.6	x(2)	1.0	**7.6**	0.07
	China	**m**	m	m	m	m	m	**m**	m
	India	**m**	m	m	m	m	m	**m**	m
	Indonesia[2]	**m**	m	m	m	m	m	**m**	m
	Russian Federation	**m**	m	m	m	m	m	**m**	m
	Saudi Arabia	**m**	m	m	m	m	m	**m**	m
	South Africa	**m**	m	m	m	m	m	**m**	m
	G20 average	**m**	m	m	m	m	m	**m**	m

1. Year of reference 2009.
2. Year of reference 2011.
3. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932849977

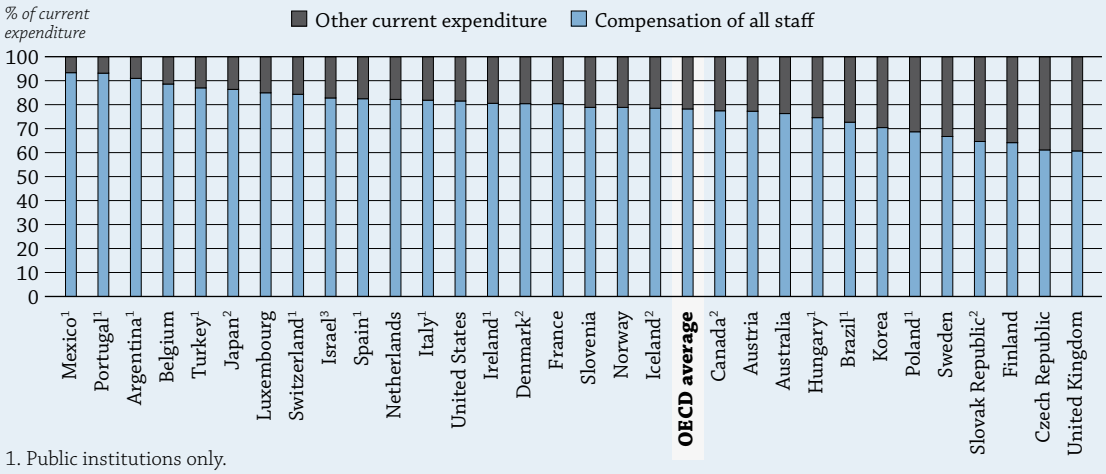
Indicator B6 is on line at:

StatLink http://dx.doi.org/10.1787/888932850015

ON WHAT RESOURCES AND SERVICES IS EDUCATION FUNDING SPENT?

- More than 91% of total expenditure on education is devoted to current expenditure on average across OECD countries and for most OECD and other G20 countries, both at the primary, secondary, post-secondary non-tertiary levels of education combined and at the tertiary level.
- At the tertiary level of education, the share of total expenditure devoted to capital expenditure is higher than that for primary, secondary and post-secondary non-tertiary education combined in 18 out of the 29 countries with available data. This may be linked to the expansion of tertiary education in recent years, and a consequent need for new buildings to be constructed.
- In OECD and other G20 countries with available data, most current expenditure goes to compensating education staff (teachers and others).
- Current expenditure devoted to purposes other than the compensation of staff is largest at the tertiary level, where it reaches 31% of all current expenditure, on average across OECD countries. This could be explained by the higher costs of facilities and equipment in tertiary education, compared to other levels of education.

Chart B6.1. Distribution of current expenditure by educational institutions for primary, secondary and post-secondary non-tertiary education (2010)



1. Public institutions only.
2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
3. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Countries are ranked in descending order of the share of compensation of all staff in primary, secondary and post-secondary non-tertiary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). South Africa: UNESCO Institute for Statistics. Table B6.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847184

Indicator B6 Charts

Chart B6.1 Distribution of current expenditure on educational institutions for primary, secondary and post-secondary non-tertiary education (2010)
StatLink http://dx.doi.org/10.1787/888932847184

Chart B6.2 Distribution of current and capital expenditure on educational institutions (2010)
StatLink http://dx.doi.org/10.1787/888932847203

Indicator B6 Tables

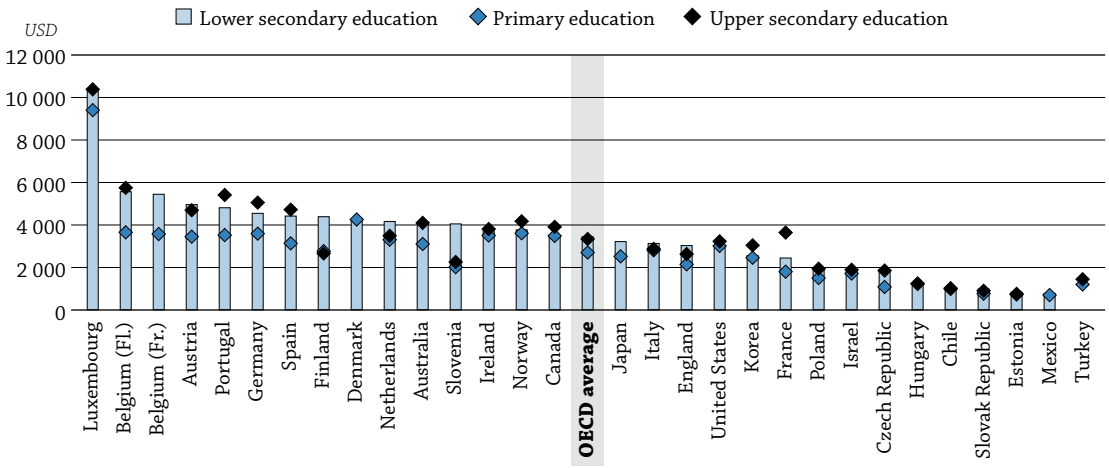
Table B6.1 Expenditure by primary and secondary educational institutions, by resource category (2010)
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Table B6.2 Expenditure by educational institutions by resource category and level of education (2010)
StatLink http://dx.doi.org/10.1787/888932850053

WHICH FACTORS INFLUENCE THE LEVEL OF EXPENDITURE ON EDUCATION?

- Four factors influence expenditure on education related to the per-student salary cost of teachers: instruction time of students, teaching time of teachers, teachers' salaries and estimated class size. Consequently, a given level of the salary cost of teachers per student may result from different combinations of these four factors.
- There are large differences in the salary cost of teachers per student between countries; in most countries, the salary cost of teachers per student increases with the level of education taught.
- Between 2005 and 2011, the salary cost of teachers per student increased substantially in most countries at the primary and lower secondary levels of education. On average, it increased by more than 10% among countries with available data in both years: from USD 2 398 to USD 2 627 at the primary level, and from USD 3 473 to USD 3 818 at the lower secondary level.

Chart B7.1. Salary cost of teachers (in USD) per student, by level of education (2011)



Countries are ranked in descending order of the salary cost of teachers per student in lower secondary education.
Source: OECD. Table B7.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847222

Context

Governments have become increasingly interested in the relationship between the amount of resources devoted to education and student learning outcomes. Governments seek to provide more and better education for their populations while, at the same time, ensuring that public funding is used efficiently, particularly when public budgets are being tightened.

Teachers' compensation is usually the largest part of expenditure on education and thus of expenditure per student. It is a function of the instruction time of students, the teaching time of teachers, teachers' salaries and the number of teachers needed to teach students, which depends on estimated class size (Box B7.1). Differences among countries in these four factors may explain differences in the level of expenditure per student. Similarly, a given level of expenditure may result from a different combination of these factors.

This indicator examines the choices countries make when investing their resources in primary and secondary education and explores how changing policy choices between 2000, 2005 and 2010 relating to these four factors affected the level of salary cost of teachers. However, some

of these choices do not necessary reflect policy decisions but, rather, demographic changes, such as shrinking numbers of students. Thus, for example, in countries where enrolments have been declining in recent years, class size would also shrink, unless there was a simultaneous drop in the number of teachers as well.

Other findings

- **Similar levels of expenditure among countries can mask a variety of contrasting policy choices**. This helps to explain why there is no simple relationship between overall spending on education and the level of student performance. For example, at the upper secondary level of education, Germany and Portugal have similar levels of salary costs of teachers per student in 2011, both higher than average. In Germany, this mainly results from teachers' salaries that are significantly higher than average, while in Portugal, it results mostly from below-average class size.
- **Teachers' salaries are most often the main driver** of the difference from the average salary cost of teachers per student at each level of education. Estimated class size is the second main driver of the difference at each level.
- **Teachers' salaries are less often the main driver of the difference from the average salary cost of teachers per student when differences in countries' wealth are accounted for.**

Trends

The increase in the salary cost of teachers per student between 2005 and 2011 has mostly been influenced by the changes in two factors: teachers' salaries and estimated class size. Between 2005 and 2011, among countries with available data for both years, teachers' salaries increased, on average, by more than 14% at the primary level and by nearly 11% at lower secondary level, while estimated class size decreased, on average, by 18% at the primary level and by 6% at the lower secondary level. Variations in the other two factors, instruction time and teaching time, are smaller in most countries and averaged about 3% or 4% among countries with available data for both years.

At the primary and lower secondary levels of education, most of the countries simultaneously increased teachers' salaries and decreased the estimated class size between 2005 and 2011. These changes resulted in an increase in the salary cost. Hungary and Italy are the two countries where the salary cost of teachers per student decreased significantly between 2005 and 2011 at both primary and lower secondary levels.

Some countries introduced reforms since 2005 that affected the salary cost of teachers per student. For instance, in Hungary, teaching time was increased at the secondary level in 2006, raising the number of teachers required at this level. That, in turn, increased expenditure on teachers' salaries. Italy implemented reforms on class size to increase slightly the number of students per classroom. This resulted in a decrease in the salary cost of teachers per student (see Table B7.5 in *Education at a Glance 2012*).

B7

Analysis

The salary cost of teachers per student...

Per-student expenditure reflects the structural and institutional factors that relate to the organisation of schools and curricula. Expenditure can be broken down into the compensation of teachers and other expenditure (defined as expenditure for all purposes other than teacher compensation). Teacher compensation usually constitutes the largest part of expenditure on education. As a result, the level of teacher compensation divided by the number of students (referred to here as "salary cost of teachers per student") is the main proportion of expenditure per student.

Box B7.1. Relationship between salary cost of teachers per student and instruction time of students, teaching time of teachers, teachers' salaries and class size

One way to analyse the factors that have an impact on expenditure per student and to measure the extent of their effects is to compare the differences between national figures and the OECD average. This analysis computes the differences in expenditure per student among countries and the OECD average, and then calculates the contribution of these different factors to the variation from the OECD average.

This exercise is based on a mathematical relationship between the different factors and follows the method presented in the Canadian publication *Education Statistics Bulletin* (2005) (see explanations in Annex 3). Educational expenditure is mathematically linked to factors related to a country's school context (number of hours of instruction time for students, number of teaching hours for teachers, estimated class size) and one factor relating to teachers (statutory salary).

Expenditure is broken down into compensation of teachers and other expenditure (defined as all expenditure other than compensation of teachers). Compensation of teachers divided by the number of students, or "the salary cost per student" (CCS), is estimated through the following calculation:

$$CCS = SAL \times instT \times \frac{1}{teachT} \times \frac{1}{ClassSize} = \frac{SAL}{Ratiostud/teacher}$$

SAL: teachers' salaries (estimated by statutory salary after 15 years of experience)
instT: instruction time of students (estimated as the annual intended instruction time, in hours, for students)
teachT: teaching time of teachers (estimated as the annual number of teaching hours for teachers)
ClassSize: a proxy for class size
Ratiostud/teacher: the ratio of students to teaching staff

With the exception of class size (which is not computed at the upper secondary level, as class size is difficult to define and compare because students at this level may attend several classes depending on the subject area), values for the different variables can be obtained from the indicators published in *Education at a Glance* (Chapter D). However, for the purpose of the analysis, an "estimated" class size or proxy class size is computed based on the ratio of students to teaching staff and the number of teaching hours and instruction hours (see Box D2.1). As a proxy, this estimated class size should be interpreted with caution.

Using this mathematical relationship and comparing a country's values for the four factors to the OECD averages makes it possible to measure both the direct and indirect contribution of each of these four factors to the variation in salary cost per student between that country and the OECD average (for more details, see Annex 3). For example, in the case where only two factors interact, if a worker receives a 10% increase in the hourly wage and increases the number of hours of work by 20%, his/her earnings will increase by 32% as a result of the direct contribution of each of these variations (0.1 + 0.2) and the indirect contribution of these variations due to the combination of the two factors (0.1 * 0.2).

To account for differences in countries' level of wealth when comparing salary costs per student, salary cost per student, as well as teachers' salaries, can be divided by GDP per capita (on the assumption that GDP per capita is an estimate of countries' level of wealth). This makes it possible to compare countries' "relative" salary cost per student (see *Education at a Glance 2013* tables, available on line).

The compensation of teachers is based on the instruction time of students, the teaching time of teachers, teachers' salaries and the number of teachers needed to teach students, which depends on estimated class size (Box B7.1). As a consequence, differences among countries in these four factors may explain differences in the level of expenditure. In the same way, a given level of expenditure may result from a different combination of these factors.

...usually increases with the level of education taught, even if there are great disparities between OECD countries

Salary costs of teachers per student show a common pattern across OECD countries: they usually rise sharply with the level of education taught. However, in some countries (mainly Finland, the Netherlands and Slovenia), they are lower at the upper secondary level than at the lower secondary level. As a consequence, among OECD countries with available data for the different levels in 2011, the average salary cost of teachers per student is USD 2 757 per primary student, USD 3 456 per lower secondary student and USD 3 420 per upper secondary student, slightly lower than that per lower secondary student.

The variation in salary cost of teachers per student between levels of education is significant among countries. In 2011, there was a difference of less than USD 50 in Chile and Hungary among these three levels of education, but the difference was over USD 1 800 in Belgium (French Community), France and Portugal, and exceeded USD 2 000 in Belgium (Flemish Community) and Slovenia (Table B7.1 and Chart B7.1).

This increase in the salary cost of teachers per student with the level of education taught is partly the result of increases in teachers' salaries and in the instruction time of students at higher educational levels. The OECD average salary varies from USD 38 136 at primary level to USD 39 934 at the lower secondary level and USD 41 665 at the upper secondary level; meanwhile, the OECD average annual instruction time varies from 809 hours at the primary level, to 926 hours at the lower secondary level and 943 hours at the upper secondary level. The increase is also related to the fact that teaching time generally decreases as the level of education increases, implying that more teachers are necessary to teach a given number of pupils (the OECD average annual teaching time in 2011 decreases from 786 hours at the primary level, to 707 hours at the lower secondary level to 662 hours at the upper secondary level). However, larger classes at higher levels of education tend to reduce the salary cost per student (the OECD average estimated class size increases between primary, lower secondary and upper secondary levels from 16.1 students to 17.3 students, 19.7 students, respectively) (Tables B7.2a and B7.2b and Table B7.2c, available online).

Between 2005 and 2011, the salary cost of teachers per student increased in most countries...

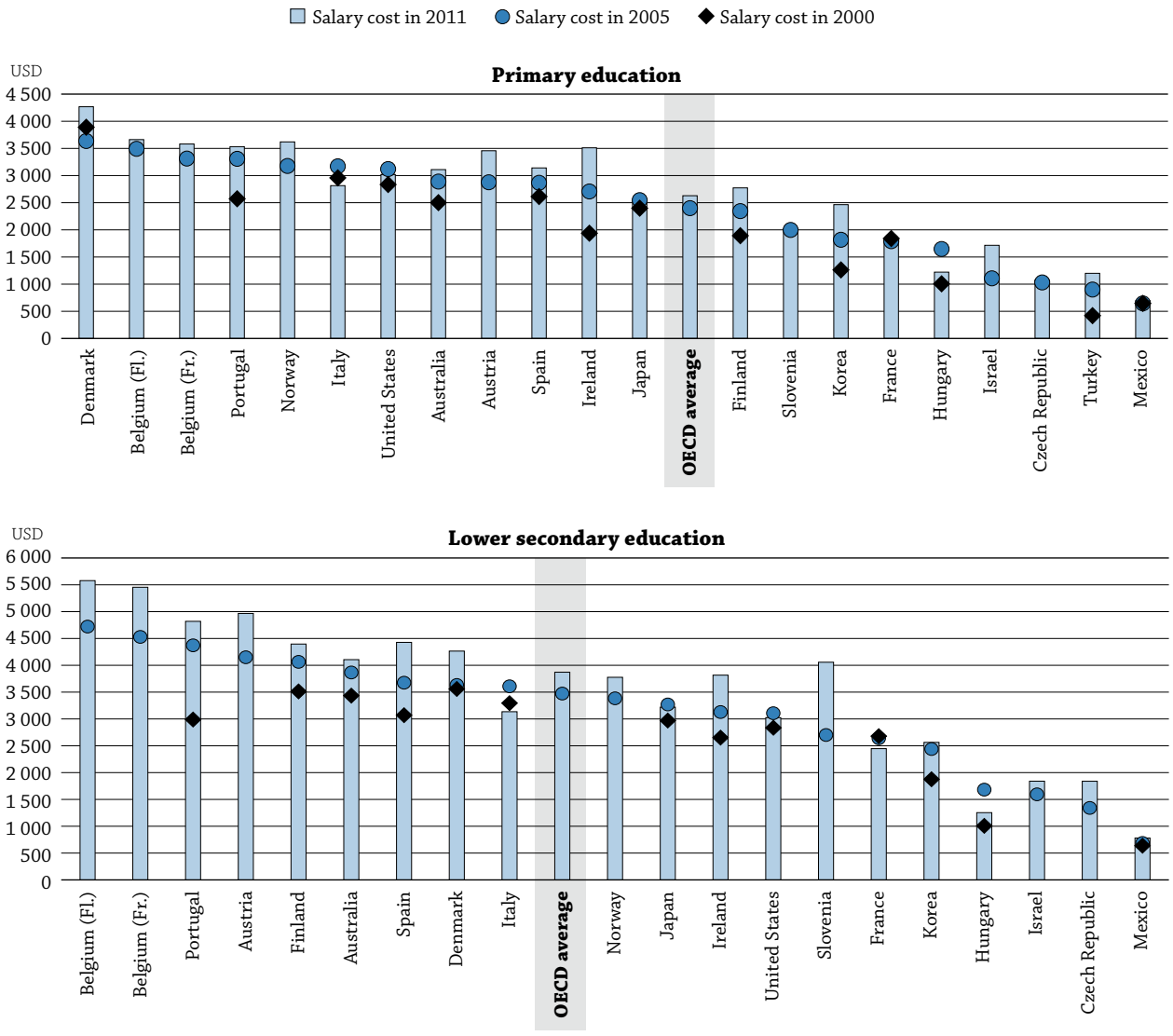
The salary cost of teachers per student also varies over time, for a given level of education. These changes are only analysed at the primary and lower secondary levels of education because trend data are not available at the upper secondary level. This analysis is also limited to countries with data for both 2005 and 2011 reference years (21 countries for both the primary and lower secondary levels), as data for 2000, 2005 and 2011 are available for fewer countries.

The salary cost of teachers per student at the primary and lower secondary levels increased by 10% , on average across the countries with available data for both years: from USD 2 398 to USD 2 627 at the primary level and from USD 3 473 to USD 3 818 at the lower secondary level (Chart B7.2).

At both these levels, the salary cost of teachers per student increased in most countries between 2005 and 2011. The increase reached 30% or more in Ireland, Korea and Turkey at the primary level, and at the lower secondary level in the Czech Republic, and exceeded 50% in Israel at the primary level and in Slovenia at the lower secondary level (Chart B7.3).

The main exceptions to this increase over time are Hungary and Italy, where the salary cost of teachers per student decreased between 2005 and 2011 by 11% and 26%, respectively, at the primary level, and by 13% and 25%, respectively, at the lower secondary level. The salary cost of teachers per student also decreased, but to a lesser extent, in France at the lower secondary level (by 7%), and in the United States (by less than 4% at the primary and lower secondary levels) (Chart B7.2).

Chart B7.2. Change in the salary cost (in USD) of teachers per student, by level of education (2000, 2005, 2011)



Countries are ranked in descending order of the salary cost of teachers per student in 2005.

Source: OECD. Tables B7.3 and B7.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847241

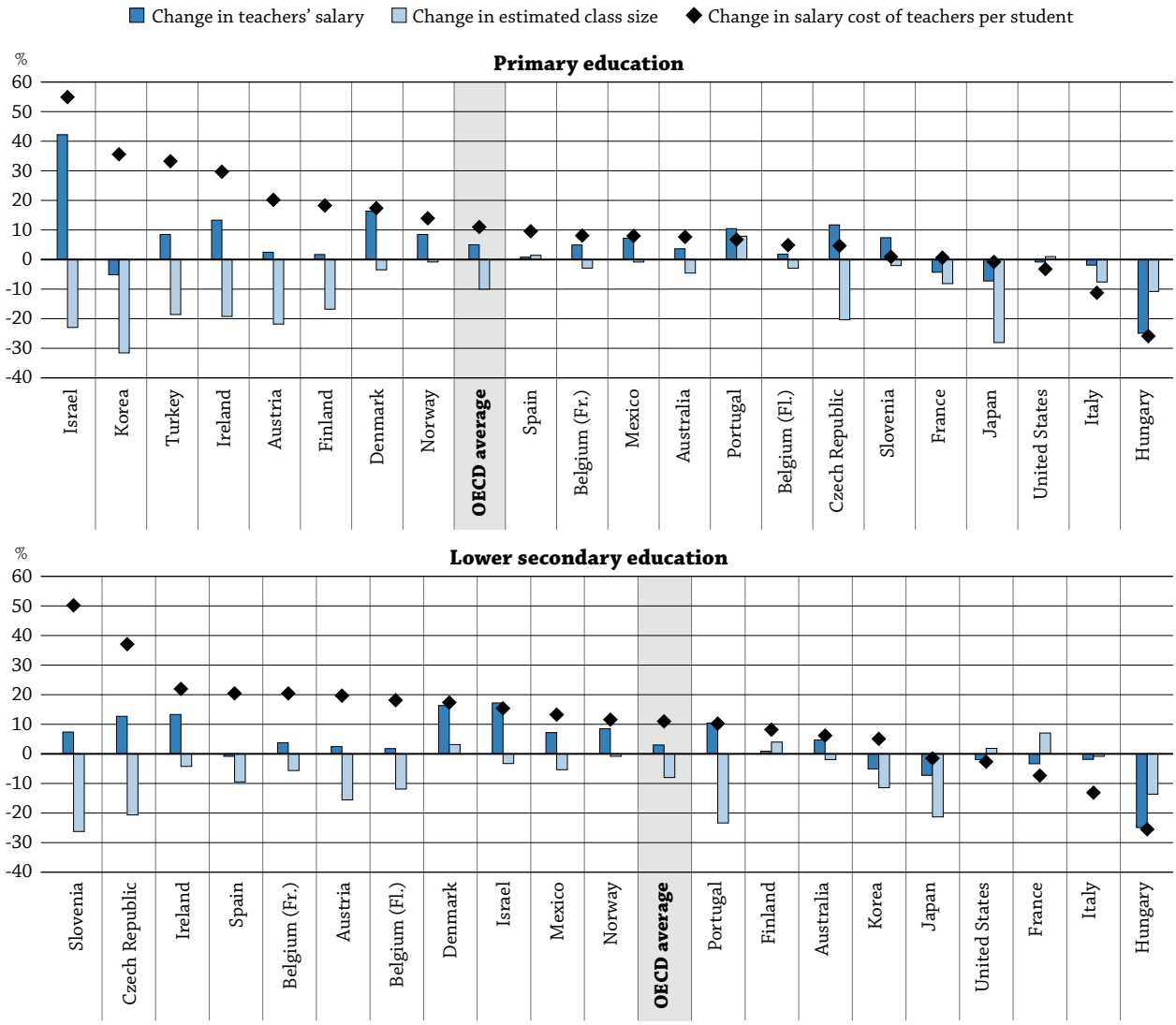
...and this was mainly influenced by changes in teachers' salaries and class size

Of the four factors that determine the level of the salary cost of teachers, two are largely responsible for the wide variations in this cost: teachers' salaries and in class size. Between 2005 and 2011, among countries with available data for this period, teachers' salaries (expressed in constant prices) increased by an average of 14% at the primary level and by 11% at the lower secondary level, whereas class size decreased, on average, by about 18% at the primary level and by 6% at the lower secondary level (Tables B7.2a and B7.2b).

Teachers' salaries increased in real terms in most countries with comparable data for 2005 and 2011, with the largest increases – over 40% – seen in Israel at the primary level. However, teachers' salaries decreased in some countries, most notably in Hungary (by 25% at both primary and lower secondary levels), and this may explain the decrease in the salary cost of teachers per student in this country (Chart B7.3).

Chart B7.3. Change in the salary cost of teachers per student, teachers' salaries and estimated class size in primary and lower secondary education (2005, 2011)

Change, in percentage, between 2005 and 2011



Countries are ranked in descending order of the change in the salary cost of teachers per student between 2005 and 2011.

Source: OECD. Tables B7.2a, B7.2b, B7.3 and B7.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847260

By contrast, in three-quarters of the countries with data for both 2005 and 2011, the estimated class size tended to decrease in primary and lower secondary education during this period, leading to an increase in the salary cost of teachers. At the primary level, the largest decreases occurred in countries that had a relatively large estimated class size in 2005 (Israel, Japan, Korea and Turkey); at the lower secondary level, the largest decreases occurred in countries with a large estimated class size in 2005 (Japan), but also in countries with below-average estimated class size (Portugal). In Portugal, the significant decrease in class size that led to an increase in the salary cost of teachers was not the result of a policy decision, but rather of demographic changes and shrinking numbers of students.

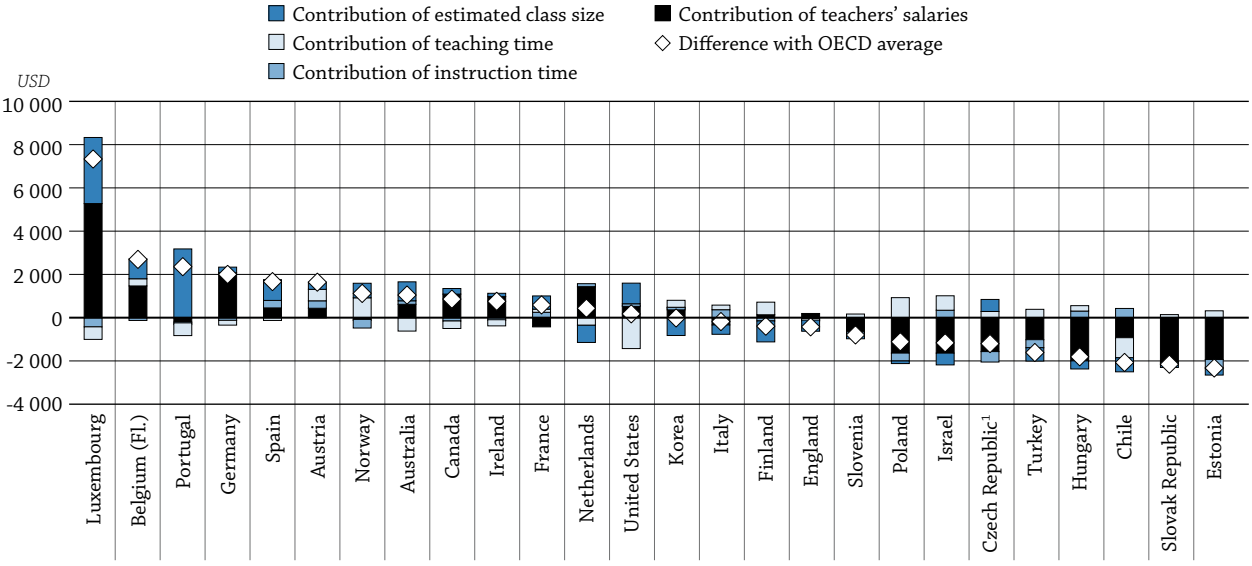
Changes in instruction time and teaching time, the two other factors influencing the salary cost of teachers, averaged less than 4.5% at both primary and lower secondary levels during the same period. This may reflect the political sensitivity of implementing reforms in these areas (see Table B7.5 in *Education at a Glance 2012*).

Nevertheless, in a small number of countries, instruction time and/or teaching time did change significantly. Teaching time increased most significantly in Japan (by more than 150 hours at the primary level and by about 100 hours in lower secondary education) and in Portugal (by 200 hours at the lower secondary level). The decreasing number of instruction hours for pupils in Italy (by 13% at the primary level and by 9% at the lower secondary level) is one of the main reason for the decrease in the salary cost of teachers per student in that country between 2005 and 2011 (Tables B7.2a and b).

Similar levels of expenditure among countries can mask a variety of contrasting policy choices…

Higher levels of expenditure on education cannot automatically be equated with better performance by education systems. This is not surprising, as countries spending similar amounts on education do not necessarily have similar education policies and practices. For example, at the upper secondary level of education, Germany and Portugal had similar levels of salary cost of teachers per student in 2011 (USD 5 063 and USD 5 421, respectively), both higher than the OECD average. In Germany, this is largely because teachers' salaries are significantly higher than average salaries, whereas in Portugal, it is because estimated class size is smaller than average. The Czech Republic, Israel and Poland also have similar salary costs of teachers per student. While teachers' salaries are similar among the three countries, the other three factors influence the salary cost of teachers in different ways in each country (Table B7.5 and Chart B7.4a).

Chart B7.4a. Contribution (in USD) of various factors to salary cost of teachers per student, in upper secondary education (2011)



1. Contribution of instruction time is calculated based on minimum instruction time.

Countries are ranked in descending order of the difference between the salary cost of teachers per student and the OECD average.

Source: OECD. Table B7.5a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847279

How to read this chart

This chart shows the contribution (in USD) of the four factors to the difference between salary cost per student in the country and the OECD average. For example, in the United States, the salary cost per student is close to the OECD average (USD 185 higher than the OECD average). This is because the effects of above-average teachers' salaries (+ USD 584), above-average annual instruction time for students (+ USD 69) and below-average estimated class size (+ USD 107) are counterbalanced by above-average teaching time (- USD 1 439).

In addition, even though countries may make similar policy choices, those choices can result in different levels of salary cost of teachers per student. For example, in Australia, Canada, Ireland and the United States, the salary cost of teachers per student at the upper secondary level is the result of balancing two opposing effects: above-average teaching time reduces the salary cost of teachers per student relative to the OECD average, and relatively small class size and high teachers' salaries increase the salary cost of teachers per student relative

to the OECD average. The salary cost of teachers per student resulting from this combination is above the OECD average in these four countries, but varies from less than USD 200 more in the United States to about USD 1 000 more in Australia (Table B7.5 and Chart B7.4a).

… but teachers' salaries have the most impact on the differences between countries in the salary cost of teachers per student

Comparing the salary cost of teachers per student to the OECD average and how the four factors contribute to this difference allows for an analysis of the extent of the impact of each factor on the differences in salary cost of teachers per student.

At each level of education, teachers' salaries are most often the main driver of the difference in the average salary cost of teachers per student. Among countries with available data in 2011, they are the main driver in 18 of 30 countries at the primary level, 16 of 29 countries at the lower secondary level, and 14 of 26 countries at the upper secondary level. This is true both in countries with the highest and lowest levels of salary cost of teachers per student.

For example, at the upper secondary level, the above-average salaries of teachers are the main driver of the difference in the country with the highest level of salary cost (Luxembourg), as well as in the eight countries with the lowest levels of salary cost of teachers per student (the Czech Republic, Estonia, Hungary, Israel, Poland, the Slovak Republic, Slovenia, and Turkey) (Chart B7.4a).

Estimated class size is the second most influential driver of the difference at each level of education (for 7 countries at the primary level, 11 countries at the lower secondary level, and 8 countries at the upper secondary level). At the upper secondary level, below-average estimated class size is the main driver of the variations from the average salary cost of teachers per student in two out of the five countries with the highest salary cost of teachers per student, namely Portugal and Spain (Box B7.2).

Box B7.2. Main driver of salary cost of teachers per student, by level of education (2011)

	Primary education	Lower secondary education	Upper secondary education
Salary	**18 countries** AUS (+), BFL (+), BFR (+), CAN (+), CHL (-), CZE (-), DNK (+), EST (-), DEU (+), HUN (-), IRL (+), ISR (-), JPN (+), LUX (+), MEX (-), NLD (+), POL (-), SVK (-)	**16 countries** AUS (+), CAN (+), CHL (-), CZE (-), DNK (+), ENG (+), EST (-), DEU (+), HUN (-), IRL (+), ISR (-), LUX (+), NLD (+), POL (-), SVK (-), ESP (+)	**14 countries** BFL (+), CAN (+), CZE (-), EST (-), DEU (+), HUN (-), IRL (+), ISR (-), LUX (+), NLD (+), POL (-), SVK (-), SVN (-), TUR (-)
Instruction time	**3 countries** FIN (-), KOR (-), SVN (-)	**0 countries**	**0 countries**
Teaching time	**2 countries** FRA (-), USA (-)	**2 countries** ITA (+), USA (-)	**4 countries** AUT (+), CHL (-), NOR (+), USA (-)
Estimated class size	**7 countries** AUT (+), ENG (-), ITA (+), NOR (+), PRT (+), ESP (+), TUR (-)	**11 countries** AUT (+), BFL (+), BFR (+), FIN (+), FRA (-), JPN (-), KOR (-), MEX (-), NOR (+), PRT (+), SVN (+)	**8 countries** AUS (+), ENG (-), FIN (-), FRA (+), ITA (-), KOR (-), PRT (+), ESP (+)

Note: The positive or negative signs show whether the factor increases or decreases the salary cost of teachers per student.
Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for the list of country codes used in this table.

Teachers' salaries are less often the main driver of the difference from the average salary cost of teachers per student when differences in countries' wealth are accounted for

However, the level of teachers' salaries and, in turn, the level of the salary cost of teachers per student, depend on a country's relative wealth. To control for differences in wealth among countries, the levels of teachers' salaries (and salary cost per student) relative to GDP per capita were analysed. Comparing the relative salary cost of teachers per student using this analysis affects the ranking of countries (Chart B7.4b, available on line). However, compared to the analysis in USD, the position of only a small number of countries changes significantly. At the upper secondary level, Luxembourg has the highest salary cost of teachers per student in USD, mainly as a result of the high level of salaries in USD, but not as a proportion of GDP per capita, which is similar to the OECD average. As a result, teachers' salaries, as a percentage of GDP per capita, do not raise the salary cost of teachers per student, as a percentage of GDP per capita (Table B7.5a and Chart B7.4a, and Table B7.5b and Chart B7.4b, available on line).

When differences in countries' wealth are accounted for, comparing the relative impact of the different factors offers a similar picture as that of the analysis based on USD for primary and secondary levels of education. Teachers' salaries, as a percentage of GDP per capita, and estimated class size are the main drivers of the variations from the average salary cost of teachers per student at each level of education (Box B7.2 continued, available on line).

Methodology

Data referring to the 2011 school year are based on the UOE data collection on education statistics, as well as on the Survey on Teachers and the Curriculum, which were both administered by the OECD in 2012. Data referring to the 2000 and 2005 school year are based on the UOE data collection on education statistics, and on the Survey on Teachers and the Curriculum, which were both administered by the OECD and published in the 2013 edition (for trend data on teaching time and salary of teachers) and 2002 and 2007 editions (ratio of student to teaching staff and instruction time) of *Education at a Glance*. The consistency of 2000, 2005 and 2011 data has been validated (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

Salary cost of teachers per student is calculated based on teachers' salaries, the number of hours of instruction for students, the number of hours of teaching for teachers and the estimated class size (a proxy of the class size; see Box D2.1). In most cases, the values for these variables are derived from *Education at a Glance 2013*, and refer to the school year 2010-11, 2004-05 and 1999-2000. Data for school year 1999-2000 and 2004-05 are derived from *Education at a Glance 2002* and *Education at a Glance 2007*, respectively, when they are not available in the current edition. The data for 2000 and 2005 have been checked to ensure consistency with 2011 data. Teachers' salaries in national currencies are converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for private consumption, following the methodology used in Indicator D3 on teachers' salaries, which results in the salary cost per student expressed in equivalent USD. Further details on the analysis of these factors are available in Annex 3 at *www.oecd.org/edu/eag.htm*.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

OECD (2012), *Education at a Glance 2012: OECD Indicators,* OECD Publishing.
http://dx.doi.org/10.1787/eag-2012-en

Indicator B7 Tables

Table B7.1	Salary cost of teachers per student, by level of education (2011)	StatLink http://dx.doi.org/10.1787/888932850091
Table B7.2a	Factors used to compute the salary cost of teachers per student, in primary education (2000, 2005 and 2011)	StatLink http://dx.doi.org/10.1787/888932850110
Table B7.2b	Factors used to compute the salary cost of teachers per student, in lower secondary education (2000, 2005, 2011)	StatLink http://dx.doi.org/10.1787/888932850129
WEB Table B7.2c	Factors used to compute the salary cost of teachers per student, in upper secondary education (2011)	StatLink http://dx.doi.org/10.1787/888932850148
Table B7.3	Contribution of various factors to salary cost of teachers per student, in primary education (2000, 2005 and 2011)	StatLink http://dx.doi.org/10.1787/888932850167
Table B7.4a	Contribution of various factors to salary cost of teachers per student, in lower secondary education (2000, 2005 and 2011)	StatLink http://dx.doi.org/10.1787/888932850186
WEB Table B7.4b	Contribution of various factors to salary cost of teachers per student, in lower secondary education, in percentage point of GDP per capita (2011)	StatLink http://dx.doi.org/10.1787/888932850205
Table B7.5a	Contribution of various factors to salary cost of teachers per student, in upper secondary education (2011)	StatLink http://dx.doi.org/10.1787/888932850224
WEB Table B7.5b	Contribution of various factors to salary cost of teachers per student, in upper secondary education, in percentage points of GDP per capita (2011)	StatLink http://dx.doi.org/10.1787/888932850243

B7

Table B7.1. Salary cost of teachers per student, by level of education (2011)

In equivalent USD, converted using PPPs for private consumption, and in percentage of GDP per capita

		Salary cost of teachers per student (in USD)			Salary cost of teachers per student (in percentage of GDP per capita)		
		Primary education	Lower secondary education	Upper secondary education	Primary education	Lower secondary education	Upper secondary education
		(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia	3 108	4 105	4 105	7.5	9.9	9.9
	Austria	3 455	4 966	4 703	8.3	12.0	11.4
	Belgium (Fl.)	3 660	5 578	5 760	9.9	15.1	15.6
	Belgium (Fr.)	3 579	5 455	m	9.7	14.7	m
	Canada	3 492	3 492	3 917	9.1	9.1	10.2
	Chile	1 023	1 001	984	5.5	5.3	5.3
	Czech Republic	1 079	1 839	1 856	4.6	7.8	7.8
	Denmark	4 265	4 265	m	11.5	11.5	m
	England	2 148	3 033	2 633	6.3	8.9	7.7
	Estonia	753	835	725	4.0	4.4	3.8
	Finland	2 771	4 396	2 663	8.0	12.6	7.6
	France	1 802	2 446	3 647	5.3	7.2	10.7
	Germany	3 597	4 555	5 063	9.6	12.1	13.5
	Greece	m	m	m	m	m	m
	Hungary	1 220	1 254	1 246	6.4	6.5	6.5
	Iceland	m	m	m	m	m	m
	Ireland	3 509	3 816	3 816	9.5	10.3	10.3
	Israel	1 714	1 840	1 893	6.8	7.3	7.5
	Italy	2 813	3 135	2 878	9.1	10.2	9.3
	Japan	2 525	3 220	m	8.3	10.6	m
	Korea	2 462	2 563	3 045	9.1	9.5	11.2
	Luxembourg	9 425	10 409	10 409	11.5	12.7	12.7
	Mexico	697	780	m	4.8	5.4	m
	Netherlands	3 311	4 172	3 493	8.1	10.2	8.5
	New Zealand	m	m	m	m	m	m
	Norway	3 618	3 776	4 181	6.4	6.7	7.4
	Poland	1 503	1 881	1 942	7.6	9.5	9.8
	Portugal	3 530	4 819	5 421	15.6	21.4	24.0
	Scotland	m	m	m	m	m	m
	Slovak Republic	760	980	901	3.5	4.5	4.1
	Slovenia	2 016	4 057	2 258	8.0	16.2	9.0
	Spain	3 139	4 427	4 729	10.8	15.2	16.2
	Sweden	m	m	m	m	m	m
	Switzerland	m	m	m	m	m	m
	Turkey	1 199	a	1 444	8.1	a	9.7
	United States	3 018	3 024	3 235	6.3	6.3	6.7
	OECD average	2 706	3 452	3 344	8.0	10.1	9.9

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932850091

Table B7.2a. [1/2] Factors used to compute the salary cost of teachers per student, in primary education (2000, 2005 and 2011)

		Teachers' salary (annual, in USD 2011 constant prices)				Instruction time (for students, hours per year)				Teaching time (for teachers, hours per year)			
		2000	2005	2011	Variation 2005-2011 (%)	2000	2005	2011	Variation 2005-2011 (%)	2000	2005	2011	Variation 2005-2011 (%)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia[1]	43 259	46 821	48 522	**3.6**	987	979	953	**-2.6**	882	888	873	**-1.8**
	Austria[1]	36 755	40 640	41 633	**2.4**	833	812	750	**-7.6**	m	774	779	**0.7**
	Belgium (Fl.)[1]	41 107	44 616	45 413	**1.8**	m	835	831	**-0.6**	767	761	757	**-0.6**
	Belgium (Fr.)[1]	39 799	42 325	44 407	**4.9**	930	930	930	**0.0**	804	722	721	**-0.1**
	Canada	m	m	56 349	**m**	m	m	919	**m**	m	m	799	**m**
	Chile	m	m	23 623	**m**	1 060	m	1 007	**m**	m	1 001	1 120	**11.9**
	Czech Republic[1, 2]	10 032	18 067	20 185	**11.7**	752	774	597	**-22.9**	m	813	840	**3.3**
	Denmark[1]	40 483	43 259	50 332	**16.3**	790	763	754	**-1.1**	640	640	650	**1.6**
	England	41 270	45 142	44 269	**-1.9**	890	900	861	**-4.3**	m	m	684	**m**
	Estonia	7 580	9 040	12 306	**36.1**	m	910	650	**-28.6**	630	630	619	**-1.7**
	Finland[1]	31 883	37 252	37 886	**1.7**	694	673	654	**-2.7**	656	677	680	**0.5**
	France[1]	36 461	34 640	33 152	**-4.3**	814	894	864	**-3.4**	936	936	936	**0.0**
	Germany	m	m	58 662	**m**	796	777	702	**-9.7**	783	808	804	**-0.4**
	Greece	29 428	33 122	28 184	**-14.9**	928	928	756	**-18.5**	609	604	589	**-2.5**
	Hungary[1]	11 008	17 465	13 115	**-24.9**	834	718	655	**-8.8**	583	583	604	**3.6**
	Iceland	24 242	27 176	26 991	**-0.7**	692	792	857	**8.2**	629	671	624	**-7.1**
	Ireland[1]	41 590	48 498	54 954	**13.3**	941	941	869	**-7.6**	915	915	915	**0.0**
	Israel[1]	19 175	19 108	27 174	**42.2**	m	990	956	**-3.4**	731	731	842	**15.1**
	Italy[1]	31 743	33 597	32 969	**-1.9**	1 020	1 023	891	**-12.9**	744	739	770	**4.2**
	Japan[1]	50 027	49 311	45 741	**-7.2**	761	774	754	**-2.6**	635	578	731	**26.5**
	Korea[1]	40 550	50 864	48 251	**-5.1**	737	703	632	**-10.0**	865	883	812	**-8.0**
	Luxembourg	m	71 109	93 397	**31.3**	m	847	924	**9.1**	m	774	810	**4.5**
	Mexico[1]	17 524	18 273	19 590	**7.2**	800	800	800	**0.0**	800	800	800	**0.0**
	Netherlands	m	m	52 292	**m**	1 000	1 000	940	**-6.0**	930	930	930	**0.0**
	New Zealand	39 040	39 730	41 755	**5.1**	985	985	m	**m**	m	m	935	**m**
	Norway[1]	m	34 644	37 585	**8.5**	703	713	748	**4.9**	713	741	741	**0.0**
	Poland	m	11 233	16 506	**46.9**	m	m	703	**m**	m	m	483	**m**
	Portugal[1]	31 188	35 696	39 424	**10.4**	833	861	924	**7.3**	815	855	880	**2.9**
	Scotland	40 470	49 642	47 984	**-3.3**	950	a	a	**m**	950	893	855	**-4.3**
	Slovak Republic	m	m	12 858	**m**	m	m	698	**m**	m	m	846	**m**
	Slovenia[1]	m	29 979	32 193	**7.4**	m	721	664	**-7.9**	m	690	690	**0.0**
	Spain[1]	39 008	41 012	41 339	**0.8**	795	794	875	**10.3**	880	880	880	**0.0**
	Sweden	31 486	33 436	34 387	**2.8**	741	741	741	**0.0**	m	m	m	**m**
	Switzerland	57 771	59 304	m	**m**	m	m	m	**m**	884	m	m	**m**
	Turkey[1]	12 811	23 223	25 189	**8.5**	796	864	864	**0.0**	639	639	639	**0.0**
	United States[1]	44 762	46 469	46 130	**-0.7**	980	980	980	**0.0**	1 080	1 080	1 097	**1.6**
	OECD average	32 980	36 603	38 136	**6.6**	853	847	809	**-4.2**	780	781	786	**1.7**
	Average for 21 countries with all data available for 2005 and 2011		33 735	38 328	**13.6**		841	819	**-2.6**		791	805	**1.8**

Note: Data in this table come either from Chapter D (for 2000, 2005 and 2011 data relating to salaries of teachers and teaching time) or from 2002 or 2007 editions of *Education at a Glance* (data on ratio of student to teaching staff and instruction time). Some 2000 data have been revised to ensure consistency with 2011 data.

1. Countries with all data available for both 2005 and 2011.
2. Current instruction time for 2000 and 2005, minimum instruction time for 2011

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850110

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Table B7.2a. [2/2] Factors used to compute the salary cost of teachers per student, in primary education (2000, 2005 and 2011)

		Ratio of students to teaching staff (number of students per teacher)				Estimated class size (number of students per classroom)			
		2000	2005	2011	Variation 2005-2011 (%)	2000	2005	2011	Variation 2005-2011 (%)
		(13)	(14)	(15)	(16)	(17) = (13)*(5) / (9)	(18) = (14)*(6) / (10)	(19) = (15)*(7) / (11)	(20)
OECD	Australia[1]	17.3	16.2	15.6	**-3.7**	19.3	17.9	17.1	**-4.6**
OECD	Austria[1]	13.2	14.1	12.1	**-14.8**	m	14.8	11.6	**-21.8**
OECD	Belgium (Fl.)[1]	m	12.8	12.4	**-2.9**	m	14.0	13.6	**-2.9**
OECD	Belgium (Fr.)[1]	m	12.8	12.4	**-2.9**	m	16.5	16.0	**-2.9**
OECD	Canada	18.1	m	16.1	**m**	m	m	18.5	**m**
OECD	Chile	m	25.9	23.1	**-10.9**	m	m	20.8	**m**
OECD	Czech Republic[1, 2]	19.7	17.5	18.7	**6.7**	m	16.7	13.3	**-20.4**
OECD	Denmark[1]	10.4	11.9	11.8	**-0.9**	12.9	14.2	13.7	**-3.5**
OECD	England	21.2	14.9	20.6	**38.3**	m	m	25.9	**m**
OECD	Estonia	m	m	16.3	**m**	m	m	17.1	**m**
OECD	Finland[1]	16.9	15.9	13.7	**-14.0**	17.8	15.8	13.1	**-16.8**
OECD	France[1]	19.8	19.4	18.4	**-4.9**	17.2	18.5	17.0	**-8.1**
OECD	Germany	19.8	18.8	16.3	**-13.4**	20.1	18.1	14.2	**-21.5**
OECD	Greece	13.4	11.1	m	**m**	20.4	17.0	m	**m**
OECD	Hungary[1]	10.9	10.6	10.7	**1.3**	15.7	13.1	11.6	**-10.8**
OECD	Iceland	12.7	11.3	m	**m**	14.0	13.4	m	**m**
OECD	Ireland[1]	21.5	17.9	15.7	**-12.6**	22.1	18.4	14.9	**-19.2**
OECD	Israel[1]	m	17.3	15.9	**-8.2**	m	23.4	18.0	**-23.0**
OECD	Italy[1]	10.7	10.6	11.7	**10.5**	14.7	14.7	13.6	**-7.6**
OECD	Japan[1]	20.9	19.4	18.1	**-6.5**	25.0	25.9	18.7	**-28.1**
OECD	Korea[1]	32.1	28.0	19.6	**-30.0**	27.4	22.3	15.3	**-31.6**
OECD	Luxembourg	15.9	m	9.9	**m**	m	m	11.3	**m**
OECD	Mexico[1]	27.2	28.3	28.1	**-0.7**	27.2	28.3	28.1	**-0.7**
OECD	Netherlands	16.8	15.9	15.8	**-0.8**	18.1	17.1	16.0	**-6.7**
OECD	New Zealand	20.6	18.1	16.3	**-9.9**	m	m	m	**m**
OECD	Norway[1]	12.4	10.9	10.4	**-4.8**	12.2	10.5	10.5	**-0.1**
OECD	Poland	12.7	11.7	11.0	**-5.8**	m	m	16.0	**m**
OECD	Portugal[1]	12.1	10.8	11.2	**3.5**	12.4	10.9	11.7	**7.9**
OECD	Scotland	21.2	14.9	20.6	**38.3**	21.2	m	m	**m**
OECD	Slovak Republic	18.3	18.9	16.9	**-10.3**	m	m	14.0	**m**
OECD	Slovenia[1]	m	15.0	16.0	**6.4**	m	15.7	15.4	**-2.0**
OECD	Spain[1]	14.9	14.3	13.2	**-8.0**	13.5	12.9	13.1	**1.4**
OECD	Sweden	12.8	12.2	11.3	**-7.0**	m	m	m	**m**
OECD	Switzerland	m	14.6	m	**m**	m	m	m	**m**
OECD	Turkey[1]	30.5	25.8	21.0	**-18.6**	38.0	34.9	28.4	**-18.6**
OECD	United States[1]	15.8	14.9	15.3	**2.6**	14.3	13.5	13.7	**1.0**
	OECD average	17.6	16.1	15.6	**-2.8**	19.2	17.5	16.1	**-10.5**
	Average for 21 countries with all data available for 2005 and 2011		18.7	16.0	**-14.2**		19.8	16.3	**-17.9**

Note: Data in this table come either from Chapter D (for 2000, 2005 and 2011 data relating to salaries of teachers and teaching time) or from 2002 or 2007 editions of *Education at a Glance* (data on ratio of student to teaching staff and instruction time). Some 2000 data have been revised to ensure consistency with 2011 data.

1. Countries with all data available for both 2005 and 2011.
2. Current instruction time for 2000 and 2005, minimum instruction time for 2011.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850110

Table B7.2b. [1/2] Factors used to compute the salary cost of teachers per student, in lower secondary education (2000, 2005 and 2011)

		Teachers' salary (annual, in USD 2010 constant prices)				Instruction time (for students, hours per year)				Teaching time (for teachers, hours per year)			
		2000	2005	2011	Variation 2005-2011 (%)	2000	2005	2011	Variation 2005-2011 (%)	2000	2005	2011	Variation 2005-2011 (%)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia[1]	43 277	46 929	49 144	**4.7**	1 019	1 014	1 009	**-0.5**	811	810	811	**0.1**
	Austria[1]	38 306	44 024	45 105	**2.5**	1 148	958	945	**-1.4**	m	607	607	**0.0**
	Belgium (Fl.)[1]	43 348	44 616	45 413	**1.8**	m	960	955	**-0.6**	682	690	671	**-2.7**
	Belgium (Fr.)[1]	42 363	42 798	44 407	**3.8**	1 075	1 020	1 020	**0.0**	728	724	661	**-8.7**
	Canada	m	m	56 349	**m**	m	m	923	**m**	m	m	743	**m**
	Chile	m	m	23 623	**m**	1 080	m	1 083	**m**	m	1 001	1 120	**11.9**
	Czech Republic[1, 2]	10 032	18 067	20 360	**12.7**	867	902	848	**-5.9**	m	647	630	**-2.6**
	Denmark[1]	40 483	43 259	50 332	**16.3**	890	880	930	**5.7**	640	640	650	**1.6**
	England	41 270	45 142	44 269	**-1.9**	940	933	912	**-2.3**	m	m	695	**m**
	Estonia	7 580	9 040	12 306	**36.1**	m	1 073	770	**-28.2**	630	630	619	**-1.7**
	Finland[1]	37 426	40 552	40 917	**0.9**	808	815	913	**12.1**	570	592	595	**0.5**
	France[1]	39 358	37 412	36 159	**-3.3**	1 042	1 053	1 081	**2.6**	648	648	648	**0.0**
	Germany	m	m	64 491	**m**	903	872	890	**2.0**	732	758	757	**-0.2**
	Greece	29 428	33 122	28 184	**-14.9**	1 064	998	796	**-20.2**	426	434	415	**-4.4**
	Hungary[1]	11 008	17 465	13 115	**-24.9**	925	921	859	**-6.7**	555	555	604	**8.8**
	Iceland	24 242	27 176	26 991	**-0.7**	809	872	987	**13.1**	629	671	624	**-7.1**
	Ireland[1]	42 038	48 498	54 954	**13.3**	907	907	935	**3.1**	735	735	735	**0.0**
	Israel[1]	21 313	21 326	24 997	**17.2**	m	971	981	**1.0**	579	579	614	**6.1**
	Italy[1]	34 769	36 597	35 922	**-1.8**	1 020	1 082	990	**-8.5**	608	605	630	**4.1**
	Japan[1]	50 027	49 311	45 741	**-7.2**	875	869	866	**-0.4**	557	505	602	**19.3**
	Korea[1]	40 405	50 741	48 146	**-5.1**	867	867	850	**-2.0**	570	621	621	**0.0**
	Luxembourg	m	92 988	100 013	**7.6**	m	782	900	**15.0**	m	642	739	**15.1**
	Mexico[1]	22 176	23 240	24 910	**7.2**	1 167	1 167	1 167	**0.0**	1 182	1 047	1 047	**0.0**
	Netherlands	m	m	63 695	**m**	1 067	1 067	1 000	**-6.2**	867	750	750	**0.0**
	New Zealand	39 040	39 730	42 241	**6.3**	948	962	m	**m**	m	m	848	**m**
	Norway[1]	m	34 644	37 585	**8.5**	827	827	855	**3.5**	633	656	663	**1.2**
	Poland	m	11 233	18 806	**67.4**	m	m	800	**m**	m	m	478	**m**
	Portugal[1]	31 188	35 696	39 424	**10.4**	842	905	950	**5.0**	595	564	774	**37.2**
	Scotland	40 470	49 642	47 984	**-3.3**	a	a	a	**m**	893	893	855	**-4.3**
	Slovak Republic	m	m	12 858	**m**	m	m	832	**m**	m	m	656	**m**
	Slovenia[1]	m	29 979	32 193	**7.4**	m	791	817	**3.2**	m	690	690	**0.0**
	Spain[1]	42 147	46 027	45 689	**-0.7**	845	956	1 050	**9.8**	564	713	713	**0.0**
	Sweden	31 486	34 286	35 495	**3.5**	741	741	741	**0.0**	m	m	m	**a**
	Switzerland	69 185	67 532	m	**m**	m	m	m	**m**	859	m	m	**m**
	Turkey	a	a	a	**a**	a	a	a	**a**	a	a	a	**a**
	United States[1]	44 588	46 876	45 950	**-2.0**	980	980	980	**0.0**	1 080	1 080	1 068	**-1.1**
	OECD average	35 267	38 932	39 934	**5.6**	946	936	926	**-0.2**	699	696	707	**2.6**
	Average for 21 countries with all data available for 2005 and 2011		36 838	40 800	**10.8**		937	968	**3.2**		701	731	**4.2**

Note: Data in this table come either from Chapter D (for 2000, 2005 and 2011 data relating to salaries of teachers and teaching time) or from 2002 or 2007 editions of *Education at a Glance* (data on ratio of student to teaching staff and instruction time). Some 2000 data have been revised to ensure consistency with 2011 data.

1. Countries with all data available for both 2005 and 2011.
2. Current instruction time for 2000 and 2005, minimum instruction time for 2011.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850129

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Table B7.2b. [2/2] Factors used to compute the salary cost of teachers per student, in lower secondary education (2000, 2005 and 2011)

		Ratio of students to teaching staff (number of students per teacher)				Estimated class size (number of students per classroom)			
		2000	2005	2011	Variation 2005-2011 (%)	2000	2005	2011	Variation 2005-2011 (%)
		(13)	(14)	(15)	(16)	(17) = (13)*(5) / (9)	(18) = (14)*(6) / (10)	(19) = (15)*(7) / (11)	(20)
OECD	Australia[1]	12.6	12.1	12.0	**-1.4**	15.8	15.2	14.9	**-1.9**
OECD	Austria[1]	9.8	10.6	9.1	**-14.4**	m	16.8	14.1	**-15.6**
OECD	Belgium (Fl.)[1]	m	9.4	8.1	**-13.8**	m	13.1	11.6	**-11.9**
OECD	Belgium (Fr.)[1]	m	9.4	8.1	**-13.8**	m	13.3	12.6	**-5.6**
OECD	Canada	18.1	m	16.1	**m**	m	m	20.0	**m**
OECD	Chile	m	25.9	23.6	**-9.0**	m	m	22.8	**m**
OECD	Czech Republic[1, 2]	14.7	13.5	11.1	**-17.8**	m	18.8	14.9	**-20.6**
OECD	Denmark[1]	11.4	11.9	11.8	**-0.9**	15.8	16.4	16.9	**3.2**
OECD	England	17.6	15.1	14.6	**-3.3**	m	m	19.2	**m**
OECD	Estonia	m	m	14.7	**m**	m	m	18.3	**m**
OECD	Finland[1]	10.7	10.0	9.3	**-6.7**	15.1	13.7	14.3	**4.0**
OECD	France[1]	14.7	14.2	14.8	**4.3**	23.6	23.0	24.7	**7.0**
OECD	Germany	15.7	15.5	14.2	**-8.8**	19.3	17.9	16.6	**-6.8**
OECD	Greece	10.8	7.9	m	**m**	26.9	18.1	m	**m**
OECD	Hungary[1]	10.9	10.4	10.5	**0.8**	18.2	17.2	14.9	**-13.6**
OECD	Iceland	12.7	11.3	m	**m**	16.3	14.7	m	**m**
OECD	Ireland[1]	15.9	15.5	14.4	**-7.1**	19.6	19.1	18.3	**-4.2**
OECD	Israel[1]	m	13.4	13.6	**1.6**	m	22.4	21.7	**-3.3**
OECD	Italy[1]	10.6	10.1	11.5	**13.0**	17.7	18.1	18.0	**-0.8**
OECD	Japan[1]	16.8	15.1	14.2	**-5.8**	26.5	26.0	20.4	**-21.3**
OECD	Korea[1]	21.5	20.8	18.8	**-9.7**	32.8	29.0	25.7	**-11.4**
OECD	Luxembourg	m	9.0	9.6	**6.8**	m	11.0	11.7	**6.7**
OECD	Mexico[1]	34.8	33.7	31.9	**-5.4**	34.3	37.6	35.6	**-5.4**
OECD	Netherlands	17.1	16.2	15.3	**-6.0**	21.0	23.1	20.4	**-11.9**
OECD	New Zealand	19.9	16.8	16.3	**-3.1**	m	m	m	**m**
OECD	Norway[1]	9.9	10.2	10.0	**-2.8**	12.9	12.9	12.8	**-0.5**
OECD	Poland	11.5	12.7	10.0	**-21.4**	m	m	16.7	**m**
OECD	Portugal[1]	10.4	8.2	8.2	**0.2**	14.8	13.1	10.0	**-23.4**
OECD	Scotland	17.6	15.1	14.6	**-3.3**	m	m	m	**m**
OECD	Slovak Republic	13.5	14.1	13.1	**-6.8**	m	m	16.7	**m**
OECD	Slovenia[1]	m	11.1	7.9	**-28.5**	m	12.7	9.4	**-26.2**
OECD	Spain[1]	13.7	12.5	10.3	**-17.6**	20.6	16.8	15.2	**-9.5**
OECD	Sweden	12.8	12.0	11.3	**-6.1**	m	m	m	**m**
OECD	Switzerland	m	11.7	m	**m**	m	m	m	**m**
OECD	Turkey	a	a	a	**a**	a	a	a	**a**
OECD	United States[1]	16.3	15.1	15.2	**0.7**	14.8	13.7	13.9	**1.9**
	OECD average	14.9	13.7	13.3	**-6.2**	20.3	18.2	17.3	**-7.4**
	Average for 21 countries with all data available for 2005 and 2011		15.4	14.1	**-8.7**		19.8	18.6	**-6.2**

Note: Data in this table come either from Chapter D (for 2000, 2005 and 2011 data relating to salaries of teachers and teaching time) or from 2002 or 2007 editions of *Education at a Glance* (data on ratio of student to teaching staff and instruction time). Some 2000 data have been revised to ensure consistency with 2011 data.

1. Countries with all data available for both 2005 and 2011.
2. Current instruction time for 2000 and 2005, minimum instruction time for 2011.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850129

Table B7.3. Contribution of various factors to salary cost of teachers per student, in primary education (2000, 2005 and 2011)

In equivalent USD, converted using PPPs for private consumption

		Salary cost of teacher per student			Difference (in USD) from the 2011 OECD average of **USD 2 469**	Contribution of the underlying factors to the difference from the OECD average			
						Effect (in USD) of teachers' salary below/above the 2011 OECD average of **USD 38 515**	Effect (in USD) of instruction time (for students) below/above the 2011 OECD average of **812 hours**	Effect (in USD) of teaching time (for teachers) below/above the 2011 OECD average of **791 hours**	Effect (in USD) of estimated class size below/above the 2011 OECD average of **16 students per class**
		2000	2005	2011	2011	2011	2011	2011	2011
		(1)	(2)	(3)	(4)= (5)+(6)+(7)+(8)	(5)	(6)	(7)	(8)
OECD	Australia	2 500	2 887	3 108	**639**	643	449	- 275	- 179
	Austria	m	2 874	3 455	**986**	230	- 234	44	946
	Belgium (Fl.)	m	3 490	3 660	**1 191**	498	70	136	487
	Belgium (Fr.)	m	3 311	3 579	**1 110**	425	407	277	0
	Canada	m	m	3 492	**1 023**	1 128	370	- 31	- 444
	Chile	m	m	1 023	**-1 446**	- 805	374	- 579	- 436
	Czech Republic	m	1 031	1 079	**-1 390**	-1 086	- 529	- 106	331
	Denmark	3 887	3 634	4 265	**1 795**	879	- 246	647	515
	England	m	m	2 148	**- 321**	329	140	344	-1 134
	Estonia	m	m	753	**-1 716**	-1 658	- 352	404	- 110
	Finland	1 891	2 344	2 771	**302**	- 43	- 570	397	518
	France	1 839	1 790	1 802	**- 668**	- 318	133	- 356	- 127
	Germany	m	m	3 597	**1 127**	1 267	- 447	- 50	357
	Greece	m	m	m	**m**	m	m	m	m
	Hungary	1 006	1 646	1 220	**-1 249**	-2 010	- 421	542	640
	Iceland	m	m	m	**m**	m	m	m	m
	Ireland	1 937	2 706	3 509	**1 039**	1 054	205	- 438	218
	Israel	m	1 107	1 714	**- 755**	- 724	346	- 130	- 247
	Italy	2 956	3 169	2 813	**343**	- 413	247	72	438
	Japan	2 397	2 546	2 525	**56**	432	- 186	197	- 386
	Korea	1 262	1 816	2 462	**- 7**	561	- 621	- 66	119
	Luxembourg	m	m	9 425	**6 956**	4 503	714	- 129	1 868
	Mexico	645	645	697	**-1 772**	- 941	- 21	- 17	- 793
	Netherlands	m	m	3 311	**841**	881	425	- 472	7
	New Zealand	m	m	m	**m**	m	m	m	m
	Norway	m	3 175	3 618	**1 148**	- 75	- 251	199	1 275
	Poland	m	m	1 503	**- 966**	-1 728	- 303	1 059	6
	Portugal	2 571	3 306	3 530	**1 060**	70	388	- 320	923
	Scotland	m	m	m	**m**	m	m	m	m
	Slovak Republic	m	m	760	**-1 709**	-1 586	- 237	- 106	221
	Slovenia	m	1 997	2 016	**- 454**	- 403	- 449	309	90
	Spain	2 612	2 865	3 139	**669**	198	211	- 299	560
	Sweden	m	m	m	**m**	m	m	m	m
	Switzerland	m	m	m	**m**	m	m	m	m
	Turkey	420	900	1 199	**-1 270**	- 762	116	398	-1 021
	United States	2 833	3 118	3 018	**548**	500	522	- 914	439
	OECD average for countries with available data for both 2005 and 2011	~	2 398	2 627	**~**	~	~	~	~

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850167

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Table B7.4a. Contribution of various factors to salary cost of teachers per student, in lower secondary education (2000, 2005 and 2011)

In equivalent USD, converted using PPPs for private consumption

		Salary cost of teacher per student			Difference (in USD) from the 2011 OECD average of **USD 3 013**	Contribution of the underlying factors to the difference from the OECD average			
						Effect (in USD) of teachers' salary below/above the 2011 OECD average of **USD 39 934**	Effect (in USD) of instruction time (for students) below/above the 2011 OECD average of **926 hours**	Effect (in USD) of teaching time (for teachers) below/above the 2011 OECD average of **707 hours**	Effect (in USD) of estimated class size below/above the 2011 OECD average of **17.4 students per class**
		2000	2005	2011	2011	2011	2011	2011	2011
		(1)	(2)	(3)	(4)= (5)+(6)+(7)+(8)	(5)	(6)	(7)	(8)
OECD	Australia	3 435	3 866	4 105	**1 092**	735	304	- 489	543
	Austria	m	4 150	4 966	**1 953**	477	79	599	798
	Belgium (Fl.)	m	4 722	5 578	**2 565**	540	128	220	1 677
	Belgium (Fr.)	m	4 529	5 455	**2 442**	439	400	279	1 324
	Canada	m	m	3 492	**479**	1 126	- 10	- 164	- 474
	Chile	m	m	1 001	**-2 012**	- 960	304	- 846	- 510
	Czech Republic	m	1 341	1 839	**-1 174**	-1 624	- 217	286	381
	Denmark	3 559	3 634	4 265	**1 252**	832	15	304	100
	England	m	m	3 033	**20**	312	- 46	52	- 298
	Estonia	m	m	835	**-2 178**	-1 987	- 344	255	- 102
	Finland	3 513	4 064	4 396	**1 383**	89	- 51	630	714
	France	2 679	2 640	2 446	**- 567**	- 273	428	241	- 962
	Germany	m	m	4 555	**1 542**	1 794	- 153	- 259	159
	Greece	2 728	4 205	m	**m**	m	m	m	m
	Hungary	1 007	1 682	1 254	**-1 760**	-2 293	- 166	354	346
	Iceland	1 910	2 401	m	**m**	m	m	m	m
	Ireland	2 652	3 129	3 816	**803**	1 088	34	- 132	- 187
	Israel	m	1 595	1 840	**-1 173**	-1 120	140	345	- 539
	Italy	3 294	3 609	3 135	**122**	- 326	206	355	- 113
	Japan	2 970	3 270	3 220	**207**	425	- 210	502	- 509
	Korea	1 876	2 439	2 563	**- 450**	531	- 242	369	-1 108
	Luxembourg	m	10 332	10 409	**7 396**	5 417	- 185	- 288	2 452
	Mexico	637	689	780	**-2 233**	- 799	421	- 670	-1 185
	Netherlands	m	m	4 172	**1 158**	1 677	279	- 215	- 582
	New Zealand	m	m	m	**m**	m	m	m	m
	Norway	m	3 384	3 776	**763**	- 207	- 271	218	1 023
	Poland	m	m	1 881	**-1 132**	-1 869	- 373	1 015	95
	Portugal	2 989	4 372	4 819	**1 806**	- 51	102	- 360	2 115
	Scotland	m	m	m	**m**	m	m	m	m
	Slovak Republic	m	m	980	**-2 033**	-2 056	- 212	153	83
	Slovenia	m	2 701	4 057	**1 044**	- 788	- 458	89	2 201
	Spain	3 070	3 675	4 427	**1 414**	495	462	- 30	488
	Sweden	m	m	m	**m**	m	m	m	m
	Switzerland	m	m	m	**m**	m	m	m	m
	Turkey	a	a	a	**a**	a	a	a	a
	United States	2 737	3 107	3 024	**11**	432	174	-1 270	675
	OECD average for countries with available data for both 2005 and 2011	~	3 473	3 818	**~**	~	~	~	~

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table B7.5a. Contribution of various factors to salary cost of teachers per student, in upper secondary education (2011)

In equivalent USD, converted using PPPs for private consumption

		Salary cost of teacher per student	Difference (in USD) from the OECD average of **USD 3 050**	Contribution of the underlying factors to the difference from the OECD average			
				Effect (in USD) of teachers' salary below/above the OECD average of **USD 41 223**	Effect (in USD) of instruction time (for students) below/above the OECD average of **959 hours**	Effect (in USD) of teaching time (for teachers) below/above the OECD average of **677 hours**	Effect (in USD) of estimated class size below/above the OECD average of **19.2 students per class**
		(1)	(2) = (3)+(4)+(5)+(6)	(3)	(4)	(5)	(6)
OECD	Australia	4 105	**1 055**	628	163	- 613	878
OECD	Austria	4 703	**1 653**	445	345	532	332
	Belgium (Fl.)	5 760	**2 710**	1 479	- 21	332	920
	Belgium (Fr.)	m	**m**	m	m	m	m
	Canada	3 917	**867**	1 100	- 146	- 347	260
	Chile	984	**-2 066**	- 920	435	- 928	- 653
	Czech Republic	1 856	**-1 194**	-1 563	- 484	296	557
	Denmark	m	**m**	m	m	m	m
	England	2 633	**- 417**	203	- 28	- 76	- 516
	Estonia	725	**-2 325**	-1 931	- 392	327	- 329
	Finland	2 663	**- 387**	142	- 142	584	- 972
	France	3 647	**597**	- 418	258	145	613
	Germany	5 063	**2 013**	2 090	- 113	- 224	260
	Greece	m	**m**	m	m	m	m
	Hungary	1 246	**-1 804**	-1 993	315	251	- 376
	Iceland	m	**m**	m	m	m	m
	Ireland	3 816	**766**	985	- 87	- 285	153
	Israel	1 893	**-1 157**	-1 634	353	670	- 546
	Italy	2 878	**- 172**	- 327	378	213	- 435
	Japan	m	**m**	m	m	m	m
	Korea	3 045	**- 5**	477	13	323	- 818
	Luxembourg	10 409	**7 359**	5 294	- 418	- 580	3 063
	Mexico	m	**m**	m	m	m	m
	Netherlands	3 493	**443**	1 445	139	- 344	- 796
	New Zealand	m	**m**	m	m	m	m
	Norway	4 181	**1 131**	- 70	- 401	930	673
	Poland	1 942	**-1 108**	-1 633	- 365	936	- 46
	Portugal	5 421	**2 371**	- 194	- 41	- 588	3 193
	Scotland	m	**m**	m	m	m	m
	Slovak Republic	901	**-2 149**	-2 046	- 39	150	- 215
	Slovenia	2 258	**- 792**	- 651	- 147	177	- 171
	Spain	4 729	**1 679**	461	347	- 90	961
	Sweden	m	**m**	m	m	m	m
	Switzerland	m	**m**	m	m	m	m
	Turkey	1 444	**-1 606**	-1 012	- 371	395	- 619
	United States	3 235	**185**	584	69	-1 424	955

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850224

Chapter

C

Access to Education, Participation and Progression



Indicator C1 Who participates in education?
StatLink http://dx.doi.org/10.1787/888932850262

Indicator C2 How do early childhood education systems differ around the world?
StatLink http://dx.doi.org/10.1787/888932850490

Indicator C3 How many students are expected to enter tertiary education?
StatLink http://dx.doi.org/10.1787/888932850566

Indicator C4 Who studies abroad and where?
StatLink http://dx.doi.org/10.1787/888932850718

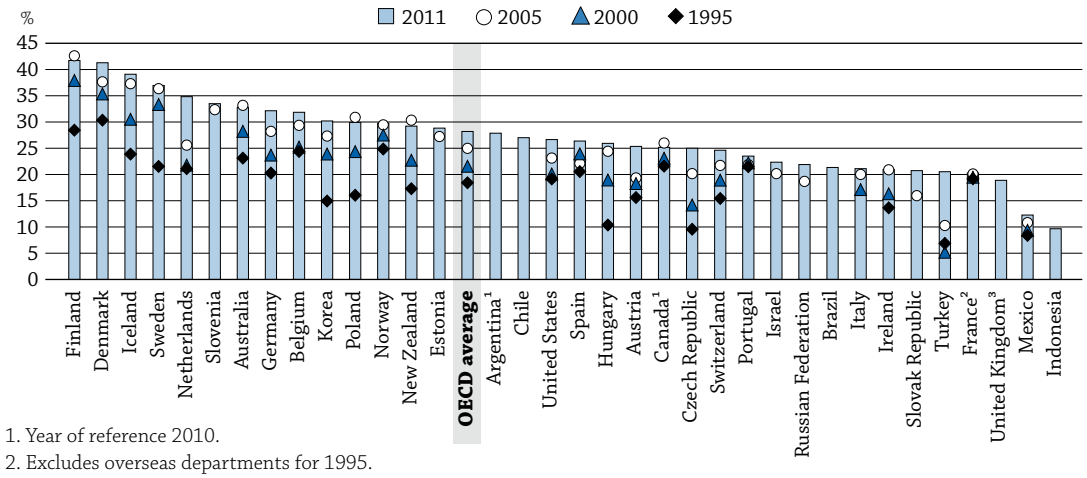
Indicator C5 Transition from school to work: where are the 15-29 year-olds?
StatLink http://dx.doi.org/10.1787/888932850870

WHO PARTICIPATES IN EDUCATION?

- Access to education for 5-14 year-olds is universal in all OECD and other G20 countries with available data.
- In 2011, enrolment rates among 15-19 year-olds were greater than 75% in 31 of the 39 OECD and G20 countries with available data.
- More than 20% of 20-29 year-olds in all OECD countries, except Mexico and the United Kingdom, participated in education in 2011.
- From 1995 to 2011, enrolment rates among 20-29 year-olds increased by more than 10 percentage points on average across OECD countries with available data.

Chart C1.1. Enrolment rates of 20-29 year-olds (1995, 2000, 2005 and 2011)

Full-time and part-time students in public and private institutions



1. Year of reference 2010.
2. Excludes overseas departments for 1995.
3. Break in time series following methodological change from 2006.

Countries are ranked in descending order of the enrolment rates of 20-29 year-olds in 2011.

Source: OECD. Argentina and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table C1.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847317

Context

In times of economic hardship, the advantage of education for labour-market prospects becomes even clearer. Education systems in OECD and most G20 countries now provide universal access to basic education, such that both pre-primary and upper secondary education are becoming universal in most countries (see Indicator C2). The expansion of upper secondary education has been driven by both increasing demand and policy changes ranging from a more flexible curriculum, a reshaping of vocational studies, and efforts to expand access to education to the entire population. While the same changes have been made to tertiary education, participation rates at this higher level of education are significantly lower.

Upper secondary education has become the minimum qualification for a smooth and successful transition into the labour market, and lowers the risk of unemployment (see Indicator A7). Successful completion of upper secondary programmes is vital for addressing equity issues (OECD, 2010a; OECD, 2011a), but completion rates vary widely among OECD countries (see Indicator A2). Efforts to expand this level of education further and to help ensure good returns

for individuals will require that education systems provide the skills students need to make them employable in the short term, and the generic skills and knowledge to enable them to pursue increasingly flexible pathways through lifelong learning during their working lives (OECD, 2010b).

In most OECD countries, upper secondary education is the last phase of compulsory education that equips students with the minimum knowledge and skills needed to enter the labour market and to become more engaged citizens. Skills have become the global currency of 21st-century economies. Without sufficient investment in skills, people languish on the margins of society, technological progress does not translate into productivity growth, and countries can no longer compete in an increasingly knowledge-based global economy (OECD, 2013).

Demographic pressures, such as smaller school-age populations, are likely to influence education policies in the future. While countries with fewer students will have opportunities to increase per-student resources (see Indicator B1) and reduce student-teacher ratios (see Indicator D2), reallocating human resources to other levels of education may require changes in teacher training and recruitment that need long-term planning. Countries facing historically large populations of students have the opportunity to shape their future labour force and skills profile through education reforms. But the pressures on these countries' education budgets, particularly in light of the current economic situation, are likely to intensify. The potentially greater prevalence of skilled workers could lead to skills mismatches and lower private and public returns on education (see Indicator A9). However, the deep structural changes that have occurred in the global labour market over the past decades suggest that individuals in increasingly better-educated populations will continue to gain a solid foothold in the labour market as long as economies keep evolving to become more knowledge-based.

Other findings

- **Under 2011 enrolment conditions, a 5-year-old in an OECD country can expect to participate in more than 17 years of full-time and part-time education, on average, before reaching the age of 40.** The expected duration of education ranged from 14 years in Luxembourg (where student mobility is high) and 15 years in Mexico to more than 19 years in Finland, Iceland, Denmark and Sweden.
- **Across OECD countries in 2011, at least 90% of the population participated in an average of 13 years of formal education.** Fifteen out of 33 countries with available data were above this average whereas 9 of those 33 countries were below the average.

Trends

Between 2000 and 2011, enrolment rates for 15-19 year-olds increased steadily by around 8 percentage points, from an average 76% in 2000 to 84% in 2011, in nearly all OECD countries. While the rates increased by more than 30 percentage points during this period in Turkey, and by around 15 percentage points in Hungary, Mexico and Portugal, they remained virtually unchanged in Austria, Canada (data available only up to 2010), Finland, Greece, Israel, Norway, Sweden and Switzerland. In France, the enrolment rate for this age group decreased from 87% to 84% during this period (Table C1.2 and Chart C1.2). In 2011, enrolment rates for 15-19 year olds were still below 80% in Austria, Chile, Israel, Mexico, Turkey and the United Kingdom.

C1

Analysis

In 19 of the 33 OECD countries with available data in 2011, full enrolment in education (defined here as enrolment rates exceeding 90% of the population of the age range covering a certain level of studies) begins between ages 3 and 4; in the other 14 countries, full enrolment starts between ages 5 and 6. In almost two-thirds of OECD countries, at least 75% of 3-4 year-olds are enrolled in either pre-primary or primary programmes; participation is higher, on average, across EU countries (78%) than across other OECD countries (72%) (Table C1.1a and see Indicator C2). In Belgium, France, Iceland, Norway and Spain, enrolment of 3-4 year-olds reached 95% or more in 2011.

Box C1.1. Expected years in education

Based on 2011 enrolment patterns, children entering education can expect to spend an additional year in education for each year of age at which there is full enrolment in the country in which they attend school.

The estimation of expected years in education comprises enrolment in all forms of formal education, including non-continuous and incomplete participation. Thus, based on 2011 enrolment patterns, a 5-year-old in an OECD country can expect to participate in education for more than 17 years, on average, before reaching the age of 40. More specifically, this person can expect to be enrolled in full-time studies for 16.5 years: 9.4 years in primary and lower secondary education, 3.4 years in upper secondary education, and 2.7 years in tertiary education. This same student can also expect to participate in an additional 1.2 years of part-time studies, mainly at the tertiary level. Women can expect to be enrolled in full-time education for 16.7 years while men can expect to be enrolled for 16.3 years, on average. Among countries with available data, the expected number of years in education ranges from 13.6 years in Indonesia to more than 19 years in Denmark, Iceland and Sweden, and almost 20 years in Finland (Table C1.6a).

Enrolment in an education programme is not limited to a particular age group. Based on data for 2011, Australia, Belgium, Finland, Iceland and New Zealand show significant shares of their adult populations – particularly adults who are 40 and over – participating in education. This is explained by larger part-time enrolments and by lifelong learning programmes in these countries. For instance, credit-based systems in Sweden allow adults to participate in formal education as a way to improve their skills.

Expected years in education is only an estimate of the potential number of years an individual may expect to be in education. This estimation is not comparable to educational attainment, and may also differ from projections of future attainment, because the time spent in a given programme may change within the population.

Participation in compulsory education

Compulsory education varies across countries. In 2011, the typical starting age for compulsory education ranged from age 4 in Luxembourg and Mexico to age 7 in Estonia, Finland, the Russian Federation, South Africa and Sweden. In the United Kingdom and the United States, the typical starting age ranged between ages 4 to 5 and ages 4 to 6, respectively. Compulsory education comprises primary and lower secondary programmes in all OECD countries, and upper secondary education in most of these countries. Between ages 5 and 14, enrolment rates are higher than 90%, i.e. there is universal coverage of basic education in all OECD and other G20 countries. In most countries except Chile, China, Indonesia and the Russian Federation, enrolment rates in 2011 were higher than 95% (Table C1.1a).

Participation in upper secondary education

In recent years, countries have increased the diversity of their upper secondary programmes. This diversification has been driven by the increasing demand for upper secondary education and an evolution of the curriculum from general knowledge taught in general programmes and practical skills reserved to vocational studies, to more comprehensive programmes that include both types of learning, leading to more flexible pathways.

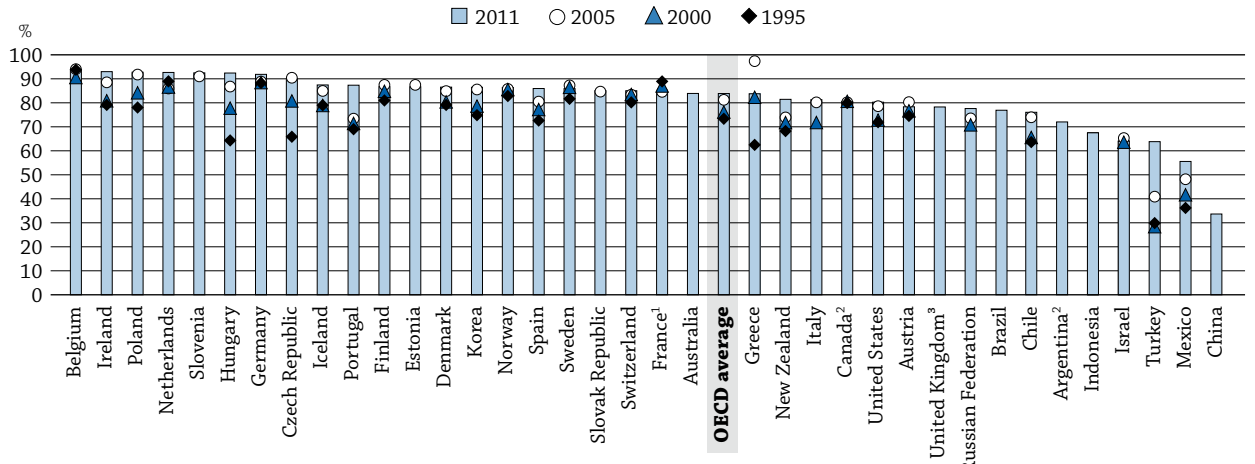
Based on 2011 data, enrolment rates among 15-19 year-olds, i.e. those normally in upper secondary programmes or in transition to upper levels of education, was at least 80% in 26 of the 39 OECD and G20 countries with available data, and higher than 90% in Belgium, the Czech Republic, Germany, Hungary, Ireland, the Netherlands, Poland and Slovenia (Table C1.1a). By contrast, the proportion of people in this age group who are not enrolled in education exceeds 20% in Argentina, Austria, Brazil, Chile, the Russian Federation and the United Kingdom. In Indonesia, Israel (due to conscription) and Turkey, this proportion is greater than 30%, while in Mexico and China this proportion exceeds 40% and 60%, respectively (Table C1.1a and Chart C1.2).

Enrolment rates among 15-19 year-olds in OECD countries increased by 10.5 percentage points on average between 1995 and 2011. This is mostly due to a convergence of enrolment rates in OECD countries in the past 16 years. While the rates increased by more than 20 percentage points during this period in the Czech Republic, Greece, Hungary and Turkey, and by nearly 15 percentage points or more in Mexico, Poland and Portugal, they have remained virtually unchanged in Belgium, Canada (data only up to 2010), and Israel (Table C1.2 and Chart C1.2).

In all countries with available data, at least 90% of 15-16 year-olds are enrolled in upper secondary education (except in Argentina for 16-year-olds, China, Indonesia, Mexico, the Russian Federation and Turkey). In most OECD and other G20 countries, the sharpest decline in enrolment rates occurs at the end of upper secondary education.

Chart C1.2. Enrolment rates of 15-19 year-olds (1995, 2000, 2005 and 2011)

Full-time and part-time students in public and private institutions



1. Excludes overseas departments for 1995.
2. Year of reference 2010.
3. Break in time series following methodological change from 2006.

Countries are ranked in descending order of the enrolment rates of 15-19 year-olds in 2011.

Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table C1.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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In 2011, more than 90% of both 15- and 16- year-olds in 30 of the 37 countries with available data were enrolled in upper secondary education. In Argentina, Brazil and the Russian Federation, enrolment rates for these ages exceeded 85% (except among 16-year-olds in Argentina and the Russian Federation, where enrolment rates were 83% and 69%, respectively). Enrolment rates for these ages varied more widely in other countries. For example, in Indonesia, 90% of 15-year-olds and 77% of 16-year-olds were enrolled. In China, 58% of 15-year-olds and only 42% of 16-year-olds were enrolled.

The variety of enrolment rates in upper secondary education reflects different completion requirements or age limits. For example, Belgium, Germany and Portugal allow older students to complete upper secondary education on a part-time basis. In the Netherlands, students older than 20 can participate in upper secondary vocational programmes. These policies, combined with other factors, such as longer programmes, grade repetition, and late entry into the labour market or participation in education while employed, among others, have resulted in larger numbers of older students participating in upper secondary education (see Indicator A2). Consequently, in some OECD countries, around one in four 20-year-olds is still enrolled in upper secondary education. This is the case in Denmark (34%), Germany (24%), Iceland (35%), Luxembourg (27%) and the Netherlands (29%) (Table C1.1b, available on line).

Vocational education and training (VET) programmes

Many countries have recently renewed their interest in vocational education and training (VET) programmes, as they are seen as an important vehicle for developing skills for those who would otherwise lack qualifications to ensure a smooth and successful transition into the labour market (OECD 2010a). Countries with well-established vocational and apprenticeship programmes have been more effective in holding the line on youth unemployment (see Indicator C5). At the same time, some consider vocational education a less attractive option than more academic education; and some research suggests that participation in vocational education increases the risk of unemployment at later ages (Hanushek et al., 2011).

In most countries, a student who successfully completes an apprenticeship programme is usually awarded an upper secondary or post-secondary qualification. In some countries, it is possible to obtain higher qualifications, like the Advanced Diploma awarded in Australia. Vocational programmes in OECD countries offer different combinations of vocational or pre-vocational studies along with apprenticeship programmes. Upper secondary students in many education systems can enrol in vocational programmes, but some OECD countries delay vocational training until students graduate from upper secondary education. For instance, while vocational programmes are offered as advanced upper secondary education in Austria, Hungary and Spain, similar programmes are typically offered as post-secondary education in Canada (see Indicator A2).

In around one-third of the countries for which 2011 data is available, more than 50% of students in upper secondary education – and at least 70% of these students in Austria, Belgium, the Czech Republic, Finland and the Slovak Republic – participate in pre-vocational or vocational programmes. In the other two-thirds of countries, more than 50% of upper secondary students are enrolled in general programmes rather than in VET. This proportion is larger than 75% in Argentina, Brazil, Canada, Japan, Korea and Mexico. Only about one-quarter of the countries also offer pre-vocational courses at the upper secondary level. Among them, Ireland (33%) and the Russian Federation (23%) have significant proportions of students enrolled at this level (Table C1.3).

When looking at enrolment of the 15-19 year-olds in VET programmes at the upper secondary level it appears that the Czech Republic is the country who attracts the most with more than 50%. Countries with enrolments superior to 40% in this age group include Austria, Belgium, Italy, the Slovak Republic and Slovenia.

In most countries, vocational education at the upper secondary level is school-based only. However in a number of countries a programme that combines both school and work is also offered. Some 60% of all upper secondary students in Switzerland are enrolled in these combined vocational programmes as are more than 30% of all upper secondary students in Austria, the Czech Republic, Denmark and Germany (Table C1.3).

Participation of young adults in education

In 2011, an average of 28% of 20-29 year-olds in OECD countries were enrolled in some type of education. The highest proportions of this age group enrolled in education (more than 40%) are found in Denmark, Finland and Greece. In Iceland, the Netherlands and Sweden, the proportion equalled or exceeded 35%. Meanwhile, in Indonesia, Mexico and Saudi Arabia, less than 15% of adults in this age group were enrolled (Table C1.1a and Chart C1.1).

Over the past 16 years, the enrolment rate for this segment of the population has grown by close to 10 percentage points on average across OECD countries. In the Czech Republic, Greece, Hungary, Iceland, Korea and Sweden, these rates have increased by more than 15 percentage points during this period, while they have grown by less than five percentage points in Canada, France, Mexico, Norway and Portugal (Table C1.2 and Chart C1.1).

In most of the countries analysed, 20-year-olds are typically enrolled in tertiary education. In 2011, an average of more than 37% of 20-year-olds in OECD countries was enrolled in tertiary education. In Korea, almost seven in ten 20-year-olds were enrolled in this level of education, whereas in Belgium, Slovenia and the United States, more than one in two people of this age were enrolled. By contrast, 20% or less of 20-year-olds in Brazil, Denmark, Israel and Switzerland were enrolled in tertiary education (Table C1.1b, available on line).

Returning to or continuing studies is an option for adults who want to improve and diversify their skills and make themselves more adaptable to the changing demands of the labour market. In the current context of high unemployment and changing skills needs in the labour market, some countries, such as Chile, have established specific policies to encourage adults to follow tertiary-type B studies.

Gender differences

Recent studies have emphasised the importance of having a more balanced approach to gender, considering, for example, that half of the economic growth in OECD countries over the past 50 years can be attributed to higher educational attainment, which, in turn, has been achieved mainly because more girls and women are participating in all levels of education (OECD 2012c).

In 2011, an average of 83% of 15-19 year-old boys and 85% of girls the same age across OECD countries were enrolled in education. In most OECD and G20 countries, enrolment rates were higher for girls than for boys in this age group. The widest gender gap at this age was found in Argentina, where 79% of girls and only 66% of boys were enrolled in education. Canada, Israel, the Russian Federation, Slovenia and the United States each show a gender gap in enrolment rates of more than five percentage points in favour of girls. A gender gap in enrolment rates that favours boys is observed in Indonesia (a one percentage-point difference) and Switzerland (a three percentage-point difference). In Turkey, the enrolment rate of 15-19 year-old boys is six percentage points higher than that of girls of the same age. In Denmark, Hungary and Sweden, there is little, if any, gender gap for this age group.

Among 20-29 year-olds, the gender gap in enrolment rates is wider. On average, 30% of women and 26% of men this age participate in education in OECD countries. As with 15-19 year olds, the enrolment rate among women is higher than that among men in most OECD and G20 countries, but in fewer countries than observed for the younger cohort. There are also larger differences within countries. In Slovenia for instance, 42% of women are enrolled while only 26% of men are. In Argentina and Sweden, the enrolment rate for women is 10 percentage points higher than that for men. The 16 percentage-point gap between men's and women's enrolment rates in Korea in 2011 is linked to delayed graduation among men completing their mandatory military service.

In most countries, enrolment rates among 30-39 year-olds are higher among women than men. Australia, Finland, Iceland, New Zealand and Sweden have the highest rates of women of this age participating in education, with Iceland and Sweden showing the widest gender gap (at least six percentage points) (Table C1.1a).

Part-time studies

Students in tertiary education are more likely to enrol full time rather than part time, regardless of their choice of programme (tertiary-type A or B). Students may opt for part-time studies because they may also participate in the labour market at the same time, because of family constraints (particularly for women), because of preferences for different fields of education, or for other reasons. In 2011, 73% of students enrolled in tertiary type-B education were enrolled full time, while only 27% were enrolled part time, on average across OECD countries. In tertiary-type A and advanced research programmes, 78% of students were enrolled full time while 22% were enrolled part time (Table C1.5).

Part-time enrolment in tertiary-type B programmes exceeded full-time enrolment in some countries. In Australia, the Netherlands, New Zealand and the United States, more than 50% of students at this level chose part-time enrolment; in Switzerland and the United Kingdom, more than 70% of students did.

Meanwhile, more than 50% of students in tertiary-type A and advanced programmes in Poland, the Russian Federation and Sweden chose to enrol part time – far more than the OECD average of 22%. In Argentina, Finland, Hungary, New Zealand, the Slovak Republic and the United States, more than 30% of students at these levels of education also chose part-time enrolment.

The relative size of the public and private sectors

In most countries, public institutions provide most education, from primary through tertiary levels. On average across OECD countries in 2011, almost 89% of primary students, 86% of lower secondary students and 81% of upper secondary students are enrolled in public schools. Some 97% of all lower secondary students and 95% of all upper secondary students attended either public or government-dependent private institutions.

Fully private educational institutions increase their share of students enrolled as the level of studies increase. For example, slightly less than 3% of primary students are enrolled in fully private institutions while slightly more than 3% of lower secondary and more than 5% of upper secondary students are. The proportions of students enrolled in private tertiary institutions are considerably larger. Some 20% of students enrolled in tertiary-type B programmes and 15% of students enrolled in tertiary-type A and advanced research programmes are enrolled in fully private institutions. When considering tertiary-level fully private and government-dependent private institutions together, more than 41% of students are enrolled in in type B programmes and at least 29% of students are enrolled in type A and advanced research programmes (Tables C1.4 and C1.5).

The United Kingdom is the only country reporting that 100% of students in tertiary-type B programmes and in tertiary-type A and advanced research programmes are enrolled in government-dependent private institutions (Table C1.5).

Definitions

Programmes at the secondary level can be subdivided into three categories, based on the degree to which they are oriented towards a specific class of occupations or trades and lead to a qualification that is relevant to the labour market:

In **combined school- and work-based programmes**, less than 75% of the curriculum is presented in the school environment or through distance education. These programmes can be organised in conjunction with education authorities or institutions and include apprenticeship programmes that involve concurrent school-based and work-based training, and programmes that involve alternating periods of attendance at educational institutions and participation in work-based training (sometimes referred to as "sandwich" programmes).

General education programmes are not explicitly designed to prepare participants for specific occupations or trades, or for entry into further vocational or technical education programmes (less than 25% of programme content is vocational or technical).

Pre-vocational or pre-technical education programmes are mainly designed to introduce participants to the world of work and to prepare them for entry into further vocational or technical education programmes. Successful completion of such programmes does not lead to a vocational or technical qualification that is directly relevant to the labour market (at least 25% of programme content is vocational or technical).

The degree to which a programme has a vocational or general orientation does not necessarily determine whether participants have access to tertiary education. In several OECD countries, vocationally oriented programmes are designed to prepare students for further study at the tertiary level, and in some countries general programmes do not always provide direct access to further education.

In **school-based programmes**, instruction takes place (either partially or exclusively) in educational institutions. These include special training centres run by public or private authorities or enterprise-based special training centres if these qualify as educational institutions. These programmes can have an on-the-job training component involving some practical experience at the workplace. Programmes are classified as school-based if at least 75% of the programme curriculum is presented in the school environment. This may include distance education.

Vocational or technical education programmes prepare participants for direct entry into specific occupations without further training. Successful completion of such programmes leads to a vocational or technical qualification that is relevant to the labour market.

Vocational and pre-vocational programmes are further divided into two categories (school-based and combined school- and work-based programmes) based on the amount of training provided in school as opposed to the workplace.

Methodology

Data on enrolments are for the school year 2010-11 and are based on the UOE data collection on education systems administered annually by the OECD.

Except where otherwise noted, figures are based on head counts; that is, they do not distinguish between full-time and part-time study because the concept of part-time study is not recognised by some countries. In some OECD countries, part-time education is only partially covered in the reported data.

Net enrolment rates, expressed as percentages in Tables C1.1a and C1.2, are calculated by dividing the number of students of a particular age group enrolled in all levels of education by the size of the population of that age group. In Table C1.1b, available on line, the net enrolment rate is calculated for students at a particular level of education.

In Table C1.2, data on trends in enrolment rates for the years 1995, 2000, 2001, 2002, 2003 and 2004 are based on a special survey carried out in January 2007 among OECD countries and four of six partner countries at the time (Brazil, Chile, Israel and the Russian Federation).

Expected years in education are calculated as the proportion of the population enrolled at specific ages summed over an age range. The main assumption is that every year of full enrolment would correspond to a full year of expected education for an individual below that age.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator C1 Tables

	Table C1.1a	Enrolment rates, by age (2011) StatLink http://dx.doi.org/10.1787/888932850281
WEB	Table C1.1b	Transition characteristics from age 15 to 20, by level of education (2011) StatLink http://dx.doi.org/10.1787/888932850300
	Table C1.2	Trends in enrolment rates (1995-2011) StatLink http://dx.doi.org/10.1787/888932850319
	Table C1.3	Upper secondary and post-secondary non-tertiary enrolment patterns (2011) StatLink http://dx.doi.org/10.1787/888932850338
	Table C1.4	Students in primary and secondary education, by percent share in type of institution or mode of enrolment (2011) StatLink http://dx.doi.org/10.1787/888932850357
	Table C1.5	Students in tertiary education, by percent share in type of institution or mode of enrolment (2011) StatLink http://dx.doi.org/10.1787/888932850376
	Table C1.6a	Expected years in education from age 5 through age 39 (2011) StatLink http://dx.doi.org/10.1787/888932850414
WEB	Table C1.6b	Expected years in education from the age of 5 (2011) StatLink http://dx.doi.org/10.1787/888932850433
WEB	Table C1.6c	Expected years in tertiary education (2011) StatLink http://dx.doi.org/10.1787/888932850452

Table C1.1a. Enrolment rates, by age (2011)

Full-time and part-time students in public and private institutions

		Starting age of compulsory education	Ending age of compulsory education	Number of years at which over 90% of the population are enrolled	Age range at which over 90% of the population are enrolled	Students as a percentage of the population of a specific age group						
						Age 2 and under[1]	Ages 3 and 4	Ages 5 to 14	Ages 15 to 19 M+W	Ages 20 to 29 M+W	Ages 30 to 39 M+W	Ages 40 and over
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(11)	(14)	(17)
OECD	Australia	6	17	**12**	5 - 16	a	40	99	84	33	13	4.9
	Austria	6	15	**13**	4 - 16	4	76	98	78	25	6	0.9
	Belgium	6	18	**16**	3 - 18	17	99	99	94	32	9	4.0
	Canada[2]	6	16-18	**12**	6 - 17	a	24	99	81	25	6	1.1
	Chile	6	18	**11**	6 - 16	2	59	94	76	27	5	0.7
	Czech Republic	6	15	**13**	5 - 17	6	72	98	90	25	4	0.5
	Denmark	6	16	**14**	3 - 16	a	94	99	87	41	8	1.6
	Estonia	7	16	**14**	4 - 17	n	88	96	87	29	7	0.8
	Finland	7	16	**13**	6 - 18	a	53	96	87	42	16	3.6
	France	6	16	**15**	3 - 17	5	99	99	84	20	3	x(14)
	Germany	6	18	**15**	4 - 18	8	93	99	92	32	4	n
	Greece	5	14-15	**13**	5 - 17	n	27	100	84	40	2	n
	Hungary	5	18	**14**	4 - 17	2	84	98	92	26	4	0.7
	Iceland	6	16	**14**	3 - 16	a	96	99	87	39	13	3.4
	Ireland	6	16	**14**	4 - 18	n	70	*100*	93	21	3	1.1
	Israel	6	17	**12**	4 - 16	n	90	97	64	22	6	1.0
	Italy	6	16	**14**	3 - 16	5	94	99	81	21	3	n
	Japan	6	15	**14**	4 - 17	n	85	*100*	m	m	m	m
	Korea	6	14	**11**	6 - 17	32	82	99	86	30	2	n
	Luxembourg[3]	4	15	**12**	4 - 15	1	83	96	m	m	m	m
	Mexico	4	15	**11**	4 - 14	n	72	*100*	56	12	4	0.7
	Netherlands	5	18	**14**	4 - 17	n	93	100	93	35	5	1.5
	New Zealand	5	16	**13**	4 - 16	n	90	*100*	81	29	11	4.1
	Norway	6	16	**15**	3 - 17	a	96	100	86	30	7	1.7
	Poland	5	16	**13**	6 - 18	2	57	95	93	30	5.1	x(14)
	Portugal	6	18	**13**	5 - 17	n	82	*100*	87	24	7	2.2
	Slovak Republic	6	16	**12**	6 - 17	2	66	96	85	21	4	0.7
	Slovenia	6	14	**14**	5 - 18	n	86	97	92	34	4	0.6
	Spain	6	16	**14**	3 - 16	29	99	99	86	26	5	1.2
	Sweden	7	16	**16**	3 - 18	a	93	97	86	37	14	2.8
	Switzerland	5-7	15	**13**	5 - 17	n	22	99	85	25	4	0.5
	Turkey	6	14	**8**	6 - 13	n	12	95	64	21	3	n
	United Kingdom	4-5	16	**13**	4 - 16	3	91	*100*	78	19	6	1.7
	United States	4-6	17	**11**	6 - 16	n	64	96	80	27	7	1.5
	OECD average	6	16	**13**	4 - 16	3	74	99	84	28	6	1.5
	EU21 average	6	16	**14**	4 - 16	4	81	98	87	29	6	1.3
Other G20	Argentina[2]	5	17	**11**	5 - 15	n	56	*100*	72	28	8	1.5
	Brazil	6	17	**10**	6 - 15	9	47	95	77	21	8	2.3
	China	m	m	**m**	m	m	m	m	34	n	m	m
	India	m	m	**m**	m	m	m	m	m	m	m	m
	Indonesia	m	15	**6**	7 - 14	3	17	93	67	10	n	n
	Russian Federation	7	17	**9**	7 - 15	18	73	92	78	22	4	n
	Saudi Arabia	6	11	**m**	m	m	m	m	m	m	m	m
	South Africa	7	15	**m**	m	m	m	m	m	m	m	m
	G20 average	m	m	**m**	m	m	m	m	74	m	m	m

Note: Ending age of compulsory education is the age at which compulsory schooling ends. For example, an ending age of 18 indicates that all students under 18 are legally obliged to participate in education. Mismatches between the coverage of the population data and the enrolment data mean that the participation rates may be underestimated for countries such as Luxembourg that are net exporters of students and may be overestimated for those that are net importers. Rates above 100% in the calculation are shown in italics. Enrolment rates by gender for the 15-19, 20-29 and 30-39 year-old age group are available for consultation on line (see *StatLink* below).

1. Includes only institution-based pre-primary programmes. These are not the only form of effective early childhood education available below the age of 3, therefore inferences about access to and quality of pre-primary education and care should be made with caution. In countries where an integrated system of pre-primary and care exists enrolment rate is noted as not applicable for children aged 2 and below.

2. Year of reference 2010.

3. Underestimated because many resident students go to school in the neighbouring countries.

Source: OECD. Argentina, China, India, Indonesia, Saudi Arabia and South Africa: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850281

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Table C1.2. Trends in enrolment rates (1995-2011)

Full-time and part-time students in public and private institutions

		15-19 year-olds						20-29 year-olds					
		Students as a percentage of the population of this age group						Students as a percentage of the population of this age group					
		1995	2000	2005	2009	2010	2011	1995	2000	2005	2009	2010	2011
OECD	Australia	m	m	m	80	81	84	23	28	33	32	32	33
	Austria	75	77	80	79	78	78	16	18	19	23	25	25
	Belgium	94	91	94	93	93	94	24	25	29	30	30	32
	Canada	80	81	80	81	81	m	22	23	26	25	25	m
	Chile	64	66	74	73	75	76	m	m	m	23	25	27
	Czech Republic	66	81	90	89	90	90	10	14	20	23	24	25
	Denmark	79	80	85	84	85	87	30	35	38	37	38	41
	Estonia	m	m	87	85	87	87	m	m	27	26	28	29
	Finland	81	85	87	87	87	87	28	38	43	41	42	42
	France	89	87	85	84	84	84	19	19	20	19	20	20
	Germany	88	88	89	88	89	92	20	24	28	30	31	32
	Greece	62	82	97	m	83	84	13	16	24	m	40	40
	Hungary	64	78	87	90	92	92	10	19	24	25	25	26
	Iceland	79	79	85	85	88	87	24	31	37	35	38	39
	Ireland	79	81	89	92	96	93	14	16	21	19	21	21
	Israel	m	64	65	64	65	64	m	m	20	22	22	22
	Italy	m	72	80	82	83	81	m	17	20	21	21	21
	Japan	m	m	m	m	m	m	m	m	m	m	m	m
	Korea	75	79	86	87	86	86	15	24	27	29	30	30
	Luxembourg	73	74	72	m	77	m	m	5	6	m	13	m
	Mexico	36	42	48	52	54	56	8	9	11	11	12	12
	Netherlands	89	87	86	90	91	93	21	22	26	29	30	35
	New Zealand	68	72	74	81	79	81	17	23	30	32	30	29
	Norway	83	86	86	86	86	86	25	28	29	29	29	30
	Poland	78	84	92	93	93	93	16	24	31	31	30	30
	Portugal	69	71	73	85	86	87	22	22	22	24	24	24
	Slovak Republic	m	m	85	85	85	85	m	m	16	20	21	21
	Slovenia	m	m	91	91	92	92	m	m	32	34	34	34
	Spain	73	77	81	81	84	86	21	24	22	22	24	26
	Sweden	82	86	87	87	86	86	22	33	36	34	36	37
	Switzerland	80	83	83	85	85	85	15	19	22	23	24	25
	Turkey	30	28	41	53	56	64	7	5	10	15	20	21
	United Kingdom	m	m	m	74	77	78	m	m	m	17	18	19
	United States	72	73	79	81	82	80	19	20	23	24	26	27
	OECD average	73	76	81	82	83	84	18	22	25	26	27	28
	OECD average for countries with data available for all reference years	73	77	82	83	83	85	18	22	26	27	28	29
	EU21 average	78	81	86	86	87	87	19	22	25	27	27	29
Other G20	Argentina	m	m	m	70	72	m	m	m	m	27	28	m
	Brazil	m	m	m	75	76	77	m	m	m	21	20	21
	China	m	m	m	m	33	34	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	62	60	67	m	m	m	m	m	10
	Russian Federation	m	71	74	m	m	78	m	m	19	m	m	22
	Saudi Arabia	m	m	m	m	87	m	m	m	m	m	19	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	73	74	m	m	m	m	m	m

Note: Columns showing years 2001, 2002, 2003, 2004, 2006, 2007 and 2008 are available for consultation on line (see *StatLink* below).
Source: OECD. Argentina, China, Indonesia and Saudi Arabia: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932850319

Table C1.3. Upper secondary and post-secondary non-tertiary enrolment patterns (2011)

Enrolment rates in public and private institutions, by programme orientation, age group, and intensity

		Upper secondary education							Post-secondary non-tertiary education						
		Share of students by orientation				Enrolment rates in pre-vocational and vocational among 15-19 year-olds			Share of students by orientation				Enrolment rates in pre-vocational and vocational among 15-19 year-olds		
		General	Pre-vocational	Vocational	of which vocational combined school- and work-based	Full-time + part-time	Part-time	of which combined work- and school-based	General	Pre-vocational	Vocational	of which combined school- and work-based	Full-time + part-time	Part-time	of which combined work- and school-based
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
OECD	Australia	**51**	a	49	m	**8**	7	m	**a**	a	100	m	**2**	1	m
	Austria	**24**	6	70	35	**47**	m	21	**a**	a	100	20	**6**	m	1
	Belgium	**27**	a	73	3	**41**	2	2	**1**	a	99	19	**3**	1	1
	Canada[1]	**94**	x(3)	6	a	**m**	m	m	**m**	m	m	m	**m**	m	m
	Chile	**67**	a	33	m	**21**	x(5)	m	**a**	a	a	a	**a**	a	a
	Czech Republic	**27**	n	73	32	**52**	n	23	**39**	n	61	6	**2**	n	n
	Denmark	**54**	a	46	45	**15**	n	15	**100**	a	a	a	**a**	a	a
	Estonia	**66**	a	34	n	**19**	n	n	**a**	a	100	4	**3**	n	n
	Finland	**30**	a	70	12	**30**	a	m	**a**	a	100	71	**n**	a	m
	France	**55**	a	45	12	**25**	m	7	**37**	n	63	2	**n**	m	n
	Germany	**51**	a	49	43	**18**	n	m	**25**	a	75	m	**4**	m	m
	Greece	**68**	a	32	a	**16**	1	a	**a**	a	100	a	**1**	n	m
	Hungary	**74**	10	17	17	**20**	n	13	**a**	a	100	a	**5**	1	a
	Iceland	**66**	2	32	14	**m**	m	6	**n**	n	100	15	**n**	n	n
	Ireland	**66**	33	1	a	**15**	m	a	**a**	a	100	15	**7**	1	1
	Israel	**62**	a	38	4	**22**	n	2	**89**	11	a	a	**n**	n	a
	Italy	**40**	a	60	a	**42**	n	a	**a**	a	100	a	**m**	m	a
	Japan	**77**	1	22	a	**13**	n	a	**a**	a	a	a	**m**	m	a
	Korea	**79**	a	21	a	**12**	n	a	**a**	a	a	a	**a**	a	a
	Luxembourg	**39**	a	61	14	**36**	n	8	**a**	a	100	n	**1**	n	n
	Mexico	**91**	a	9	a	**3**	n	a	**a**	a	a	a	**a**	a	a
	Netherlands	**31**	a	69	m	**29**	n	m	**a**	a	100	a	**n**	n	n
	New Zealand	**71**	6	23	a	**8**	5	a	**19**	1	80	a	**3**	2	a
	Norway	**47**	a	53	15	**30**	1	8	**11**	a	89	a	**1**	n	a
	Poland	**52**	a	48	7	**32**	1	4	**a**	a	100	a	**4**	3	a
	Portugal	**58**	4	39	a	**22**	m	a	**a**	a	100	a	**1**	m	a
	Slovak Republic	**29**	a	71	29	**49**	n	20	**a**	a	100	a	**n**	n	a
	Slovenia	**35**	a	65	n	**47**	2	n	**47**	a	53	n	**n**	n	n
	Spain	**55**	a	45	2	**13**	1	1	**a**	a	a	a	**a**	a	a
	Sweden	**44**	1	55	n	**36**	n	n	**16**	n	84	n	**1**	n	n
	Switzerland	**35**	a	65	60	**35**	n	33	**61**	a	39	n	**n**	n	n
	Turkey[2]	**56**	a	44	n	**m**	m	n	**a**	a	a	a	**a**	a	a
	United Kingdom	**64**	x(7)	36	m	**19**	1	m	**a**	a	a	a	**a**	a	a
	United States	**m**	m	m	m	**m**	m	m	**a**	a	100	m	**m**	m	m
	OECD average	**54**	2	44	12	**26**	1	10	**40**	6	89	17	**2**	1	n
	EU21 average	**47**	3	50	13	**30**	1	7	**13**	n	78	7	**2**	n	n
Other G20	Argentina[1]	**82**	a	18	a	**8**	n	a	**a**	a	a	a	**a**	a	a
	Brazil	**86**	a	14	a	**3**	x(5)	a	**a**	a	a	a	**a**	a	a
	China	**48**	x(3)	52	a	**m**	m	a	**84**	x(12)	16	a	**m**	a	a
	India	**m**	m	m	m	**m**	m	m	**m**	m	m	m	**m**	m	m
	Indonesia	**58**	a	42	a	**17**	m	a	**a**	a	a	a	**m**	a	a
	Russian Federation	**48**	23	29	m	**9**	m	m	**a**	a	100	m	**m**	m	a
	Saudi Arabia	**m**	m	m	m	**m**	m	m	**m**	m	m	m	**m**	m	m
	South Africa	**m**	m	m	m	**m**	m	m	**m**	m	m	m	**m**	m	m
	G20 average	**65**	m	33	m	**m**	m	m	**49**	m	79	m	**m**	m	m

Note: Different duration of upper secondary programmes between countries must be taken into account when comparing enrolment rates at this level of education. Columns showing enrolment rates in upper secondary vocational programmes for the 20-24 year-olds and in post-secondary non-tertiary vocational programmes for the 25-29 year-olds are available for consultation on line (see *StatLink* below).

Columns (7), (10, available on line), (17), and (20, available on line) are based on the estimated numbers of students in combined school-work based programmes for the age groups of reference.

1. Year of reference 2010.

2. Excludes ISCED 3C.

Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850338

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Table C1.4. Students in primary and secondary education, by percent share in type of institution or mode of enrolment (2011)

		Type of institution									Mode of enrolment	
		Primary			Lower secondary			Upper secondary			Primary and secondary	
		Public	Government-dependent private	Independent private	Public	Government-dependent private	Independent private	Public	Government-dependent private	Independent private	Full-time	Part-time
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia[1]	**69**	31	a	**64**	36	m	**65**	35	n	**83**	17
	Austria	**94**	6	x(2)	**91**	9	x(5)	**90**	10	x(8)	**100**	n
	Belgium	**46**	54	m	**39**	61	m	**43**	57	m	**80**	20
	Canada[2]	**94**	6	x(2)	**91**	9	x(5)	**94**	6	x(8)	**100**	a
	Chile	**41**	52	7	**46**	47	7	**39**	54	7	**100**	a
	Czech Republic	**98**	2	a	**97**	3	a	**86**	14	a	**100**	n
	Denmark	**86**	14	n	**73**	26	1	**98**	2	n	**97**	3
	Estonia	**96**	a	4	**96**	a	4	**97**	a	3	**95**	5
	Finland	**98**	2	a	**95**	5	a	**82**	18	a	**100**	a
	France	**85**	14	1	**78**	22	n	**69**	31	1	**100**	m
	Germany	**96**	4	x(2)	**91**	9	x(5)	**92**	8	x(8)	**100**	n
	Greece	**93**	a	7	**95**	a	5	**96**	a	4	**98**	2
	Hungary	**91**	9	a	**90**	10	a	**78**	22	a	**95**	5
	Iceland	**98**	2	n	**99**	1	n	**80**	19	1	**91**	9
	Ireland	**99**	a	1	**100**	a	a	**98**	a	2	**100**	n
	Israel	**78**	22	a	**84**	16	a	**93**	7	a	**100**	a
	Italy	**93**	a	7	**96**	a	4	**89**	6	5	**99**	1
	Japan	**99**	a	1	**93**	a	7	**69**	a	31	**99**	1
	Korea	**99**	a	1	**82**	18	a	**55**	45	a	**100**	a
	Luxembourg	**91**	n	9	**81**	10	8	**84**	7	9	**100**	n
	Mexico	**92**	a	8	**89**	a	11	**83**	a	17	**100**	a
	Netherlands	**100**	a	n	**97**	a	3	**92**	a	8	**97**	3
	New Zealand	**98**	n	2	**95**	n	5	**83**	9	8	**91**	9
	Norway	**98**	2	x(2)	**97**	3	x(5)	**88**	12	x(8)	**98**	2
	Poland	**97**	1	2	**95**	1	3	**85**	1	13	**94**	6
	Portugal	**88**	4	8	**84**	6	10	**78**	5	17	**100**	m
	Slovak Republic	**94**	6	n	**94**	6	n	**86**	14	n	**99**	1
	Slovenia	**100**	n	n	**100**	n	n	**96**	2	2	**94**	6
	Spain	**68**	28	4	**69**	28	3	**79**	12	9	**91**	9
	Sweden	**91**	9	n	**87**	13	n	**83**	17	n	**84**	16
	Switzerland	**95**	2	3	**92**	3	5	**89**	7	4	**100**	n
	Turkey	**98**	a	2	**a**	a	a	**97**	a	3	**100**	m
	United Kingdom	**95**	n	5	**71**	23	6	**48**	46	5	**96**	4
	United States	**91**	a	9	**92**	a	8	**92**	a	8	**100**	a
	OECD average	**89**	8	3	**86**	11	3	**81**	14	5	**97**	4
	EU21 average	**90**	7	3	**86**	11	3	**83**	13	4	**96**	4
Other G20	Argentina[2]	**76**	18	6	**78**	17	6	**71**	21	8	**100**	n
	Brazil	**86**	a	14	**89**	a	11	**84**	a	16	**100**	m
	China	**95**	5	x(2)	**92**	8	x(5)	**88**	12	x(8)	**98**	2
	India	**m**	m	m	**m**	m	m	**m**	m	m	**m**	m
	Indonesia	**83**	a	17	**64**	a	36	**51**	a	49	**100**	a
	Russian Federation	**99**	a	1	**100**	a	n	**99**	a	1	**100**	n
	Saudi Arabia	**m**	m	m	**m**	m	m	**m**	m	m	**m**	m
	South Africa	**m**	m	m	**m**	m	m	**m**	m	m	**m**	m
	G20 average	**91**	11	m	**85**	18	m	**78**	23	m	**98**	3

1. Excludes independent private institutions.
2. Year of reference 2010.

Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table C1.5. Students in tertiary education, by percent share in type of institution or mode of enrolment (2011)

		Type of institution						Mode of study							
		Tertiary-type B education			Tertiary-type A and advanced research programmes			Tertiary-type B education				Tertiary-type A and advanced research programmes			
									Part-time				Part-time		
		Public	Government-dependent private	Independent private	Public	Government-dependent private	Independent private	Full-time Men + Women	M+W	Men	Women	Full-time Men + Women	M+W	Men	Women
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD	Australia	**72**	20	9	**96**	a	4	**45**	55	54	56	**71**	29	28	30
	Austria	**73**	27	x(2)	**85**	15	x(5)	**m**	m	m	m	**m**	m	m	m
	Belgium[1]	**42**	58	m	**44**	56	m	**63**	37	40	35	**83**	17	19	16
	Canada[2]	**m**	m	m	**m**	m	m	**88**	12	11	13	**77**	23	21	24
	Chile	**5**	3	93	**26**	21	54	**m**	m	m	m	**m**	m	m	m
	Czech Republic	**71**	28	1	**86**	a	14	**93**	7	8	7	**97**	3	2	4
	Denmark	**97**	3	1	**98**	2	n	**65**	35	32	38	**90**	10	9	12
	Estonia	**52**	20	28	**n**	94	6	**90**	10	13	9	**87**	13	16	11
	Finland	**100**	n	a	**74**	26	a	**100**	a	a	a	**56**	44	49	41
	France	**69**	10	21	**83**	1	16	**m**	m	m	m	**m**	m	m	m
	Germany	**57**	43	x(2)	**94**	6	x(5)	**87**	13	23	7	**87**	13	15	12
	Greece	**100**	a	a	**100**	a	a	**100**	a	a	a	**100**	a	a	a
	Hungary	**51**	49	a	**87**	13	a	**75**	25	20	27	**66**	34	30	38
	Iceland	**26**	74	n	**82**	18	n	**60**	40	53	25	**73**	27	24	30
	Ireland	**98**	a	2	**95**	a	5	**74**	26	21	33	**88**	12	12	13
	Israel	**36**	64	a	**10**	76	14	**100**	a	a	a	**83**	17	17	18
	Italy	**86**	a	14	**92**	a	2	**100**	a	a	a	**m**	m	m	m
	Japan	**8**	a	92	**25**	a	75	**97**	3	2	3	**91**	9	7	12
	Korea	**2**	a	98	**25**	a	75	**m**	m	m	m	**m**	m	m	m
	Luxembourg	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**	m	m	m
	Mexico	**95**	a	5	**67**	a	33	**100**	a	a	a	**100**	a	a	a
	Netherlands	**8**	a	92	**88**	a	12	**36**	64	55	71	**82**	18	17	19
	New Zealand	**59**	37	4	**97**	3	n	**36**	64	62	65	**61**	39	37	41
	Norway	**44**	29	27	**86**	5	10	**50**	50	34	59	**74**	26	23	28
	Poland	**81**	a	19	**69**	a	31	**68**	32	32	32	**47**	53	50	55
	Portugal	**100**	a	n	**78**	a	22	**m**	m	m	m	**m**	m	m	m
	Slovak Republic	**75**	25	n	**83**	n	17	**79**	21	16	23	**65**	35	30	38
	Slovenia	**78**	5	17	**88**	7	5	**57**	43	44	42	**79**	21	22	21
	Spain	**79**	14	7	**86**	n	14	**94**	6	4	8	**73**	27	29	26
	Sweden	**56**	44	n	**93**	7	n	**90**	10	12	9	**49**	51	49	53
	Switzerland	**33**	35	32	**95**	3	2	**29**	71	77	62	**88**	12	14	10
	Turkey	**97**	a	3	**94**	a	6	**100**	n	n	n	**100**	n	n	n
	United Kingdom	**a**	100	n	**a**	100	n	**28**	72	72	73	**76**	24	22	26
	United States	**78**	a	22	**70**	a	30	**48**	52	51	52	**66**	34	31	36
	OECD average	**59**	21	20	**71**	14	15	**73**	27	26	27	**78**	22	21	23
	EU21 average	**68**	21	12	**75**	16	8	**76**	24	23	24	**76**	24	23	24
Other G20	Argentina[2]	**61**	16	23	**79**	a	21	**95**	5	7	4	**54**	46	46	45
	Brazil	**15**	a	85	**30**	a	70	**m**	m	m	m	**m**	m	m	m
	China	**m**	m	m	**m**	m	m	**72**	28	29	26	**79**	21	21	20
	India	**m**	m	m	**m**	m	m	**m**	m	m	m	**m**	m	m	m
	Indonesia	**51**	a	49	**35**	a	65	**100**	a	n	n	**100**	a	n	n
	Russian Federation[3]	**95**	a	5	**83**	a	17	**67**	33	36	31	**48**	52	48	54
	Saudi Arabia	**100**	n	n	**95**	5	n	**100**	n	n	n	**75**	25	33	19
	South Africa	**100**	m	m	**100**	m	m	**100**	n	n	n	**100**	m	n	n
	G20 average	**m**	m	m	**m**	m	m	**82**	18	19	18	**80**	20	19	20

1. Excludes independent private institutions.
2. Year of reference 2010.
3. Enrolments in ISCED 3B are included in indicators for tertiary type-B education.

Source: OECD. Argentina, China, Indonesia, Saudi Arabia and South Africa: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table C1.6a. Expected years in education from age 5 through age 39 (2011)

Expected years of education under countries' current educational system (excluding education for children under the age of 5 and individuals aged over 40), by gender and mode of study

		Full-time							Part-time[1]							Full-time + Part-time[1]
		All levels of education combined			Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary	Tertiary education	All levels of education combined			Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary	Tertiary education	All levels of education combined
		M+W	Men	Women	M+W				M+W	Men	Women	Men +Women				M+W
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	**15.4**	15.1	15.8	10.9	1.8	0.1	2.5	**3.4**	3.3	3.1	0.6	1.2	0.4	1.0	**18.8**
	Austria	**16.9**	16.7	17.2	8.1	3.8	0.6	3.1	**n**	n	n	n	n	n	n	**16.9**
	Belgium	**16.3**	16.1	16.5	8.4	4.1	0.3	2.4	**2.5**	2.2	2.8	0.3	1.3	0.1	0.8	**18.8**
	Canada[2]	**15.4**	15.0	15.7	12.4	x(4)	m	2.4	**1.7**	1.6	1.8	x(4)	x(4)	m	0.5	**17.0**
	Chile[3]	**16.4**	16.4	16.5	8.0	3.8	a	3.6	**m**	m	m	m	m	a	m	**16.4**
	Czech Republic	**17.4**	17.0	17.8	9.0	3.8	0.3	2.9	**0.5**	0.4	0.7	n	n	0.3	0.1	**17.9**
	Denmark	**18.6**	18.2	19.0	10.6	3.8	n	3.2	**0.6**	0.5	0.7	n	0.3	n	0.3	**19.2**
	Estonia	**16.7**	16.1	17.3	8.9	2.9	0.4	2.8	**0.8**	0.7	0.9	0.1	0.3	n	0.4	**17.5**
	Finland	**18.0**	17.5	18.5	9.0	4.8	0.2	2.4	**1.6**	1.7	1.6	n	n	n	1.6	**19.7**
	France[3]	**16.5**	16.1	16.8	9.3	3.3	0.1	2.8	**m**	m	m	m	m	m	m	**16.4**
	Germany	**17.7**	17.8	17.6	10.2	3.1	0.6	2.4	**0.4**	0.4	0.3	n	n	n	0.3	**18.1**
	Greece	**18.3**	18.1	18.5	9.2	3.1	0.1	4.9	**0.3**	0.4	0.2	0.1	0.2	n	n	**18.6**
	Hungary	**16.3**	16.3	16.3	8.0	4.2	0.4	2.0	**1.2**	1.0	1.4	n	0.4	0.1	0.7	**17.5**
	Iceland	**17.5**	17.0	18.0	9.9	4.0	0.1	2.7	**2.0**	1.7	2.3	n	1.1	0.1	0.8	**19.5**
	Ireland	**16.9**	16.9	17.0	10.9	2.6	0.9	3.7	**0.6**	0.6	0.5	n	n	0.3	0.3	**17.5**
	Israel	**15.3**	15.2	15.6	8.7	2.8	0.1	2.6	**0.4**	0.3	0.4	n	n	n	0.4	**15.7**
	Italy	**16.9**	16.5	17.4	8.1	m	n	3.0	**0.1**	0.1	0.1	0.1	m	n	n	**17.0**
	Japan	**15.8**	m	m	9.1	m	n	m	**0.4**	m	m	n	m	n	m	**16.2**
	Korea[3]	**17.5**	18.3	16.7	9.1	2.8	a	4.8	**x(1)**	x(2)	x(3)	x(4)	x(5)	a	x(7)	**17.5**
	Luxembourg[4]	**14.1**	14.1	14.2	9.2	3.8	0.1	m	**n**	n	n	n	n	n	m	**14.1**
	Mexico[3]	**15.2**	15.1	15.3	10.7	2.0	a	1.5	**x(1)**	x(2)	x(3)	x(4)	x(5)	a	x(7)	**15.2**
	Netherlands	**17.9**	17.9	17.9	10.3	3.5	n	3.0	**0.7**	0.7	0.8	n	0.2	n	0.5	**18.6**
	New Zealand	**15.4**	15.0	15.7	10.2	2.8	0.2	2.1	**2.8**	2.6	3.0	n	0.9	0.4	1.4	**18.1**
	Norway	**16.9**	16.7	17.2	10.0	3.5	0.1	2.4	**1.0**	0.8	1.2	n	0.2	0.1	0.7	**17.9**
	Poland	**15.5**	15.2	15.7	8.9	3.0	0.1	1.8	**2.9**	2.3	3.4	n	0.5	0.4	1.9	**18.3**
	Portugal[3]	**17.8**	17.6	18.0	10.4	3.5	0.1	2.8	**x(1)**	x(2)	x(3)	x(4)	x(5)	x(6)	x(7)	**17.8**
	Slovak Republic	**15.5**	15.3	15.8	8.8	3.7	n	1.8	**0.9**	0.6	1.1	n	0.1	n	0.8	**16.4**
	Slovenia	**16.9**	16.1	17.7	8.7	3.9	0.1	3.1	**1.4**	1.2	1.6	0.1	0.4	n	0.8	**18.3**
	Spain	**16.2**	16.0	16.5	10.3	2.2	a	2.7	**1.3**	1.3	1.4	0.4	0.3	a	0.6	**17.6**
	Sweden	**16.1**	15.8	16.4	9.0	3.2	0.1	1.8	**3.1**	2.5	3.7	0.7	0.9	n	1.4	**19.2**
	Switzerland	**16.6**	16.6	16.5	9.5	3.4	0.1	1.9	**0.6**	0.7	0.5	n	n	0.1	0.5	**17.1**
	Turkey[3]	**16.0**	16.4	15.5	8.6	3.7	a	3.0	**n**	n	n	n	n	a	n	**16.0**
	United Kingdom	**15.5**	15.3	15.8	9.4	4.2	m	1.9	**1.0**	0.9	1.2	0.2	0.2	m	0.6	**16.6**
	United States	**15.3**	14.9	15.7	9.0	2.7	m	2.8	**1.8**	1.6	2.0	n	n	m	1.5	**17.1**
	OECD average	**16.5**	16.3	16.7	9.4	3.4	0.2	2.7	**1.2**	1.1	1.4	0.1	0.3	0.1	0.7	**17.5**
	EU21 average	**16.8**	16.5	17.0	9.3	3.5	0.2	2.7	**1.0**	0.9	1.2	0.1	0.3	0.1	0.6	**17.7**
Other G20	Argentina[2]	**16.9**	16.0	17.9	11.1	2.3	a	m	**1.2**	1.1	1.3	n	n	a	m	**18.1**
	Brazil[3]	**16.3**	16.0	16.6	9.9	3.1	a	2.0	**n**	n	n	n	n	a	n	**16.3**
	China	**m**	12.8	m	8.4	2.3	m	1.1	**m**	1.0	m	n	0.2	m	m	**14.2**
	India	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Indonesia	**13.6**	13.7	13.6	9.8	2.1	a	1.3	**n**	n	n	n	n	a	n	**13.6**
	Russian Federation[5]	**12.5**	12.4	12.7	8.5	2.0	x(5)	2.6	**3.3**	3.0	4.0	a	m	m	1.8	**m**
	Saudi Arabia	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	South Africa	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	G20 average	**m**	15.4	m	9.7	m	m	2.4	**m**	1.1	m	m	0.2	m	m	**16.5**

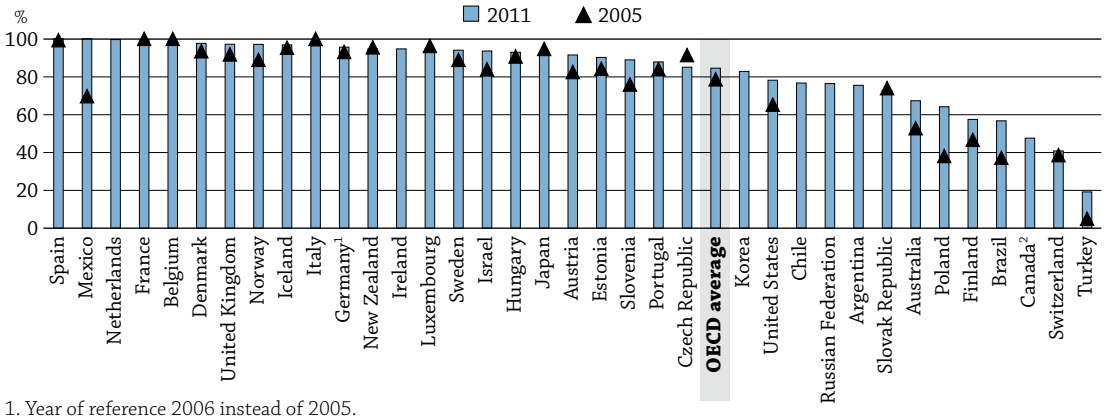
1. Expected years in part-time education must be taken with caution since they may reflect variations due to different intensities of participation among countries, levels and individuals of different ages.
2. Year of reference 2010.
3. Full-time + Part-time.
4. High levels of enrolment abroad and immigration may affect expected years in education.
5. Enrolments in ISCED 3B are included in indicators for tertiary education.

Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.
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HOW DO EARLY CHILDHOOD EDUCATION SYSTEMS DIFFER AROUND THE WORLD?

- In many OECD countries, early childhood education (ECE) services have expanded in tandem with the change in women's participation in the labour force. But improving access without also improving the quality of these services will not ensure good individual and social outcomes.
- Early childhood education is associated with better performance in school later on. Fifteen-year-old students who attended at least one year of pre-primary education perform better on the OECD Programme for International Student Assessment (PISA) than those who did not, even after accounting for their socio-economic backgrounds.
- In a majority of OECD countries, education now begins for most children well before they are 5 years old. In Belgium, France, Iceland, Italy, Norway, Spain and Sweden, more than 90% of 3-year-olds are enrolled in early childhood education.
- More than three-quarters of 4-year-olds (82%) are enrolled in early childhood education across OECD countries; among OECD countries that are part of the European Union, 86% of 4-year-olds are.

Chart C2.1. Enrolment rates at age 4 in early childhood and primary education (2005 and 2011)



1. Year of reference 2006 instead of 2005.
2. Year of reference 2010 instead of 2011.

Countries are ranked in descending order of the enrolment rates of 4 year-olds in 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table C2.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847393

Context

As family structures change, so do the relative ages of parents. More women and men are waiting until later in life to begin their families. They do so for a number of reasons, including planning for greater financial security and emotional maturity, taking more time to find a stable relationship, and committing to their careers before turning their attention to having children. As these older parents are also likely to be in the workforce, there is a growing need for early childcare. In addition, there is a growing awareness of the key role that early childhood education plays in the cognitive and emotional development of the young. As a result, ensuring the quality of early childhood education and care has become a policy priority in many countries.

Enrolling pupils in early childhood education can also mitigate social inequalities and promote better student outcomes overall. Many of the inequalities found in education systems are already evident when pupils enter formal schooling and persist as they progress through the school system (Entwisle et al., 1997; Downey et al., 2004). Because inequalities tend to grow when school is not compulsory, earlier entrance into the school system may reduce these inequalities.

In addition, pre-primary education helps to prepare pupils to enter and succeed in formal schooling (Hart and Risely, 1995; Heckman, 2000).

As countries continue to expand their early childhood education programmes, it will be important to consider parents' needs and expectations regarding accessibility, cost, programme and staff quality and accountability. When parents' needs for quality, accessibility or accountability are not met, some parents may be more inclined to send their children to private pre-primary institutions, childcare, or extra-curricular activities. This can result in heavy financial burdens for parents, even when government subsidies are provided (Shin et al., 2009).

There are many different early childhood education and care systems and structures within OECD countries. Consequently, there is also a range of different approaches to identifying the boundary between early childhood education and childcare (see Box C2.1). These differences should be taken into account when drawing conclusions from international comparisons.

Other findings

- **The average age at which mothers have their first child has risen across all OECD countries over the past 40 years.** In 2009, Germany and the United Kingdom had the highest national averages, recording an average age at first birth of 30 years. In contrast, Mexico had the lowest average age of just over 21 years.
- **Publicly-funded pre-primary education tends to be more strongly developed in the European than in the non-European countries of the OECD.** Private funding varies widely between countries, ranging from 5% or less in Belgium, Estonia, Luxembourg and Sweden, to 25% or more in Argentina, Australia, Austria, Japan, Korea, Spain and the United States.
- **As a percentage of GDP, expenditure on pre-primary education accounts for an average of 0.6% of GDP.** Differences between countries are significant. For example, while 0.1% or less of GDP is spent on pre-primary education in Australia and Turkey, 0.8% or more is spent in Denmark, Iceland, Israel, Luxembourg, the Russian Federation and Spain.
- The ratio of pupils to teaching staff is also an important indicator of the resources devoted to pre-primary education. **The pupil-teacher ratio excluding non-professional staff (e.g. teachers' aides) ranges from more than 20 pupils per teacher in Chile, China, France, Israel, Mexico and Turkey, to fewer than 10 in Estonia, Iceland, New Zealand, Slovenia and Sweden.**
- **Some countries make extensive use of teachers' aides at the pre-primary level.** Twelve countries reported smaller ratios of pupils to contact staff than of pupils to teaching staff. As a result, the ratios of pupils to contact staff are substantially lower than the ratios of pupils to teaching staff (at least two fewer pupils) in Austria, Brazil, Chile, China, France, Germany, Israel, the United Kingdom and the United States.

Trends

Over the past decade, many countries have expanded pre-primary education programmes. This increased focus on early childhood education has resulted in the extension of compulsory education to lower ages in some countries, free early childhood education, universal provision of early childhood education and care, and the creation of programmes that integrate care with formal pre-primary education.

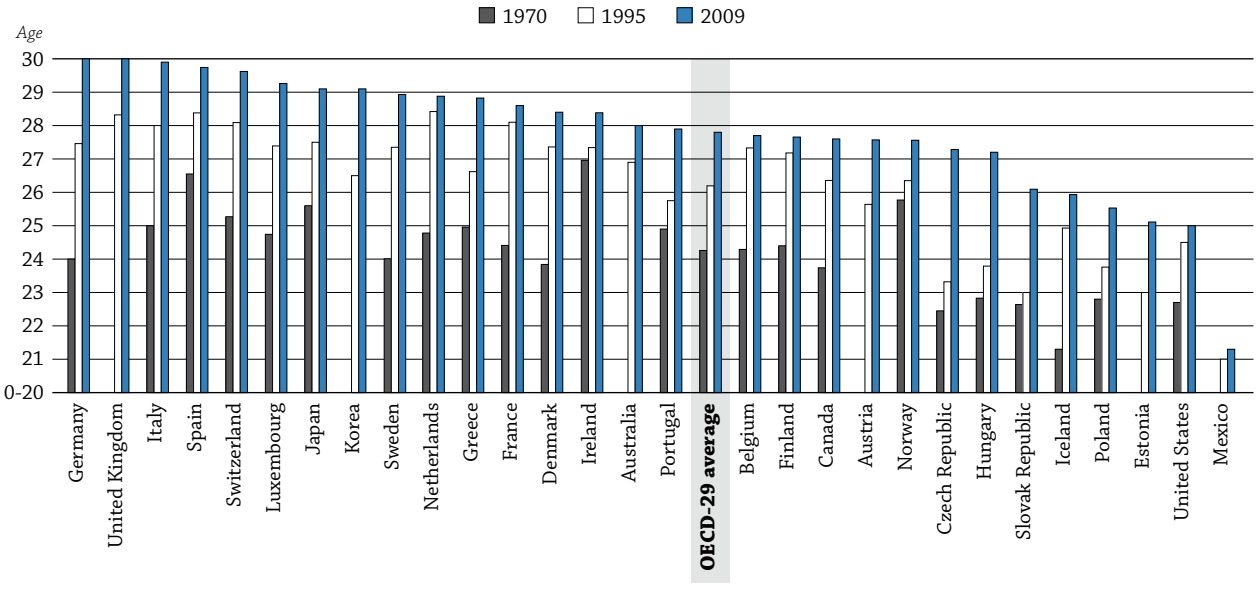
On average across those OECD countries with 2005 and 2011 data, enrolments in early childhood education programmes rose from 64% of 3-year-olds in 2005 to 70% in 2011, and similarly from 78% of 4-year-olds in 2005 to 84% in 2011. The enrolment rates of 4-year-olds in early childhood education programmes increased by 20 percentage points or more in Brazil, Mexico and Poland between 2005 and 2011.

Analysis

In a majority of OECD countries, early childhood education and care (ECEC) policy has paralleled the evolution of women's participation in the labour force. More and more women have become salaried employees since the 1970s, as the service- and knowledge-based economies expanded. Because economic prosperity depends on maintaining a high employment-to-population ratio, encouraging more women to enter the labour market has prompted greater government interest in expanding ECEC services. In the 1970s and 1980s, European governments, in particular, put family and childcare policies into place to encourage couples to have children and ensure that it is feasible for women to combine work and family responsibilities (OECD, 2013a and b; 2011a).

Chart C2.2. **Starting parenthood later**

Average age when mothers have their first child, in 1970, 1995 and 2009



Source: OECD (2011) OECD Family Database. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847412

The average age at which mothers have their first child has risen across all OECD countries over the past 40 years. In 1970, Iceland had the lowest average age of mothers giving birth to their first child: just over 21 years. But Iceland was not an outlier: of the 23 countries for which data are available, five other countries had an average of under 23, and the average age across all countries was just over 24. By 1995, the age had risen to over 26, on average across OECD countries, and by 2009 it had risen again to almost 28. Despite this trend, there is still wide variation among countries. In 2009, Germany and the United Kingdom had the highest average age at first birth of 30 years. By contrast, Mexico had the lowest average age of just over 21 years (Chart C2.2).

Enrolment in early childhood education

Early childhood education is the initial stage of organised instruction for many children and can play a significant role in their development. While primary and lower secondary enrolment patterns are fairly similar throughout OECD countries, there is significant variation in early childhood education programmes among OECD and other G20 countries. This includes the overall level of participation in programmes, the typical starting age for children, financing, and programme length.

In most OECD countries, education now begins for most children well before they are 5 years old. More than three-quarters (82%) of 4-year-olds are enrolled in early childhood education programmes across OECD countries as a whole, rising to 86%, on average, across the OECD countries that are part of the European Union.

Enrolment rates for early childhood education at this age vary from over 95% in Belgium, Denmark, France, Germany, Iceland, Italy, Mexico, the Netherlands, Norway, Spain, and the United Kingdom, to less than 60% in Brazil, Finland and Turkey. Canada and Switzerland also fall into this group, but because enrolment in integrated programmes is not reported for those countries, the true enrolment rate cannot be calculated and is likely to be higher than that reported here (Table C2.1 and Chart C2.1).

Results from the OECD Programme for International Student Assessment (PISA) assessment support these figures. On average across OECD countries, 72% of the 15-year-old pupils assessed by PISA reported that they had attended more than one year of pre-primary education. According to pupils' responses, enrolment in more than one year of pre-primary education was nearly universal about ten years ago in Belgium, France, Hungary, Iceland, Japan and the Netherlands, where over 90% of 15-year-olds reported that they had attended pre-primary education for more than one year. More than 90% of pupils in 27 OECD countries had attended pre-primary education for at least some time, and more than 98% of students in France, Hungary, Japan and the United States reported having done so. Pre-primary education is rare in Turkey, where fewer than 30% of 15-year-olds attended pre-primary education for any period of time. More than one year of pre-primary education is uncommon in Chile, Ireland and Poland, where fewer than 50% of students had attended pre-primary education for that length of time (see OECD, 2010, Table II.5.5, and Table C2.2 at the end of this indicator).

Box C2.1. **The boundary between early childhood education and childcare**

There are many different early childhood education and care systems and structures within OECD countries. Consequently, there is also a range of different approaches to identifying the boundary between early childhood education and childcare. As the educational properties of ISCED 0 programmes can be difficult to assess directly, several proxy measures are used to come up with a technical definition. These include whether or not the programme is being delivered by qualified staff members, whether it takes place in an institutionalised setting, and the targeted age of children.

In order to help readers of *Education at a Glance* to interpret the early childhood education results, a number of examples of how countries define, in theory, and enforce, in practice, the boundary between early childhood education (ECE) and childcare in the data reported to the OECD are provided below.

For countries with early childhood education (ECE) programmes that take place in institutional settings distinct from those providing childcare, the education/childcare boundary is easy to define. In Belgium, for example, the different institutional settings are financed by different government ministries, which makes estimations unnecessary (see Figure 1).

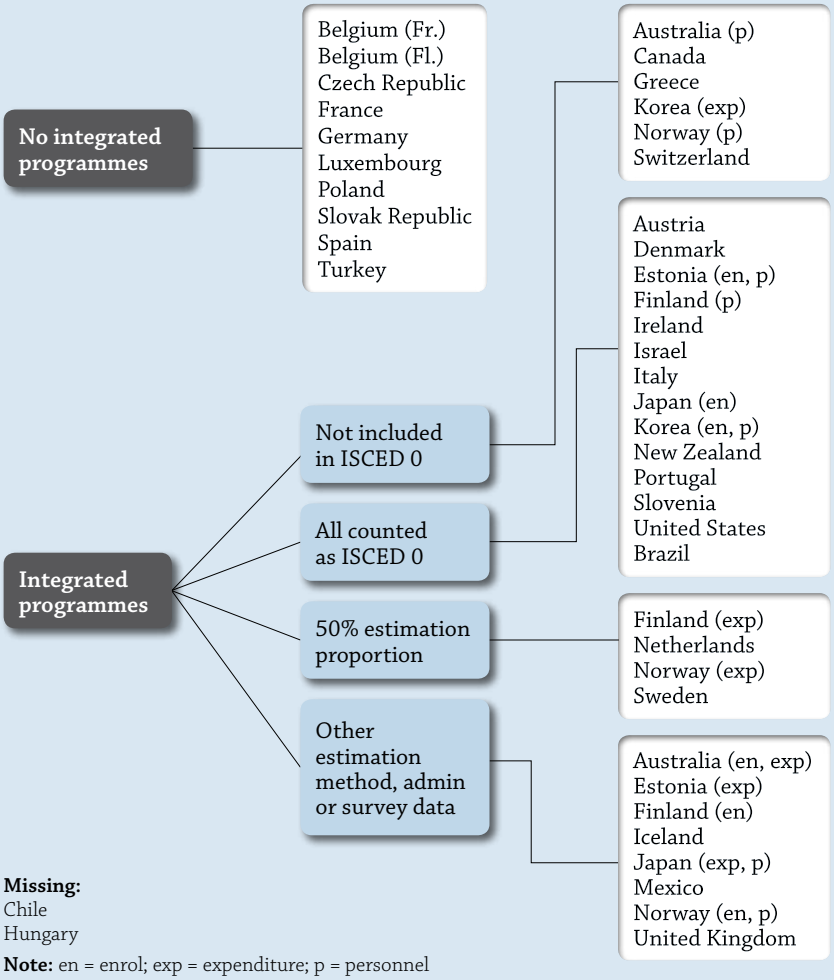
For countries with programmes that combine an educational programme with childcare ("integrated" programmes), the education/childcare boundary becomes more challenging. OECD countries with integrated early childhood education and care programmes often also have stand-alone programmes that are purely educational. Over half of OECD countries are unable, in practice, to distinguish between early childhood education and childcare in integrated programmes. Of these, most, including Italy, Denmark and the United States, choose to report all of the information under ISCED 0. A minority of countries do not include integrated programmes under ISCED 0 for reporting on personnel (Australia, Norway), expenditure (Korea), or overall reporting (Canada, Greece, Switzerland). These differences should be taken into account when drawing conclusions from international comparisons.

For countries with integrated programmes that do attempt to isolate the education component, a variety of estimation methods are used to isolate enrolments, expenditure and personnel. Some countries, such as the Netherlands, Norway and Sweden, choose to apply a simple 50/50 estimation method, whereby

...

half of all enrolments, staff or expenditure are considered educational. Other countries rely on survey data, assign a different education/childcare split, or apply a more complicated estimation method. Finland, for example, weights expenditure on integrated programmes by the child's age, while Estonia uses an estimated expenditure proportion of 30%.

Figure 1. Diagrammatical representation of ISCED 0 systems and reporting across the OECD



OECD member countries are working together to improve methods of reporting statistics on early childhood education. The improvement, which will take into account the new international classification of ISCED programmes, will be implemented in ISCED 2011.

Figure 1 diagrams early childhood education systems and approaches to reporting across OECD and member countries. Country-specific information can be found in Annex 3 of this publication.

Notably, PISA analyses also find that in most countries, students who have attended at least one year of pre-primary education tend to perform better than those who have not, even after accounting for pupils' socio-economic background. PISA research also shows that the relationship between pre-primary attendance and performance tends to be greater in school systems with a longer duration of pre-primary education, smaller pupil-to-teacher ratios in pre-primary education, and higher public expenditure per child at the pre-primary level (OECD 2010, Table II.5.6).

Early childhood education programmes for even younger children are not as pervasive. In some countries, demand for early childhood education for children aged 3 and under far outstrips supply, even in countries that provide for long parental leave. The highest enrolment rates of 3-year-olds in early childhood education are found in Belgium, France, Iceland, Italy, Norway and Spain. In countries where public funding for parental leave is limited, many working parents must either look to the private market, where parents' ability to pay significantly influences access to quality services, or else rely on informal arrangements with family, friends and neighbours (Table C2.1 and *Starting Strong III* [OECD, 2011b]).

Since early childhood education helps to build a strong foundation for lifelong learning and ensure equity in education later on, some countries have made access to pre-primary education almost universal for children by the time they are three. The availability of early childhood education is growing quickly in most countries. On average across OECD countries with 2005 and 2011 data, enrolments rose from 64% of 3-year-olds in 2005 to 70% in 2011, and from 78% of 4-year-olds in 2005 to 84% in 2011. In Brazil, Mexico and Poland, the enrolment rates among 4-year-olds increased by 20 percentage points or more during this period (Table C2.1).

Financing early childhood education

Sustained public funding is critical for supporting the growth and quality of early childhood education programmes. Appropriate funding helps to recruit professional staff who are qualified to support children's cognitive, social and emotional development. Investment in early childhood facilities and materials also helps support the development of child-centred environments for learning. In countries that do not channel sufficient public funding to cover both quantity and quality, some parents may be more inclined to send their children to private ECEC services, which implies heavy financial burdens (OECD, 2011b); others may prefer to stay home, which can hinder women's participation in the labour force (OECD, 2011a).

Public expenditure on pre-primary education is mainly used to support public institutions, but in some countries it also funds private institutions to varying degrees. On average across OECD countries, the level of public expenditure on public pre-primary institutions, per pupil, is around twice the level of public expenditure on private pre-primary institutions (USD 6 275 and USD 3 494, respectively) (see Table B3.4). At the pre-primary level, annual expenditure (from both public and private sources) per pupil for both public and private institutions averages USD 6 762 in OECD countries. However, expenditure varies from USD 2 500 or less in Argentina, Brazil, Mexico and Turkey, to more than USD 10 000 in Luxembourg, New Zealand and the United States (Table C2.2, and see Table B3.4 in Indicator B3).

Expenditure on pre-primary education accounts for an average of 0.6% of the collective GDP. Differences between countries are significant. For example, while 0.1% or less of GDP is spent on pre-primary education in Australia and Turkey, 0.8% or more is spent in Denmark, Iceland, Israel, Luxembourg, the Russian Federation and Spain (Table C2.2 and Chart C2.3). These differences are largely explained by enrolment rates, legal entitlements and costs, and the different starting age for primary education, but they are also influenced by the extent to which this indicator covers private early childhood education. In the Netherlands and Switzerland, the absence of data on integrated programmes is also likely to understate the true level of expenditure and enrolments in early childhood education programmes (see more details in Box C2.1), and may affect the comparability of the data to other countries. Inferences on access to and quality of early childhood education and care should therefore be made with caution (Table C2.2 and Box C2.1).

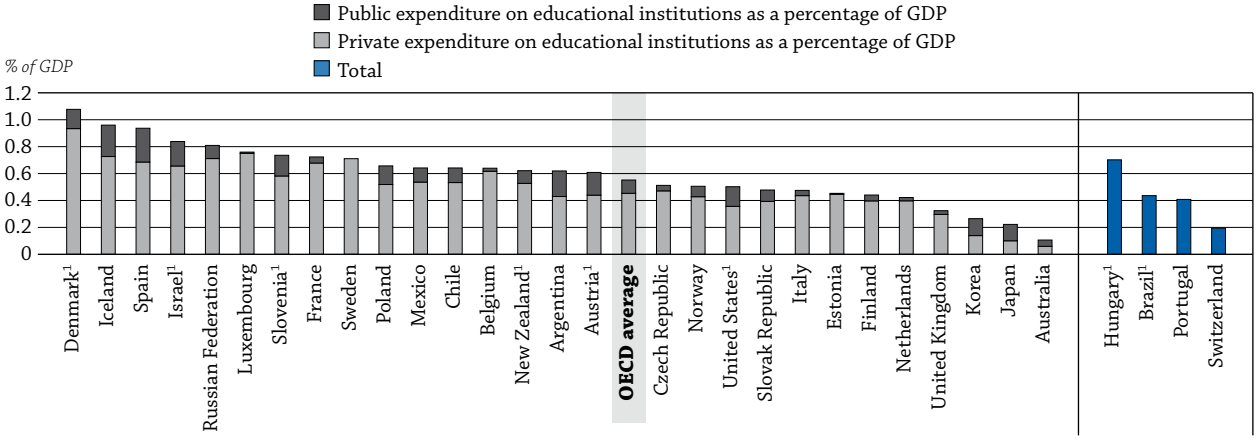
Publicly-funded pre-primary education tends to be more strongly developed in the European than the non-European countries of the OECD. In Europe, the concept of universal access to education for 3-6 year-olds is generally accepted. Most countries in this region provide all children with at least two years of free, publicly-funded pre-primary education in schools before they begin primary education. With the exception of Ireland and the Netherlands, such access is generally a statutory right from the age of 3, and in some countries, even before that and for at least two years. Compared to primary, secondary and post-secondary non-tertiary education, pre-primary institutions obtain the largest proportion of funds (18%) from private sources.

However, this proportion varies widely, ranging from 5% or less in Belgium, Estonia, Luxembourg and Sweden, to 25% or more in Argentina, Austria, Australia, Japan, Korea, Spain and the United States (Table C2.2 and *Starting Strong III* [OECD, 2011b]).

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Chart C2.3. Expenditure on early childhood educational institutions, as a percentage of GDP (2010)

By funding source



1. Includes some expenditure on childcare.

Countries are ranked in descending order of public and private expenditure on educational institutions.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table C2.2.

See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847431

The pupil-teacher ratio varies considerably across OECD countries

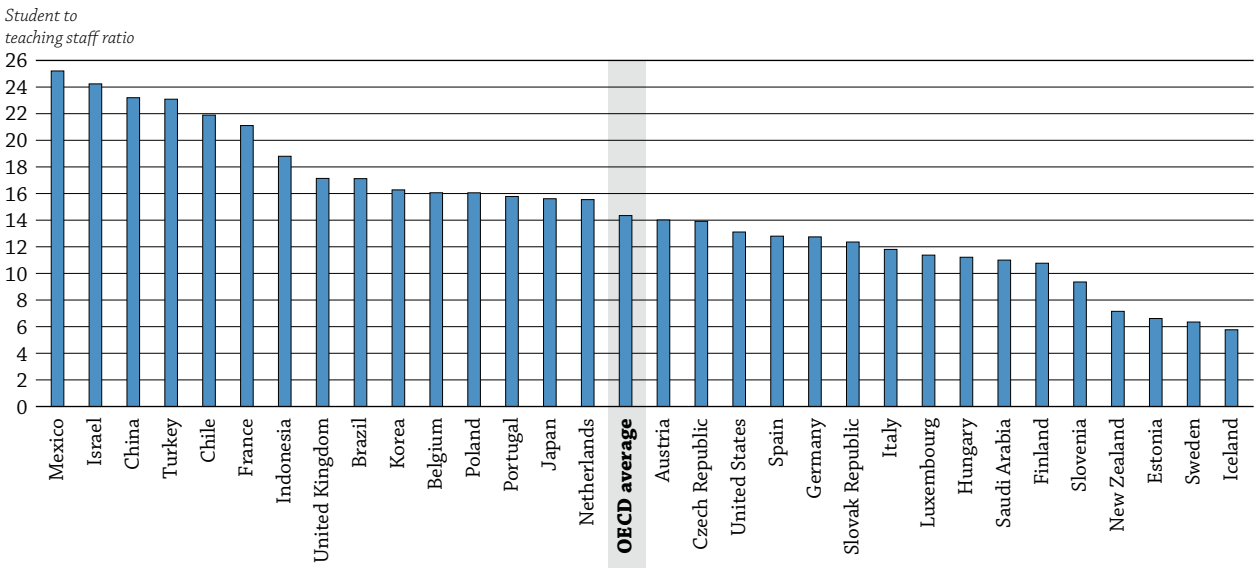
Research demonstrates that enriched, stimulating environments and high-quality pedagogy are fostered by better-qualified practitioners, and that better-quality staff-child interactions facilitate better learning outcomes (Heckman, 2000; Shin et al., 2009). While qualifications are one of the strongest predictors of staff quality, the level of qualification tells only part of the story. Qualifications indicate how much specialised and practical training is included in initial staff education, what types of professional development and education are available to and taken up by staff, and how many years of experience staff have accumulated. In addition, working conditions can influence professional satisfaction, which is likely to affect the ability and willingness of professionals to build relationships and interact attentively with children (Shin et al., 2009). High turnover disrupts the continuity of care, undermines professional development efforts, lowers overall quality, and adversely affects child outcomes.

The ratio of pupils to teaching staff is also an important indicator of the resources devoted to education. That ratio is obtained by dividing the number of full-time equivalent pupils at a given level of education by the number of full-time equivalent teachers at that level and in similar types of institutions. However, this ratio does not take into account instruction time compared to the length of a teacher's working day, nor how much time teachers spend teaching. Therefore, it cannot be interpreted in terms of class size. The number of pupils per class summarises different factors, but distinguishing between these factors helps to identify differences in the quality of education systems (see Indicator D2).

Table C2.2 shows the ratio of pupils to teaching staff and also the ratio of pupils to contact staff (e.g. teachers and non-professional staff [teacher aides]) in early childhood education. Some countries make extensive use of teachers' aides at the pre-primary level. Twelve OECD and G20 countries reported smaller ratios of pupils to contact staff (Column 4 of Table C2.2) than of pupils to teaching staff. As a result, the ratios of pupils to contact staff are substantially lower in Austria, Brazil, Chile, China, France, Germany, Israel, the United Kingdom

and the United States. Globally in pre-primary education, there are 14 pupils for every teacher, on average across OECD countries. The pupil-teacher ratio, excluding teachers' aides, ranges from more than 20 pupils per teacher in Chile, China, France, Israel, Mexico and Turkey, to fewer than 10 in Estonia, Iceland, New Zealand, Slovenia and Sweden (Table C2.2 and Chart C2.4).

Chart C2.4. Ratio of students to teaching staff in early childhood education (2011)
Public and private institutions



Note: The figures should be interpreted with some caution because the indicator compares the teacher/student ratios in countries with "education-only" and "integrated education and daycare" programmes. In some countries, the staff requirements in these two types of provision are very different.

Countries are ranked in descending order of students to teaching staff ratios in early childhood education.

Source: OECD. China, Indonesia and Saudi Arabia: UNESCO Institute for Statistics (World Education Indicators Programme). Table C2.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847450

Definitions and methodology

How is early childhood education defined?

Early childhood education, or pre-primary education (ISCED 0), is defined as the initial stage of *organised instruction*, designed primarily to introduce very young children to a school-like environment.

The distinction between programmes that are classified as ISCED 0 and programmes that are outside of the scope of ISCED 0 is based primarily on the *educational properties* of the programme. As the educational properties of these programmes are difficult to assess directly, several proxy measures are used. ISCED 0 programmes:

Include early childhood programmes that

- are in a centre or are school-based;
- are designed to meet the educational and development needs of children;
- are typically designed for children at least 3 years old and not older than 6; and
- have staff that are adequately trained (i.e. qualified) to provide an educational programme for the children;

Exclude early childhood programmes that fail to meet these criteria.

How is participation in early childhood education classified as full time or part time, and what effect does this have?

There are two methods used to classify pupils as full-time/part-time in *Education at a Glance*:

1. Based on national definitions for early childhood education programmes.
2. A proxy method, derived from the duration of the first grade in primary education (ISCED 1).

Though the classification method used by countries differs, the issue does not affect enrolment rates (Table C2.1), as these are based on the total number of enrolments as a proportion of the population, regardless of whether pupils are full time or part time. The differences in classification methods may have some effect on expenditure per pupil and the pupil-teacher ratio, as these data are based on full-time equivalent pupil figures.

What are the differences between education only and integrated programmes?

In some countries, programmes providing early childhood education also provide care. For the purposes of reporting in *Education at a Glance*, these programmes are referred to as integrated programmes i.e. they integrate education and care in the same programme. Education-only programmes are those that primarily offer education services for a short period of the day. Working parents usually have to use additional care services in the morning and /or afternoon.

Is expenditure on childcare-related activities in integrated programmes reported in *Education at a Glance*?

The focus of ISCED 0 is on the educational aspects of the programme. Therefore, the childcare component of integrated programmes is excluded from expenditure reporting in *Education at a Glance*. Countries that are not able to remove childcare expenditure from data reported in *Education at a Glance* have been footnoted in Table C2.2. The amount of childcare expenditure included is likely to vary between countries and care should be taken when interpreting these results (see more details in Box C2.1).

How are variations at the national level represented?

Some variations at the national level cannot be presented and information on the "characteristics of programmes" has been simplified in some cases. For example, in some countries the starting age of early childhood education programmes differs among jurisdictions or regions. In these instances, the information that is the most common or typical is reported.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities.

The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator C2 Tables

Table C2.1	**Enrolment rates in early childhood and primary education, by age (2005, 2011)**	*StatLink* http://dx.doi.org/10.1787/888932850509
Table C2.2	**Characteristics of early childhood education programmes (2010, 2011)**	*StatLink* http://dx.doi.org/10.1787/888932850528
Table C2.3	**Characteristics of education only and integrated early childhood education programmes (2011)**	*StatLink* http://dx.doi.org/10.1787/888932850547

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Table C2.1. Enrolment rates in early childhood and primary education, by age (2011, 2005)

		Enrolment rates (2011)										Enrolment rates (2005)									
		Age 3	Age 4			Age 5			Age 6			Age 3	Age 4			Age 5			Age 6		
		ISCED 0	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 1	TOTAL	ISCED 0	ISCED 1	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	Australia	13	**66**	1	67	15	83	98	n	*100*	*100*	17	**51**	2	53	18	72	91	n	*100*	*100*
	Austria	60	**91**	n	91	97	n	97	38	58	97	47	**82**	n	82	93	n	93	39	57	96
	Belgium	98	**99**	n	99	98	1	99	5	93	99	*100*	***100***	n	*100*	99	1	*100*	6	94	*100*
	Canada[1]	1	**48**	n	48	92	n	92	n	99	99	m	**m**	m	m	m	m	m	m	m	m
	Chile	42	**76**	n	77	86	1	87	11	81	91	m	**m**	m	m	m	m	m	m	m	m
	Czech Republic	60	**85**	n	85	91	1	91	46	50	96	65	**91**	n	91	97	n	97	49	51	*100*
	Denmark[2]	90	**98**	n	98	96	2	98	10	89	99	91	**93**	n	93	84	n	84	95	3	98
	Estonia	86	**90**	n	90	90	n	90	77	14	91	81	**84**	n	84	88	n	88	*100*	12	*100*
	Finland	49	**57**	n	57	67	n	67	98	n	98	38	**47**	n	47	56	n	56	98	1	99
	France	98	**99**	n	99	99	1	*100*	1	99	*100*	*100*	***100***	n	*100*	99	1	*100*	2	94	96
	Germany[3]	90	**96**	n	96	97	n	97	35	62	98	82	**93**	n	93	93	n	93	38	58	96
	Greece	m	**m**	m	m	m	m	m	m	m	m	a	**58**	a	58	83	2	84	n	*100*	*100*
	Hungary	74	**93**	n	93	96	n	96	72	22	93	73	**91**	n	91	97	n	97	74	25	99
	Iceland	95	**97**	n	97	96	n	96	n	98	98	94	**95**	n	95	96	n	96	n	98	98
	Ireland	47	**56**	39	95	n	99	99	n	*100*	*100*	m	**m**	m	m	m	m	m	m	m	m
	Israel	86	**94**	n	94	97	n	98	17	81	97	67	**84**	n	84	93	n	94	13	81	95
	Italy	92	**96**	a	96	89	9	97	2	97	99	97	***100***	a	*100*	94	7	*100*	1	*100*	*100*
	Japan	77	**93**	a	93	97	a	97	a	*100*	*100*	69	**95**	a	95	99	a	99	a	*100*	*100*
	Korea	82	**83**	n	83	85	1	86	1	*100*	*100*	m	**m**	m	m	m	m	m	m	m	m
	Luxembourg	72	**95**	n	95	91	5	97	4	89	93	62	**96**	n	96	92	3	95	3	97	*100*
	Mexico	44	***100***	n	*100*	98	31	*100*	1	*100*	*100*	23	**70**	a	70	88	10	98	1	*100*	*100*
	Netherlands	87	***100***	a	*100*	*100*	a	*100*	a	*100*	*100*	a	**m**	m	m	m	m	m	m	m	m
	New Zealand	85	**95**	n	95	3	97	*100*	n	*100*	*100*	85	**96**	n	96	3	97	*100*	n	*100*	*100*
	Norway	95	**97**	n	97	97	n	97	1	*100*	*100*	83	**89**	n	89	91	n	91	1	99	*100*
	Poland	50	**64**	a	64	81	x(9)	81	87	9	96	28	**38**	a	38	48	m	48	98	1	99
	Portugal	75	**88**	n	88	93	1	94	5	95	*100*	61	**84**	n	84	87	3	90	3	*100*	*100*
	Slovak Republic	60	**73**	n	73	82	n	82	40	51	91	61	**74**	n	74	85	n	85	40	54	94
	Slovenia	83	**89**	n	89	91	x(9)	91	6	93	*100*	67	**76**	n	76	84	n	84	4	96	*100*
	Spain	97	***100***	n	*100*	99	n	*100*	1	98	99	95	**99**	n	99	*100*	n	*100*	1	99	*100*
	Sweden	92	**94**	n	94	95	n	95	95	1	97	84	**89**	n	89	90	n	90	96	3	99
	Switzerland	3	**40**	n	41	94	1	96	55	44	*100*	8	**38**	n	39	90	1	91	60	40	*100*
	Turkey	4	**19**	n	19	67	n	67	n	97	97	2	**5**	n	5	23	8	32	n	83	83
	United Kingdom	86	**67**	30	97	1	99	*100*	n	99	99	78	**60**	32	92	n	*100*	*100*	n	*100*	*100*
	United States	50	**78**	n	78	77	6	83	14	86	*100*	35	**65**	n	65	72	6	78	15	80	95
	OECD average	67	**82**	2	84	81	13	94	22	77	99	64	**77**	1	79	77	11	88	29	70	*100*
	OECD average for countries with 2005 and 2011 data	70	**84**	1	85	82	12	94	25	73	99	64	**78**	1	79	77	11	88	30	69	99
	EU21 average	77	**86**	3	90	83	11	94	31	66	97	73	**82**	2	84	83	6	89	42	61	*100*
Other G20	Argentina	37	**75**	n	75	*100*	1	*100*	1	*100*	*100*	m	**m**	m	m	m	m	m	m	m	m
	Brazil	36	**57**	n	57	79	1	80	49	41	91	21	**37**	n	37	62	1	63	63	21	83
	China	m	**m**	n	m	m	n	m	n	m	m	m	**m**	m	m	m	m	m	m	m	m
	India	m	**m**	m	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	Indonesia	m	**m**	m	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	Russian Federation	70	**76**	a	76	76	1	77	72	15	87	m	**m**	a	m	m	1	m	m	23	m
	Saudi Arabia	m	**m**	m	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	South Africa	m	**m**	m	m	m	m	m	m	m	m	m	**m**	m	m	m	m	m	m	m	m
	G20 average	m	**m**	3	m	m	17	m	m	86	m	m	**m**	m	m	m	m	m	m	m	m

Note: Enrolment rates at young ages should be interpreted with care, mismatches between the date of reference of ages and the date of data collection may lead to overestimations. Underestimation in enrolment rates may be due to uncounted late entrants. Rates above 100% in the calculation are shown in italics.

1. Year of reference 2010 instead of 2011. Only includes kindergarten and junior kindergarten students in the public school system.
2. Mandatory classes have been included in ISCED 1 as of 2011.
3. Year of reference 2006 instead of 2005.

Source: OECD. Argentina and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850509

Table C2.2. Characteristics of early childhood education programmes (2010, 2011)

		Distribution of students in ISCED 0, by type of institution (2011)			Ratio of students to teaching staff (2011)		Expenditure on educational institutions (2010)				Characteristics of early childhood education programmes						
		Public	Government-dependant private	Independent private	Pupils to contact staff (teachers and teachers' aides)	Pupils to teaching staff	Total expenditure (from public and private sources) as a % of GDP	Proportion of total expenditure from public sources	Proportion of total expenditure from private sources	Annual expenditure per pupil (in USD)	Earliest starting age	Usual starting age	Usual duration (in years)	Usual starting age in ISCED 1	Entry age for compulsory programmes (if applicable)	Length of compulsory programmes (if applicable)(in years)	Full-time (FT)/ Part-time (PT)
		ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 1	ISCED 0	ISCED 0	ISCED 0
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OECD	Australia	24.5	75.5	n	m	m	0.1	55.8	44.2	8 899	3	4	1	5	a	a	PT
	Austria[1]	71.5	28.5	x(2)	9.7	14.0	0.6	72.2	27.8	8 893	3	3	3	6	5	1	FT
	Belgium	47.3	52.7	m	16.1	16.1	0.6	96.4	3.6	6 024	2.5	2.5	3 to 4	6	a	a	FT
	Canada[2]	93.0	7.0	x(2)	m	m	m	m	m	m	2.5 to 5	4.5 to 5	1	6	a	a	FT/PT
	Chile	36.2	57.5	6.3	10.7	21.9	0.6	83.1	16.9	3 544	0.25	4	2	m	a	a	FT/PT
	Czech Republic	98.2	1.8	a	13.6	13.9	0.5	92.0	8.0	4 247	3	3	3	6	a	a	FT
	Denmark[1]	80.4	19.6	n	m	m	1.1	86.7	13.3	9 454	n	1.0	5.0	6.0	m	m	FT
	Estonia	97.1	a	2.9	m	6.6	0.5	98.5	1.5	2 533	n	3	4	7	m	m	FT
	Finland	91.3	8.7	a	m	10.8	0.4	90.1	9.9	5 372	n	a	a	7	a	a	FT
	France	87.2	12.5	0.4	14.1	21.1	0.7	93.7	6.3	6 362	2	2 to 3	3	6	a	a	FT
	Germany	34.9	65.1	x(2)	10.0	12.7	m	m	m	m	3	3	3	6	a	a	FT
	Greece	m	m	m	m	m	m	x(6)	x(9)	m	4	4	1 to 2	6	5.0	1.0	FT
	Hungary[1, 3, 7]	93.6	6.4	a	m	11.2	0.7	m	m	4 773	2.5	3	3	7	5	1	FT
	Iceland	87.3	12.7	n	5.8	5.8	1.0	75.7	24.3	8 606	n	2	4	6	a	a	FT/PT
	Ireland	2.2	a	97.8	m	m	m	m	m	m	3	3	1	4 to 5	a	a	FT/PT
	Israel[1, 4]	89.4	a	10.6	11.5	24.2	0.8	78.3	21.7	3 910	3	3	3	6	3	3	FT
	Italy[3]	69.9	a	30.1	m	11.8	0.5	91.8	8.2	7 177	m	m	m	m	a	a	FT
	Japan	29.7	a	70.3	14.8	15.6	0.2	45.2	54.8	5 550	3.0	3.0	3.0	6.0	a	a	FT
	Korea	16.8	3.5	79.7	16.3	16.3	0.3	52.5	47.5	6 739	3.0	3 to 5	3.0	6.0	m	m	FT
	Luxembourg	91.2	n	8.8	m	11.4	0.8	98.8	1.2	20 958	3	3	3	6	4	2	FT
	Mexico	86.1	a	13.9	25.2	25.2	0.6	83.6	16.4	2 280	3	4 to 5	3	6	3	3	FT
	Netherlands	69.9	a	30.1	14.3	15.5	0.4	94.2	5.8	7 664	3	3 to 4	2 to 3	6	5	1	FT
	New Zealand[1]	1.6	98.4	n	7.2	7.2	0.6	84.8	15.2	11 495	m	3	2	5	a	a	FT/PT
	Norway	54.8	45.2	x(2)	m	m	0.5	84.6	15.4	6 610	n	1	5	6	a	a	FT/PT
	Poland[3]	85.4	1.3	13.3	m	16.1	0.7	79.0	21.0	5 737	2.5	3	4	7	6	1	FT
	Portugal[3]	52.0	31.0	17.1	m	15.8	0.4	m	m	5 977	3	3	3	6	a	a	FT
	Slovak Republic	96.4	3.6	n	12.3	12.4	0.5	82.3	17.7	4 306	2	3	3	6	a	a	FT
	Slovenia[1]	97.4	2.5	0.2	9.4	9.4	0.7	79.1	20.9	7 744	3	3	3	6	a	a	FT
	Spain	64.4	24.5	11.1	m	12.8	0.9	73.2	26.8	6 685	n	2 to 3	3 to 4	6	a	a	FT
	Sweden	83.3	16.7	n	6.3	6.3	0.7	100.0	n	6 582	3	-	4	7	a	a	FT
	Switzerland[3, 5, 7]	96.1	0.3	3.6	m	m	0.2	m	m	5 186	4	5	2	6	5	1	FT
	Turkey[7]	91.0	a	9.0	m	23.1	n	m	m	2 490	3	5	1 to 3	6	a	a	FT
	United Kingdom	71.2	11.1	17.7	12.2	17.1	0.3	91.4	8.6	7 047	3	3	1.5	5	a	a	FT/PT
	United States[1, 6]	55.2	a	44.8	10.9	13.1	0.5	70.9	29.1	10 020	3	4	1	6	a	a	FT/PT
	OECD average	68.1	24.5	19.5	12.2	14.3	0.6	82.1	17.9	6 762							
	OECD total	-	-	-	-	-	0.5	-	-	6 569							
	EU21 average	74.2	19.1	17.7	11.8	13.1	0.6	88.7	11.3	7 085							
Other G20	Argentina	67.9	23.3	8.9	m	m	0.6	69.3	30.7	2 427	m	m	m	m	m	m	FT
	Brazil[1, 7]	71.8	a	28.2	12.6	17.1	0.4	m	m	2 111	n	1	5	6	4	2	FT
	China	53.0	47.0	x(2)	20.6	23.2	m	m	m	m	m	m	m	m	m	m	FT
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	17.3	18.8	m	m	m	m	m	m	m	m	m	m	FT
	Russian Federation	99.0	a	1.0	m	m	0.8	87.9	12.1	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	11.0	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Includes some expenditure on childcare.
2. ISCED 0 programmes are available in all 13 jurisdictions, and compulsory for students in two jurisdictions. Earliest starting age, typical starting age and duration of ISCED 0 programmes vary by jurisdiction.
3. Data on expenditure refers only to public institutions.
4. By recently enacted law, ISCED 0 programmes have been made compulsory and gratuitous nationwide. Implementation will gradually commence from 2013.
5. ISCED 0 programmes are compulsory for two years in some jurisdictions and only one year in others.
6. ISCED 0 programmes are compulsory in about one third of states.
7. Public expenditure only.

Source: OECD. Argentina and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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C2

Table C2.3. Characteristics of education-only and integrated early childhood education programmes (2011)

Existence and characteristics of education only and integrated early childhood education programmes
Proportion of enrolments in Education at a Glance *from education only and integrated early childhood education programmes*

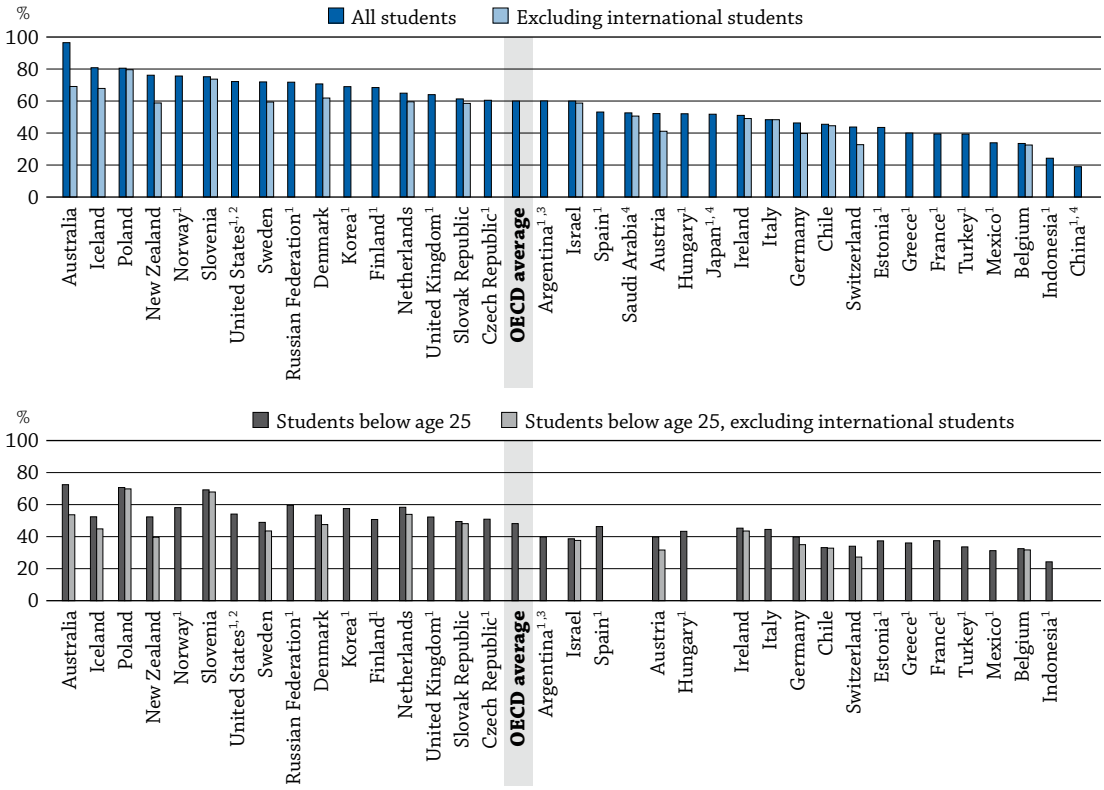
		Education-only programmes			Integrated programmes (includes education and childcare services)			Relative proportion of enrolments reported in *Education at a Glance* (%)		
		Exist nationally	Delivered by qualified teacher	Have a formal curriculum	Exist nationally	Delivered by qualified teacher	Have a formal curriculum	Education-only programmes	Integrated programmes	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100
	Austria	Yes	Yes	Yes	Yes	Yes	No	3	97	100
	Belgium	Yes	Yes	Yes	No	a	a	100	a	100
	Canada	Yes	Yes	Yes	Yes	Yes	Yes	100	m	100
	Chile	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100
	Czech Republic	Yes	Yes	Yes	No	a	a	100	a	100
	Denmark	No	a	a	Yes	Yes	Yes	a	100	100
	Estonia	No	a	a	Yes	Yes	Yes	a	100	100
	Finland	Yes	Yes	Yes	Yes	Yes	Yes	37	63	100
	France	Yes	Yes	Yes	No	a	a	100	a	100
	Germany	Yes	Yes	Yes	No	a	a	100	a	100
	Greece	Yes	Yes	Yes	Yes	m	m	100	m	100
	Hungary	No	a	a	Yes	Yes	Yes	a	100	100
	Iceland	Yes	Yes	Yes	Yes	Yes	Yes	1	99	100
	Ireland	No	a	a	Yes	a	a	a	100	100
	Israel	Yes	Yes	Yes	Yes	Yes	Yes	98	2	100
	Italy	No	a	a	Yes	m	m	a	100	100
	Japan	Yes	Yes	Yes	Yes	Varies	Varies	x(9)	x(9)	100
	Korea	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100
	Luxembourg	Yes	Yes	Yes	No	a	a	100	a	100
	Mexico	Yes	Yes	Yes	Yes	Yes	Yes	99	1	100
	Netherlands	Yes	Yes	Yes	Yes	No	Varies	70	30	100
	New Zealand	No	a	a	Yes	Yes	Yes	a	100	100
	Norway	No	a	a	Yes	Yes	Yes	a	100	100
	Poland	Yes	Yes	Yes	No	a	a	100	a	100
	Portugal	No	a	a	Yes	Yes	Yes	a	100	100
	Slovak Republic	Yes	Yes	Yes	No	a	a	100	a	100
	Slovenia	No	a	a	Yes	Yes	Yes	a	100	100
	Spain	Yes	Yes	Yes	No	a	a	100	a	100
	Sweden	Yes	Yes	Yes	Yes	Yes	Yes	30	70	100
	Switzerland	Yes	Yes	Yes	Yes	Yes	m	100	m	100
	Turkey	Yes	Yes	Yes	No	a	a	100	a	100
	United Kingdom	Yes	Yes	Yes	Yes	Varies	Yes	x(9)	x(9)	100
	United States	Yes	Varies	Varies	Yes	Varies	Varies	x(9)	x(9)	100
	OECD average									
	OECD total									
	EU21 average									
Other G20	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	Yes	Yes	No	Yes	Yes	No	x(9)	x(9)	100
	China	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m

Source: OECD, INES Working Party special data collection on early childhood education programs.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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HOW MANY STUDENTS ARE EXPECTED TO ENTER TERTIARY EDUCATION?

- While some 60% of young adults in OECD countries are expected to enter tertiary-type A (largely theory-based) programmes over their lifetimes, only 3% are expected to enter advanced research programmes.
- Almost half of young adults in OECD countries will enter tertiary-type A programmes before the age of 25.
- When international students are excluded from the calculation, Poland and Slovenia are the only two countries (out of 17 countries with available data) where around 7 out of 10 young adults are expected to enter tertiary-type A education before they are 25 years old.

Chart C3.1. Entry rates into tertiary-type A education (2011)



1. New entrants data for international students are missing.
2. The entry rates for tertiary-type A programmes include the entry rates for tertiary-type B programmes.
3. Year of reference 2010.
4. New entrants data by age are missing.

Countries are ranked in descending order of entry rates for tertiary-type A programmes in 2011.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. Tables C3.1a and b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Context

Entry rates estimate the proportion of people who are expected to enter a specific type of tertiary education programme during their lifetimes. They also indicate the accessibility of tertiary education and the perceived value of attending tertiary programmes, and provide some indication of the degree to which a population is acquiring the high-level skills and knowledge that can create and fuel knowledge-based economies. High entry and enrolment rates in tertiary education imply that a highly educated labour force is being developed and maintained.

In OECD countries, the belief that skills acquired through higher education are valued more than those held by people with lower educational attainment stems from the perception, both real and feared, that "routine" jobs can be performed instead in low-wage countries or mechanised, and from the growing understanding that knowledge and innovation are key to sustaining economic growth. Tertiary institutions not only have to meet growing demand by expanding the number of places they offer, they also have to adapt programmes and teaching methods to match the diverse needs of a new generation of students.

Other findings

- While **one in 20 students is expected to enter an advanced research programme over their lifetimes in Germany, Slovenia and Switzerland,** fewer than one in 100 students are expected to do so in Argentina, Chile, Indonesia, Mexico, Saudi Arabia, Spain and Turkey.
- Entry rates into tertiary-type A programmes are still higher for women (67%) than for men (53%) on average across OECD countries. But in advanced research programmes the gender gap almost disappears.
- Based on current patterns, it is estimated that **an average of 19% of today's young adults (20% of women and 18% of men) will enter tertiary-type B (shorter and largely vocational) programmes** over their lifetimes.
- **The most popular fields of education** chosen by new entrants into tertiary programmes **are social sciences, business and law** in all countries except Finland, Korea and Saudi Arabia.

Trends

Between 1995 and 2011, entry rates into tertiary-type A programmes increased by more than 20 percentage points, on average across OECD countries, while entry rates into tertiary-type B programmes remained stable. The increase was due to the increased accessibility of tertiary education in many countries, but also because of structural changes in the education systems of some countries, such as the creation of new programmes (to meet labour-market needs) or shorter programmes (with the implementation of the Bologna Process). Entry rates for tertiary programmes have also increased because the source of applicants has expanded to include many more international (see Indicator C4) and older students.

Note

Entry rates represent the percentage of an age cohort that is expected to enter a tertiary programme over a lifetime. This estimate is based on the number of new entrants in 2011 and the age distribution of this group. Therefore, the entry rates are based on a "synthetic cohort" assumption, according to which the current pattern of entry constitutes the best estimate of the behaviour of today's young adults over their lifetimes. Entry rates are sensitive to changes in the education system, such as the introduction of new programmes (as with the implementation of Bologna Process) or a variation in the number of international students. Entry rates can be very high, and even greater than 100% (thus clearly indicating that the synthetic cohort assumption is implausible), during a period when there are unexpected entries. In Australia, for example, the entry rate into tertiary type A programmes decreases by more than 25 percentage points when international students are excluded. In Portugal, a large number of women over 25 decided to pursue a university education, so entry rates among women increased by 40 percentage points from 2007 to 2011.

C3

Analysis

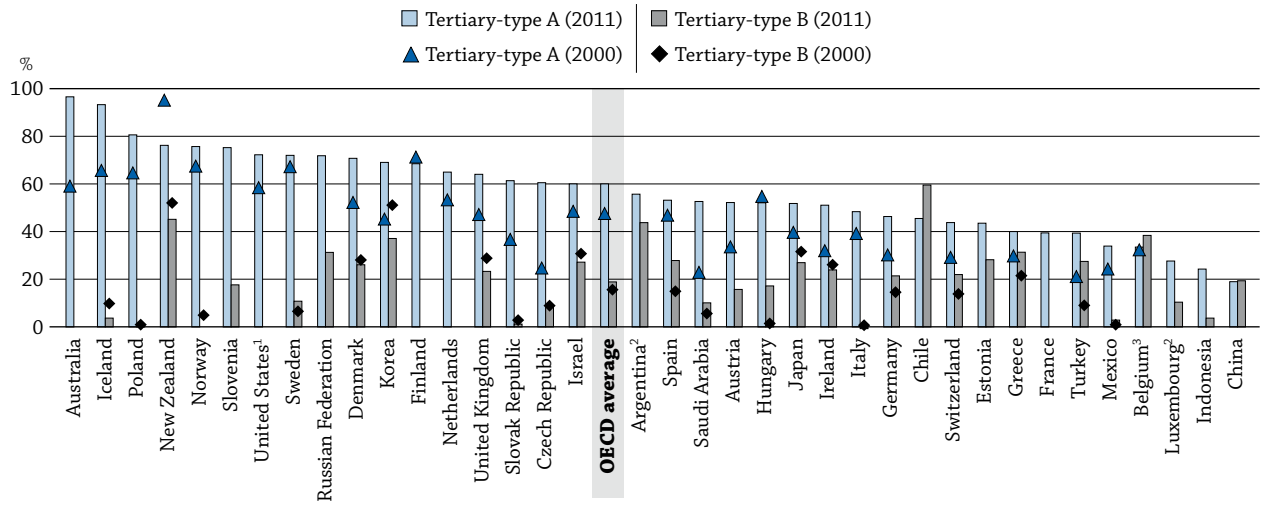
Overall access to tertiary education

It is estimated that 60% of young adults in OECD countries will enter tertiary-type A programmes during their lifetimes if current patterns of entry continue. In several countries, at least 70% of young adults are expected to enter these programmes, while less than 35% are expected to do so in Belgium, China, Indonesia and Mexico (Chart C3.1).

The proportion of students entering tertiary-type B programmes is generally smaller, mainly because these programmes are less developed in most OECD countries. Proportions range from less than 5% in Iceland, Indonesia, Mexico, Poland and the Slovak Republic, to more than 35% in Belgium, Korea and New Zealand, and above 50% in Argentina and Chile (Table C3.1a).

In contrast, in Belgium and Chile, the expected proportion of students who will enter tertiary-type B programmes is higher than those expected to enter tertiary-type A programmes. In these countries, broad access to tertiary-type B programmes counterbalances relative low entry rates into academic tertiary programmes (Chart C3.2). Other countries, most notably Israel and the United Kingdom, have entry rates around the OECD average for academic (type A) programmes, and comparatively high entry rates for vocational (type B) programmes. Although New Zealand's entry rates are among the highest in OECD countries for both types of programmes, these rates are inflated by a greater population of older and international students (Table C3.1a).

Chart C3.2. Entry rates into tertiary-type A and B education (2000, 2011)



1. The entry rates for tertiary-type A programmes include the entry rates for tertiary-type B programmes.
2. Year of reference 2010 instead of 2011.
3. Year of reference 2001 instead of 2000.

Countries are ranked in descending order of entry rates for tertiary-type A education in 2011.

Source: OECD. Table C3.2a. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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In some countries, high entry rates may reflect a temporary phenomenon, such as university reforms driven by implementation of the Bologna Process, the effects of the economic crisis, or a surge in the number of international students.

On average across all OECD countries with comparable data, the proportion of young adults who entered tertiary-type A programmes increased by 13 percentage points between 2000 and 2011, and by 21 percentage points between 1995 and 2011 (Table C3.2a). Entry rates into these programmes increased by more than

20 percentage points between 2000 and 2011 in Australia, the Czech Republic, Korea, Saudi Arabia and the Slovak Republic. In Korea, the increase (between 2007 and 2008) was influenced by a reclassification of tertiary-type B programmes into tertiary-type A programmes. In contrast, Finland, Hungary and New Zealand are the only OECD countries that show a decline in entry rates into these programmes. However, in Hungary, the decrease is counterbalanced by a significant increase in entry rates into tertiary-type B programmes during the same period. In New Zealand, the rise and fall of entry rates between 2000 and 2011 mirrored the number of international students over the same period (Chart C3.2).

Among OECD countries, overall net entry rates into tertiary-type B programmes between 2000 and 2011 have remained relatively stable except in Hungary, Spain and Turkey, where they have increased by more than 10 percentage points, and in Korea, where they have decreased by almost 15 percentage points (Chart C3.2).

Roughly 3% of today's young adults in OECD countries are expected to enter advanced research programmes during their lifetimes, if current patterns of entry remain stable. Among countries with available data, the proportions range from less than 1% in Argentina, Chile, Indonesia, Mexico, Saudi Arabia, Spain and Turkey, to around 5% in Germany, Slovenia and Switzerland (Table C3.1a).

Age of new entrants into tertiary education

On average across OECD countries, 81% of all first-time entrants into tertiary-type A programmes and 62% of first-time entrants into tertiary-type B programmes in 2011 were under 25 years of age. In addition, 56% of students who entered advanced research programmes in 2011 were under 30 years of age (Table C3.1b).

The age of new entrants into tertiary education varies among OECD countries because of differences in the typical age at which students graduate from upper secondary education (see Tables X1.1a and b), the intake capacity of institutions (admissions with *numerus clausus*, one of many methods used to limit the number of students who may study at a tertiary institution), and the opportunity cost of entering the labour market before enrolling in tertiary education.

During the recent economic crisis, some young people postponed entry into the labour market and remained in education. Some governments have also developed second-chance programmes, aimed at people who left school early, to raise the level of skills available in the workforce and increase opportunities for people to acquire practical education and competencies. Nevertheless, entering tertiary education at a later stage is more costly from both public and personal perspectives. It means that for a period of time, the productive potential of individuals is untapped. As a result, tax revenues are lower and public expenditures may be higher. Older students may face more difficulties combining work and study and thus may be unable to complete the programmes on time. Understanding that delays in completing education increase the cost of providing it, governments are introducing measures to foster timely completion.

Traditionally, students enter tertiary programmes immediately after having completed upper secondary education, and this remains true in many countries. For example, in Belgium, Indonesia, Italy and Mexico, more than 90% of all first-time entrants into tertiary-type A or B programmes are under 25. In other OECD countries, the transition from upper secondary to tertiary education may occur at a later age because of time spent in the labour force or the military. For instance, in Iceland, Israel and Portugal, only two-thirds of all first-time entrants into tertiary-type A programmes are under 25. In these cases, first-time entrants into tertiary-type A or B programmes represent a much wider age range (Table C3.1b).

The proportion of older first-time entrants into tertiary-type A and B programmes may reflect the flexibility of the programmes and their suitability to students outside the typical age group. It may also reflect the value placed on work experience before entering higher education, which is characteristic of the Nordic countries and is also common in Austria, Australia, Chile, Hungary, New Zealand and the United States, where a sizeable proportion of new entrants is much older than the typical age at entry. The reasons differ substantially from one country to another. For instance, in Australia, taking a gap year before entering tertiary education has become a trend; in 2009-10 almost one in four students took a gap year, and 51% of them declared "work"

as their main reason for taking the year off from education (Lumsden and Stanwick, 2012). Some countries require young people to serve in the military, which postpones entry into tertiary education. This is the case of Israel, which has mandatory military service for 18-21 year-old men and 18-20 year-old women.

Impact of international students on entry rates into tertiary-type A programmes

By definition, all international students enrolling for the first time in a country are counted as new entrants, regardless of their previous education in other countries. To highlight the impact of international students on entry rates into tertiary-type A programmes, both unadjusted and adjusted entry rates (i.e. the entry rate when international students are excluded from consideration) are presented in Tables C3.1a and b.

In Australia, the difference between the unadjusted and adjusted entry rates is 27 percentage points – the largest among all countries with comparable data. In Austria, Iceland, New Zealand, Sweden and Switzerland, the presence of international students also affects entry rates greatly, with differences from 11 to 17 percentage points (Table C3.1a).

The expected percentage of new entrants into tertiary-type A education changes dramatically when older and international students are not considered. These two groups are important components of the student population in countries, but they can artificially inflate the expected proportion of today's young adults who will enter a tertiary programme. When international and older students are not counted, Poland and Slovenia become the two countries with the largest proportion of people who are expected to enter tertiary-type A education under the age of 25. The large proportion in Poland is related to the greater number of students who graduated from upper secondary programmes as a result of the 1999 education reforms in that country. Those reforms aimed to improve the quality of the country's secondary and higher education systems and offer equitable education opportunities. Poland and Slovenia are also two of the six countries with the highest percentage of the population of 25-34 year olds that has attained at least an upper secondary education (see Indicator A1).

Pathways between academic and vocational programmes

In some countries, tertiary-type A and B programmes are provided by different types of institutions. However, it is increasingly common for universities or other institutions to offer both types of programmes. The two types of programmes are also gradually becoming more similar in terms of curriculum, orientation and learning outcomes.

In some countries, graduates from tertiary-type B programmes can gain entry into tertiary-type A programmes, usually in the second or third year, or even into a master's programme. Adding together entry rates into these two types of programmes to obtain overall tertiary-level entry rates would result in over-counting. Entry is typically subject to certain conditions, such as passing a special examination, prior personal or professional achievements, and/or completion of a "bridging" programme, depending on the country or programme. In some cases, students who leave an academic programme before graduating can be successfully re-oriented towards vocational programmes.

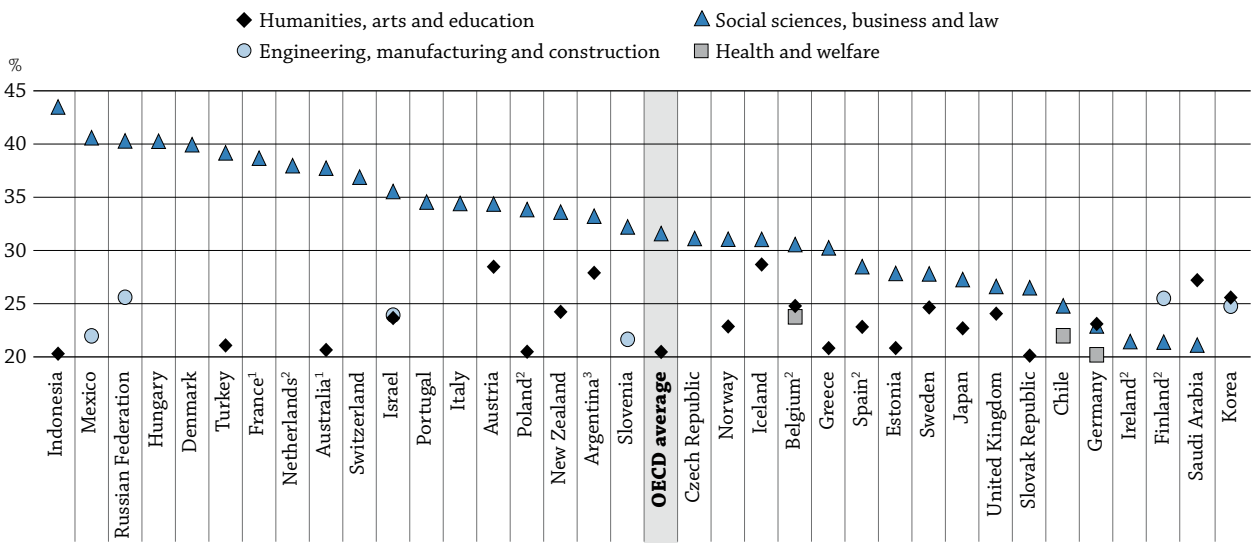
Entry rate into tertiary programmes, by field of education (tertiary-type A and B)

In almost all countries, a large proportion of students pursues tertiary programmes in the fields of social sciences, business and law. In 2011, these fields received the largest share of new entrants in all countries except Finland, Korea and Saudi Arabia. In Finland, the proportion of new entrants was largest in engineering, manufacturing and construction, while in Korea and Saudi Arabia, the proportion was largest in humanities, arts and education (Chart C3.3).

Science-related fields, which include science and engineering, manufacturing and construction, are less popular. On average, only a quarter of all students enter these fields (Table C3.3a). This low level of participation is partly due to the under-representation of women: on average in 2011, only 14% of new entrants into tertiary education who were women chose these fields, compared with 39% of new entrants who were men. Among the new-entrant population, the proportion of women who chose science-related fields ranged from 5% in Belgium and Japan to 19% in Greece, Italy, Indonesia and Mexico, while among men, the proportion in these fields ranged from 18% in Argentina to 58% in Finland (Table C3.3b, available on line).

Chart C3.3. Distribution of new entrants into tertiary programmes, by field of education (2011)

Only those fields in which more than 20% of students entered a tertiary programme in 2011 are shown in the graph below



1. Exclude tertiary-type B programmes.
2. Exclude advanced research programmes.
3. Year of reference 2010.

Countries are ranked in descending order of new entrants in Social sciences, business and law programmes in 2011.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. Table C3.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847507

The distribution of entrants into advanced research programmes by field of education shows a different outcome from that of tertiary education as a whole. Although social sciences, business and law were the most popular fields of education among tertiary students in 2011, doctoral students favoured science-related fields slightly more than social science, business and law. Almost one in 4 new doctoral students undertook studies in sciences (23%) – more than double the proportion of new tertiary entrants who chose this field (10%). In Chile, France and Israel, more than 35% of advanced research students chose science.

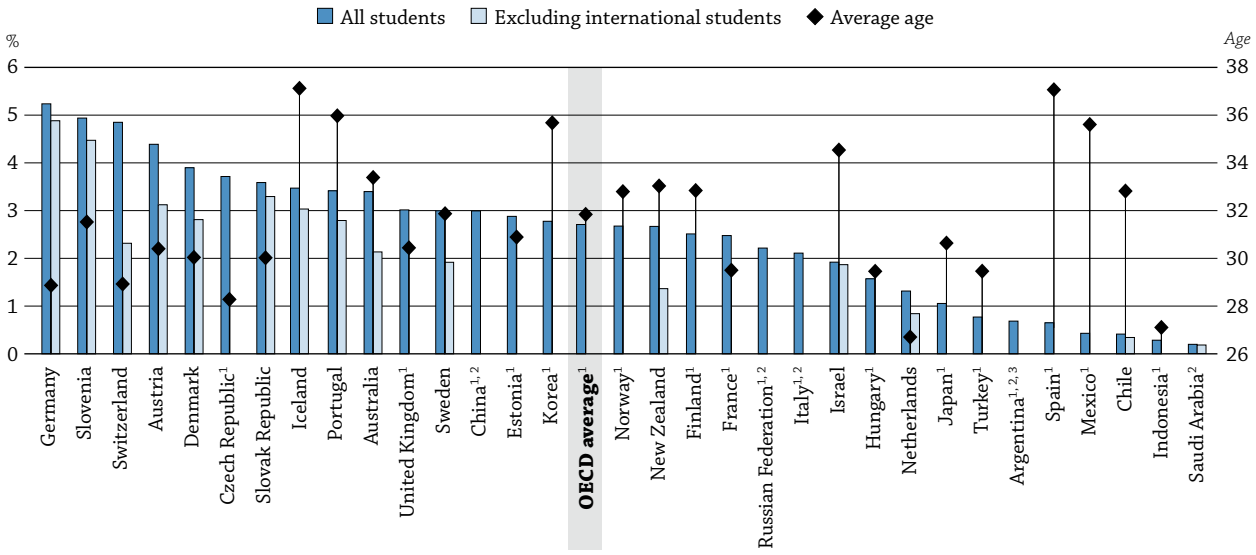
The attractiveness of certain fields of study sometimes varies from one level of education to another. In Denmark, for example, one in 5 doctoral students follows a research programme in mathematics and statistics, while this field of education represents the choice of only one in 100 of Danish tertiary students (Table C3.3c, available on line).

Advanced research programmes: The factory of knowledge for society

Doctoral-level research plays a crucial role in driving innovation and economic growth, and contributes significantly to the national and international knowledge base. Businesses are attracted to countries that make this level of research readily available (Halse and Mowbray, 2011; Smith, 2010), while individuals who attain this level of education benefit from higher wages and higher employment rates (see Indicators A5 and A6).

Many OECD countries invest heavily to provide doctoral-level education. Chart C3.4 shows the percentage of students who will pursue their studies up to the highest academic level across OECD countries. In Germany, Switzerland and, as a consequence of the implementation of the Bologna Process (EC, 2013), Slovenia, about one in 20 students is expected to enter an advanced research programme. By contrast, in Argentina, Chile, Indonesia, Mexico, Saudi Arabia, Spain and Turkey, fewer than one in 100 students is expected to begin doctoral studies during their lifetimes if current entry patterns remain stable (Table C3.1a).

Chart C3.4. Entry rates into advanced research programmes and average age of new entrants (2011)



Note: The average age refers to an average weighted age, generally the age of the students at the beginning of the calendar year. Students may be one year older than the age indicated when they graduate at the end of the school year. Please see Annex 3 to learn how the average age is calculated.
1. New entrants data for international students are missing.
2. New entrants data by age are missing.
3. Year of reference 2010.
Countries are ranked in descending order of new entrants into advanced research programmes in 2011.
Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. Table C3.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847526

Several countries are developing doctoral programmes to attract international students, that is, students who move from their country of origin to study elsewhere. Attracting the best students from around the world helps to ensure that a country plays a leading role in research and innovation (Smith, 2010). More than one in two new entrants into doctoral programmes in New Zealand and Switzerland are international students (Chart C3.4). In addition, as Indicator C4 shows, in 2011 a large proportion of students enrolled in these programmes in New Zealand (40%), Switzerland (49%) and the United Kingdom (41%) were foreign students, that is, they were citizens of a different country than the one in which the data were collected.

Although almost 60% of new students in advanced research programmes in OECD countries entered before the age of 30, there are quite significant differences among countries. In the Czech Republic, Germany, Indonesia and the Netherlands, more than 75% of students are younger than 30 at entry into this level of education, while in Iceland, Israel, Korea, Mexico, Portugal and Spain, the average age exceeds 35 (Tables C3.1a and b).

These differences may be due to several factors. They could reflect lower dropout rates and greater emphasis on acquiring specialised skills. Some countries offer incentives, such as grants, scholarships, international mobility programmes, part-time jobs and distance learning, to encourage students to pursue advanced studies. Late entry into doctoral programmes could indicate that these students were advised to acquire some professional experience before continuing with their formal education.

The doctoral level of education is the only level with near gender parity. While there are proportionally more women than men at all other levels of education, this is the only level of education at which the proportion of entrants (and consequently the proportion of graduates) is slightly larger among men than women. On average across OECD countries, 2.8% of men and 2.7% of women enter a doctoral programme (Table C3.1a).

Definitions

International students are those students who left their country of origin and moved to another country for the purpose of study. International students enrolling for the first time in a postgraduate programme are considered first-time entrants.

New entrants are students who enrol at the relevant level of education for the first time.

Tertiary-level entry rate is an estimated probability, based on current entry patterns, that a young adult will enter tertiary education during his or her lifetime.

Methodology

Data refer to the academic year 2010-11 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details, see Annex 3 at *www.oecd.org/edu/eag.htm*). The fields of education used in the UOE data collection instruments follow the revised ISCED 97 classification by field of education. The same classification is used for all levels of education.

Data on trends in entry rates (Table C3.2a) for the years 1995, 2000, 2001, 2002, 2003 and 2004 are based on a special survey carried out in OECD countries in January 2007.

Data on the impact of international students on tertiary entry rates are based on a special survey carried out by the OECD in December 2012.

Tables C3.1a, C3.1b and C.3.2a, and Table C3.2b, available on line, show the sum of net entry rates.

The ***net entry rate*** for a specific age is obtained by dividing the number of first-time entrants of that age for each type of tertiary education by the total population in the corresponding age group. The sum of net entry rates is calculated by adding the rates for each year of age. The result represents an estimate of the probability that a young person will enter tertiary education in his/her lifetime if current age-specific entry rates continue.

The ***average weighted age*** of entry is calculated by assigning higher weight to those ages at which the number of students entering a new level is higher. This variable gives the reader an accurate idea of the average age of entry. This variable appears for the first time in this edition of *Education at a Glance* as an attempt to improve the understanding of this indicator. Please refer to Annex 3 to learn more about it (*www.oecd.org/edu/eag.htm*).

Not all countries differentiate between students entering a tertiary programme for the first time and those transferring between different levels of tertiary education or repeating or re-entering a level after an absence. Thus, first-time entry rates for tertiary-type A or tertiary-type B cannot be added to form a total tertiary-level entrance rate because it would result in counting entrants twice.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator C3 Tables

	Table C3.1a	Entry rates into tertiary education and average age of new entrants (2011) StatLink http://dx.doi.org/10.1787/888932850585
	Table C3.1b	Entry rates into tertiary education of students under the typical age of entry (2011) StatLink http://dx.doi.org/10.1787/888932850604
	Table C3.2a	Trends in entry rates at tertiary level (1995-2011) StatLink http://dx.doi.org/10.1787/888932850623
WEB	Table C3.2b	Trends in entry rates at tertiary level, by gender (2005-11) StatLink http://dx.doi.org/10.1787/888932850642
	Table C3.3a	Distribution of tertiary new entrants, by field of education (2011) StatLink http://dx.doi.org/10.1787/888932850661
WEB	Table C3.3b	Distribution of tertiary new entrants, by field of education and gender (2011) StatLink http://dx.doi.org/10.1787/888932850680
WEB	Table C3.3c	Distribution of new entrants into advanced research programmes, by field of education (2011) StatLink http://dx.doi.org/10.1787/888932850699

Table C3.1a. Entry rates into tertiary education and average age of new entrants (2011)

Sum of age-specific entry rates, by gender and programme destination

		Tertiary-type B					Tertiary-type A					Advanced research programmes				
		M+W	Men	Women	Adjusted from international students[1]	Average age[2]	M+W	Men	Women	Adjusted from international students[1]	Average age[2]	M+W	Men	Women	Adjusted from international students[1]	Average age[2]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	**m**	m	m	m	*m*	**96**	83	110	69	*23*	**3.4**	3.4	3.4	2.1	*33*
	Austria	**16**	14	17	15	*30*	**52**	47	58	41	*24*	**4.4**	4.5	4.3	3.1	*30*
	Belgium	**38**	32	45	38	*20*	**33**	32	35	33	*19*	**m**	m	m	m	*m*
	Canada	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
	Chile	**59**	59	60	59	*24*	**45**	40	51	45	*23*	**0.4**	0.5	0.4	0.3	*33*
	Czech Republic	**9**	5	13	m	*24*	**60**	52	70	m	*23*	**3.7**	4.0	3.4	m	*28*
	Denmark	**26**	26	26	23	*30*	**71**	60	82	62	*24*	**3.9**	4.2	3.6	2.8	*30*
	Estonia	**28**	23	33	m	*24*	**43**	38	50	m	*22*	**2.9**	2.5	3.3	m	*31*
	Finland	**a**	a	a	a	*a*	**68**	61	76	m	*24*	**2.5**	2.4	2.6	m	*33*
	France	**m**	m	m	m	*m*	**39**	36	43	m	*20*	**2.5**	2.7	2.3	m	*30*
	Germany	**21**	14	29	m	*22*	**46**	46	47	40	*22*	**5.2**	6.0	4.5	4.9	*29*
	Greece	**31**	34	29	m	*19*	**40**	32	49	m	*20*	**m**	m	m	m	*m*
	Hungary	**17**	12	23	m	*22*	**52**	48	56	m	*23*	**1.6**	1.6	1.6	m	*29*
	Iceland	**4**	5	4	4	*34*	**81**	68	94	68	*26*	**3.5**	2.7	4.3	3.0	*37*
	Ireland	**24**	27	21	23	*24*	**51**	46	56	49	*21*	**m**	m	m	m	*m*
	Israel	**27**	26	28	m	*24*	**60**	53	67	59	*25*	**1.9**	1.9	2.0	1.9	*35*
	Italy	**n**	n	n	n	*m*	**48**	41	56	48	*20*	**2.1**	2.0	2.2	m	*m*
	Japan	**29**	22	36	m	*18*	**52**	57	46	m	*18*	**1.1**	1.4	0.7	m	*31*
	Korea	**37**	35	40	m	*21*	**69**	68	70	m	*21*	**2.8**	3.3	2.3	m	*36*
	Luxembourg	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
	Mexico	**3**	3	2	m	*20*	**34**	34	34	m	*20*	**0.4**	0.5	0.4	m	*36*
	Netherlands	**n**	n	n	n	*m*	**65**	60	70	60	*21*	**1.3**	1.4	1.3	0.8	*27*
	New Zealand	**45**	42	48	35	*29*	**76**	63	90	59	*25*	**2.7**	2.7	2.7	1.4	*33*
	Norway	**n**	n	n	m	*m*	**76**	64	88	m	*24*	**2.7**	2.7	2.7	m	*33*
	Poland	**1**	n	1	m	*m*	**81**	70	92	80	*21*	**m**	m	m	m	*m*
	Portugal[3]	**n**	n	n	n	*32*	**98**	84	112	91	*25*	**3.4**	3.2	3.7	2.8	*36*
	Slovak Republic	**1**	1	2	m	*m*	**61**	52	71	59	*23*	**3.6**	3.6	3.6	3.3	*30*
	Slovenia	**18**	19	16	18	*26*	**75**	58	94	74	*21*	**4.9**	4.4	5.6	4.5	*32*
	Spain	**28**	26	29	m	*23*	**53**	46	61	m	*22*	**0.7**	0.7	0.6	m	*37*
	Sweden	**11**	11	11	11	*27*	**72**	62	82	59	*25*	**3.0**	3.1	2.9	1.9	*32*
	Switzerland	**22**	24	20	m	*29*	**44**	42	46	33	*24*	**4.9**	5.2	4.5	2.3	*29*
	Turkey	**27**	31	24	m	*22*	**39**	39	40	m	*21*	**0.8**	0.9	0.7	m	*29*
	United Kingdom	**23**	17	30	m	*33*	**64**	57	72	m	*22*	**3.0**	3.2	2.8	m	*30*
	United States	**x(6)**	x(7)	x(8)	m	*m*	**72**	65	79	m	*23*	**m**	m	m	m	*m*
	OECD average	**19**	18	20	m	*24*	**60**	53	67	m	*22*	**2.7**	2.8	2.7	m	*32*
	EU21 average	**15**	14	17	m	*24*	**59**	51	67	m	*22*	**3.1**	3.1	3.0	m	*31*
Other G20	Argentina[4]	**51**	32	71	m	*25*	**60**	51	69	m	*24*	**0.7**	0.6	0.8	m	*m*
	Brazil	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
	China	**19**	18	21	m	*m*	**19**	18	21	m	*m*	**3.0**	3.0	3.0	m	*m*
	India	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
	Indonesia	**4**	3	4	m	*18*	**24**	25	24	m	*18*	**0.3**	0.3	0.2	m	*27*
	Russian Federation	**31**	x(1)	x(1)	m	*m*	**72**	65	78	m	*21*	**2.2**	x(11)	x(11)	m	*m*
	Saudi Arabia	**10**	15	5	10	*m*	**53**	54	52	51	*m*	**0.2**	0.2	0.2	0.2	*m*
	South Africa	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
	G20 average	**17**	24	m	m	*53*	**49**	56	m	m	*2.0*	**2.1**	1.8	m	m	*m*

Note: Mismatches between the coverage of the population data and the new-entrants data mean that the entry rates for those countries that are net exporters of students may be underestimated and those that are net importers may be overestimated. The adjusted entry rates seek to compensate for that. Please refer to Annex 3 for further specific information by country.

Please refer to Annex 1 for information on the method used to calculate entry rates (gross rates versus net rates) and the corresponding age of entry.

1. Adjusted entry rates correspond to the entry rate when international students are excluded.

2. The average age refers to an average weighted age, generally the age of the students at the beginning of the calendar year. Students may be one year older than the age indicated when they graduate at the end of the school year. Please see Annex 3 to learn how the average age is calculated.

3. Entry rates may be overestimated as they include all students who entered the first year of a programme, not just those students who entered a tertiary-type A or B programme for the first time.

4. Year of reference 2010.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850585

C3

Table C3.1b. Entry rates into tertiary education of students under the typical age of entry (2011)

Sum of net entry rates for each year of age up to 25 for tertiary-type A or B, and up to 30 for advanced research programmes, by gender and programme destination

		Tertiary-type B (below 25)					Tertiary-type A (below 25)					Advanced research programmes (below 30)				
		M+W	Men	Women	Adjusted from international students[1]	Share of below 25-year-old new entrants[2]	M+W	Men	Women	Adjusted from international students[1]	Share of below 25-year-old new entrants[2]	M+W	Men	Women	Adjusted from international students[1]	Share of below 30-year-old new entrants[2]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	**m**	m	m	m	*m*	**72**	62	83	54	*74*	**1.6**	1.6	1.6	0.9	*48*
OECD	Austria	**7**	7	8	7	*44*	**40**	34	46	32	*75*	**2.9**	2.8	2.9	2.1	*65*
OECD	Belgium	**37**	31	43	36	*95*	**32**	31	34	32	*97*	**m**	m	m	m	*m*
OECD	Canada	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
OECD	Chile	**40**	39	40	39	*70*	**33**	29	37	33	*76*	**0.2**	0.2	0.2	0.2	*51*
OECD	Czech Republic	**8**	5	11	m	*80*	**51**	45	57	m	*81*	**3.1**	3.2	2.9	m	*79*
OECD	Denmark	**12**	12	11	9	*43*	**53**	44	63	48	*76*	**2.5**	2.9	2.1	1.7	*61*
OECD	Estonia	**20**	18	23	m	*72*	**37**	33	42	m	*86*	**1.6**	1.5	1.8	m	*60*
OECD	Finland	**a**	a	a	a	*a*	**51**	46	55	m	*74*	**1.2**	1.3	1.2	m	*50*
OECD	France	**m**	m	m	m	*m*	**37**	33	42	m	*95*	**1.7**	1.8	1.6	m	*68*
OECD	Germany	**16**	9	24	m	*73*	**40**	39	41	35	*86*	**4.0**	4.4	3.5	3.7	*76*
OECD	Greece	**29**	32	27	m	*92*	**36**	28	44	m	*87*	**m**	m	m	m	*m*
OECD	Hungary	**15**	11	19	m	*84*	**43**	40	47	m	*81*	**1.1**	1.1	1.2	m	*68*
OECD	Iceland	**1**	1	1	1	*18*	**52**	45	60	45	*66*	**1.1**	1.1	1.1	0.9	*33*
OECD	Ireland	**18**	21	15	18	*72*	**45**	40	50	44	*86*	**m**	m	m	m	*m*
OECD	Israel	**18**	13	24	m	*69*	**39**	29	49	38	*65*	**0.7**	0.6	0.7	0.6	*37*
OECD	Italy	**n**	n	n	n	*m*	**45**	37	52	n	*92*	**m**	m	m	m	*m*
OECD	Japan	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
OECD	Korea	**33**	31	35	m	*87*	**58**	56	59	m	*82*	**1.1**	1.2	1.0	m	*36*
OECD	Luxembourg	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
OECD	Mexico	**3**	3	2	m	*94*	**31**	31	31	m	*93*	**0.2**	0.2	0.2	m	*41*
OECD	Netherlands	**n**	n	n	n	*28*	**58**	53	63	54	*90*	**1.1**	1.2	1.1	0.7	*86*
OECD	New Zealand	**22**	24	21	15	*53*	**52**	45	61	40	*71*	**1.3**	1.3	1.3	0.6	*50*
OECD	Norway	**n**	n	n	m	*m*	**58**	48	69	m	*77*	**1.4**	1.5	1.3	m	*49*
OECD	Poland	**1**	n	1	m	*m*	**71**	62	80	70	*86*	**m**	m	m	m	*m*
OECD	Portugal[3]	**n**	n	n	n	*m*	**69**	58	80	65	*64*	**1.3**	1.2	1.5	1.1	*34*
OECD	Slovak Republic	**1**	1	1	m	*m*	**49**	43	56	48	*79*	**2.4**	2.3	2.6	2.4	*68*
OECD	Slovenia	**11**	13	9	11	*59*	**69**	53	86	68	*90*	**3.0**	2.8	3.3	2.7	*59*
OECD	Spain	**22**	21	23	m	*73*	**46**	39	54	m	*81*	**0.2**	0.2	0.2	m	*21*
OECD	Sweden	**6**	6	5	6	*54*	**49**	42	56	44	*70*	**1.7**	1.9	1.5	1.0	*57*
OECD	Switzerland	**10**	11	10	m	*44*	**34**	32	37	27	*76*	**3.6**	3.9	3.4	1.8	*74*
OECD	Turkey	**22**	25	19	m	*81*	**34**	32	35	m	*85*	**0.5**	0.5	0.5	m	*66*
OECD	United Kingdom	**8**	6	9	m	*33*	**52**	48	57	m	*81*	**1.8**	1.9	1.7	m	*63*
OECD	United States	**x(6)**	x(7)	x(8)	m	*m*	**54**	51	58	m	*77*	**m**	m	m	m	*m*
	OECD average	**13**	12	14	m	*62*	**48**	42	54	m	*81*	**1.7**	1.7	1.6	m	*56*
	EU21 average	**11**	10	12	m	*60*	**49**	43	55	m	*83*	**2.0**	2.0	1.9	m	*61*
Other G20	Argentina[4]	**31**	21	40	m	*61*	**40**	35	45	m	*69*	**m**	m	m	m	*m*
Other G20	Brazil	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
Other G20	China	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
Other G20	India	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
Other G20	Indonesia	**4**	3	4	m	*100*	**24**	25	24	m	*100*	**0.3**	0.3	0.2	m	*92*
Other G20	Russian Federation	**m**	m	m	m	*m*	**60**	54	65	m	*80*	**m**	m	m	m	*m*
Other G20	Saudi Arabia	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
Other G20	South Africa	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*
	G20 average	**m**	m	m	m	*m*	**m**	m	m	m	*m*	**m**	m	m	m	*m*

Note: Mismatches between the coverage of the population data and the new entrants data mean that the entry rates for those countries that are net exporters of students may be underestimated and those that are net importers may be overestimated. The adjusted entry rates seek to compensate for that.

Please refer to Annex 1 for information on the method used to calculate entry rates (gross rates versus net rates) and the corresponding age of entry.

1. Adjusted entry rates correspond to the entry rate when international students are excluded.
2. Share of students below 25 among the total population of new entrants.
3. Entry rates may be overestimated as it includes students who enrolled in the first year of a programme, instead of for the first-time in tertiary-type A or B programmes.
4. Year of reference 2010.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for note *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850604

Table C3.2a. Trends in entry rates at the tertiary level (1995-2011)

		Tertiary-type 5A[1]							Tertiary-type 5B						
		1995	2000	2005	2008	2009	2010	2011	1995	2000	2005	2008	2009	2010	2011
		(1)	(2)	(7)	(10)	(11)	(12)	(13)	(14)	(15)	(20)	(23)	(24)	(25)	(26)
OECD	Australia	m	59	82	87	94	96	**96**	m	m	m	m	m	m	**m**
OECD	Austria	27	34	37	47	45	53	**52**	m	m	9	13	14	16	**16**
OECD	Belgium	m	m	33	31	31	33	**33**	m	m	34	37	39	38	**38**
OECD	Canada	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
OECD	Chile[2]	m	m	46	m	44	47	**45**	m	m	m	m	59	58	**59**
OECD	Czech Republic	m	25	41	57	59	60	**60**	m	9	8	9	8	9	**9**
OECD	Denmark	40	52	57	59	55	65	**71**	33	28	23	21	25	25	**26**
OECD	Estonia	m	m	55	42	42	43	**43**	m	m	33	31	30	29	**28**
OECD	Finland	39	71	73	70	69	68	**68**	32	a	a	a	a	a	**a**
OECD	France	m	m	m	m	m	m	**39**	m	m	m	m	m	m	**m**
OECD	Germany[3]	26	30	36	36	40	42	**46**	15	15	14	14	19	21	**21**
OECD	Greece	15	30	43	42	m	m	**40**	5	21	13	26	m	m	**31**
OECD	Hungary	m	55	68	57	53	54	**52**	m	1	11	12	14	16	**17**
OECD	Iceland	m	66	74	73	77	93	**81**	m	10	7	6	4	4	**4**
OECD	Ireland	m	32	45	46	51	56	**51**	m	26	14	20	25	28	**24**
OECD	Israel	m	48	55	60	60	60	**60**	m	31	25	26	27	29	**27**
OECD	Italy	m	39	56	51	50	49	**48**	m	1	n	n	n	n	**n**
OECD	Japan	31	40	44	48	49	51	**52**	33	32	31	29	27	27	**29**
OECD	Korea	41	45	51	71	71	71	**69**	27	51	48	38	36	36	**37**
OECD	Luxembourg	m	m	m	25	31	28	**m**	m	m	m	n	2	10	**m**
OECD	Mexico	m	24	27	30	31	33	**34**	m	1	2	2	2	3	**3**
OECD	Netherlands	44	53	59	62	63	65	**65**	a	a	a	n	n	n	**n**
OECD	New Zealand	83	95	79	72	80	80	**76**	44	52	48	46	47	48	**45**
OECD	Norway	59	67	73	71	77	76	**76**	5	5	n	n	n	n	**n**
OECD	Poland	36	65	76	83	85	84	**81**	1	1	1	1	1	1	**1**
OECD	Portugal[4]	m	m	m	81	84	89	**98**	m	m	m	n	n	n	**n**
OECD	Slovak Republic	28	37	59	72	69	65	**61**	1	3	m	1	1	1	**1**
OECD	Slovenia	m	m	40	56	61	77	**75**	m	m	49	32	32	19	**18**
OECD	Spain	m	47	43	43	46	52	**53**	3	15	22	22	23	26	**28**
OECD	Sweden	57	67	76	65	68	76	**72**	m	7	7	10	11	12	**11**
OECD	Switzerland	17	29	37	38	41	44	**44**	29	14	16	19	21	23	**22**
OECD	Turkey	18	21	27	30	40	40	**39**	9	9	19	23	30	28	**27**
OECD	United Kingdom	m	47	51	57	61	63	**64**	m	29	28	30	31	26	**23**
OECD	United States	57	58	64	64	70	74	**72**	x(1)	x(2)	x(7)	x(10)	x(11)	x(12)	**x(13)**
	OECD average	39	48	54	56	58	61	**60**	17	16	18	16	18	18	**19**
	OECD average for countries with data available for 2000 and 2011		*48*					*62*		*17*					*20*
	EU21 average	35	46	53	54	56	59	**59**	11	11	16	14	14	15	**15**
Other G20	Argentina	m	m	m	47	56	60	**m**	m	m	m	44	46	51	**m**
Other G20	Brazil	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
Other G20	China	m	m	m	m	17	17	**19**	m	m	m	m	19	19	**19**
Other G20	India	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
Other G20	Indonesia	m	m	m	m	22	22	**24**	m	m	m	m	5	5	**4**
Other G20	Russian Federation	m	m	67	68	69	66	**72**	m	m	33	30	27	29	**31**
Other G20	Saudi Arabia	24	23	37	42	43	48	**53**	4	6	10	12	15	11	**10**
Other G20	South Africa	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	G20 average	m	m	m	m	51	52	**52**	m	m	m	m	21	21	**19**

Note: Columns showing entry rates for the years 2001-04, 06, 07 (i.e. Columns 3-6, 8-9, 16-19, 21-22) are available for consultation on line (see *StatLink* below).
Please refer to Annex 1 for information on the method used to calculate entry rates (gross rates versus net rates) and the corresponding age of entry.
1. The entry rates for tertiary-type A programmes include advanced research programmes for 1995 and 2000-03 (except for Belgium and Germany).
2. Break in time series between 2009 and 2010 due to methodological changes (see Annex 3 for more details).
3. Break in time series between 2008 and 2009 due to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B.
4. Entry rates may be overestimated as it includes students who enrolled in the first year of a programme, instead of for the first-time in tertiary-type A or B programmes.
Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932850623

C3

Table C3.3a. Distribution of tertiary new entrants, by field of education (2011)

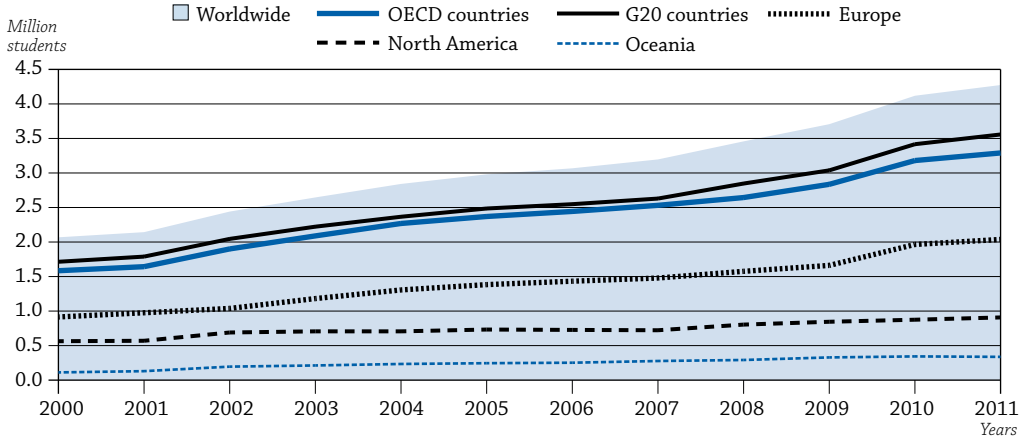
		Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Not known or unspecified
		(1)	(4)	(5)	(6)	(7)	(8)	(13)	(14)
OECD	Australia[1]	21	16	38	4	9	12	1	n
	Austria	28	7	34	3	16	10	1	n
	Belgium[2]	25	24	31	2	11	5	3	n
	Canada	m	m	m	m	m	m	m	m
	Chile	16	22	25	11	17	6	2	n
	Czech Republic	18	13	31	7	15	13	4	n
	Denmark	16	20	40	3	12	8	2	n
	Estonia	21	11	28	9	15	14	2	n
	Finland[2]	15	19	21	7	25	9	2	n
	France[1]	19	11	39	4	9	19	n	n
	Germany[2]	23	20	23	3	16	13	2	1
	Greece	21	9	30	2	17	14	5	1
	Hungary	13	9	40	13	14	8	2	n
	Iceland	29	12	31	3	11	13	1	n
	Ireland[2]	15	13	21	6	11	15	2	17
	Israel	24	6	36	n	24	8	n	1
	Italy[2]	19	13	34	4	16	11	3	n
	Japan	23	15	27	9	14	2	2	7
	Korea	26	14	20	7	25	7	1	n
	Luxembourg	m	m	m	m	m	m	m	m
	Mexico	14	9	41	2	22	10	2	n
	Netherlands[2]	18	19	38	7	9	7	1	1
	New Zealand	24	12	34	6	6	16	1	n
	Norway	23	17	31	7	8	10	1	3
	Poland[2]	20	9	34	9	17	9	2	n
	Portugal	19	14	35	7	16	8	1	n
	Slovak Republic	20	18	26	6	17	10	3	n
	Slovenia	14	10	32	11	22	8	3	n
	Spain[2]	23	13	28	7	17	9	1	n
	Sweden	25	13	28	3	19	11	1	n
	Switzerland	17	12	37	7	16	9	1	1
	Turkey	21	7	39	5	15	10	3	n
	United Kingdom	24	17	27	2	8	14	1	7
	United States	m	m	m	m	m	m	m	m
	OECD average	20	14	32	6	15	10	2	1
	EU21 average	19	14	31	6	15	11	2	1
Other G20	Argentina[3]	28	13	33	5	8	10	3	1
	Brazil	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia	20	5	43	n	16	10	5	1
	Russian Federation[2]	11	6	40	6	26	7	2	3
	Saudi Arabia	27	5	21	1	6	12	1	28
	South Africa	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m

Note: Columns showing the breakdown of humanities, arts and education (2 and 3) and science (9-12) are available for consultation on line (see *Statlink* below).
1. Exclude tertiary-type B programmes.
2. Exclude advanced research programmes.
3. Year of reference 2010.
Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia : Observatory on Higher Education. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932850661

WHO STUDIES ABROAD AND WHERE?

- In 2011, nearly 4.3 million students were enrolled in tertiary education outside their country of citizenship. Australia, the United Kingdom, Switzerland, New Zealand and Austria have, in descending order, the highest percentages of international students among their tertiary enrolments.
- Asian students represent 53% of foreign students enrolled worldwide. The largest numbers of foreign students are from China, India and Korea.
- In 2011, the number of foreign students enrolled in tertiary education in OECD countries was, on average, almost three times the number of students from OECD countries studying abroad. In the 21 European countries that are members of the OECD, there were 2.7 foreign students per each European citizen enrolled abroad.
- Some 83% of all foreign students are enrolled in G20 countries, while 77% of all foreign students are enrolled in OECD countries. These proportions have remained stable during the past decade.

Chart C4.1. Evolution in the number of students enrolled outside their country of citizenship, by region of destination (2000 to 2011)



Note: Year of reference of data for countries other than OECD and G20 is 2010 (instead of 2011).
Source: OECD and UNESCO Institute for Statistics for most data on non-OECD countries. Table C4.6. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847545

Context

As national economies become more interconnected and participation in education expands, governments and individuals are looking to tertiary education to broaden students' horizons and help them to better understand the world's languages, cultures and business methods. One way for students to expand their knowledge of other societies and languages, and thus improve their prospects in globalised sectors of the labour market, is to study in tertiary institutions in countries other than their own.

The factors driving the general increase in student mobility range from the exploding demand for higher education worldwide and the perceived value of studying at prestigious post-secondary institutions abroad, to specific policies that aim to foster student mobility within a geographic region (as is the case in Europe), to government efforts to support students in studying specific fields that are growing rapidly in the country of origin. In addition, some countries and institutions undertake major marketing efforts to attract students from outside their boundaries.

The increase in student mobility in tertiary education can also provide an opportunity for smaller and/or less-developed host education systems to improve the cost-efficiency of their education systems. For example, it can help countries focus limited resources on educational programmes with potential economies of scale, or expand participation in tertiary education without having to expand the tertiary system within the country itself. For host countries, enrolling international students can not only help raise revenues from higher education, but also can be part of a broader strategy to recruit highly skilled immigrants.

A significant proportion of foreign students coming from G20 countries that are not members of the OECD includes some of the better-performing students, who are natural candidates for public or private support, or those from relatively advantaged socio-economic backgrounds. This implies that student mobility can not only have an impact on the stature of tertiary institutions' academic programmes, but can also economically benefit the host education systems.

In the current economic climate, shrinking support for scholarships and grants, as well as tighter budgets for individuals, may slow the pace of student mobility. On the other hand, limited labour-market opportunities in students' countries of origin may increase the attractiveness of studying abroad as a way to gain a competitive edge, and thus boost student mobility.

International students tend to choose different programmes of study compared to local students (see Indicator A4 in *Education at a Glance 2011*), indicating either a degree of specialisation of countries in the programmes offered, a lack of programmes in the countries of origin, and/or better employment opportunities associated with specific fields of education.

Throughout this indicator, the term "international students" or "mobile students" refers to students who have moved from their country of origin with the purpose of studying. The term "foreign students" refers to students who are not citizens of the countries in which they are enrolled, but may be long-term residents or were born in that country. In general, international students are a subset of foreign students (see *Definitions* section at the end of this indicator).

Other findings

- **Australia, Canada, France, Germany, the United Kingdom and the United States together receive more than 50% of all foreign students worldwide.**
- **International students from OECD countries mainly come from Canada, France, Germany, Italy, Japan, Korea, the Slovak Republic, Turkey and the United States.**
- **International students represent 10% or more of the enrolments in tertiary education in Australia, Austria, New Zealand, Switzerland and the United Kingdom.** They also account for more than 30% of enrolments in advanced research programmes in Australia, the Netherlands, New Zealand, Switzerland, and the United Kingdom.

Trends

During the 2000-11 period, the number of foreign tertiary students enrolled worldwide more than doubled, with an average annual growth rate of almost 7%. In OECD countries, the number of foreign students enrolled at the tertiary level mirrored the global trend.

Europe is the top destination for students at the tertiary level of education enrolled outside their country of origin, hosting 48% of these students, followed by North America, which hosts 21% of all international students. The number of international students in Oceania has tripled since 2000, though the region hosts less than 10% of all foreign students. Other regions, such as Asia and Latin America and the Caribbean, are also seeing growing numbers of international students, reflecting the internationalisation of universities in an increasing number of countries (Table C4.6 and Chart C4.1).

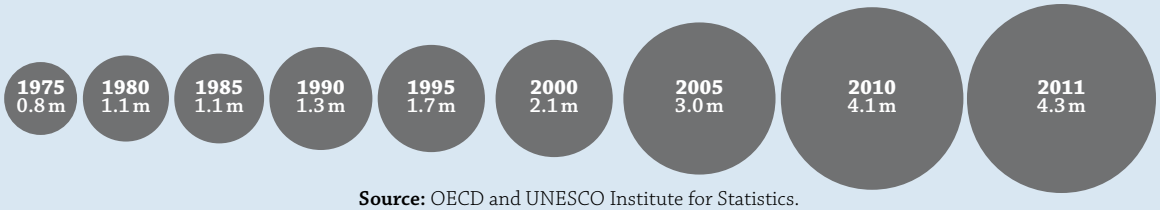
Analysis

Over the past three decades, the number of students enrolled outside their country of citizenship has risen dramatically, from 0.8 million worldwide in 1975 to 4.3 million in 2011, a more than fivefold increase (Box C4.1). This remarkable expansion stems from an interest in promoting academic, cultural, social and political ties among countries, particularly as the European Union was taking shape, to a substantial increase in global access to tertiary education, and to reduced transportation costs. The internationalisation of labour markets for highly skilled people has also given students an incentive to gain international experience as part of their higher education.

Most of the new foreign tertiary students come from countries outside the OECD area and are likely to contribute to a gradual expansion in the proportion of foreign students in advanced research programmes in OECD and other G20 countries in the coming years.

Box C4.1. Long-term growth in the number of students enrolled outside their country of citizenship

Growth in internationalisation of tertiary education (1975-2011, in millions)



Source: OECD and UNESCO Institute for Statistics.

Data on foreign enrolment worldwide comes from both the OECD (2011 figures) and the UNESCO Institute for Statistics (UIS) (2010 figures). UIS provided the data on all countries for 1975-95 and most of the non-OECD countries for 2000, 2005 and 2010. The OECD provided the data on OECD countries and the other non-OECD economies in 2000 and 2011. Both sources use similar definitions, thus making their combination possible. Missing data were imputed with the closest data reports to ensure that breaks in data coverage do not result in breaks in time series.

Global student mobility follow inter- and intra-regional migration patterns to a great extent. The growth in the internationalisation of tertiary enrolment in OECD countries, as well as the high proportion of intra-regional student mobility, show the growing importance of regional mobility over global mobility. Student flows in European countries and in Eastern Asia and Oceania tend to reflect the evolution of geopolitical areas, such as closer ties between Asia-Pacific countries and further co-operation among European countries beyond the European Union (UNESCO, 2009).

Major destinations of foreign students

G20 countries attract 83% of foreign students worldwide while some 77% of foreign students are enrolled in tertiary education in an OECD country. Within the OECD area, EU21 countries host the largest proportion of foreign students, with 40% of all foreign students. These 21 countries also host 98% of foreign students enrolled in EU countries. Some 75% of foreign students enrolled in EU21 countries come from another EU21 country, demonstrating the effect of EU mobility policies. North America is the second most attractive region for foreign students, with 21% of the total. The profile of international students in this region is more diverse than in the European Union. For instance, although 57% of Canadians studying abroad are in the United States they account for only 4% of these international students. Similarly, 15% of Americans studying abroad chose Canada, but they account for only 7% of all foreign students enrolled in tertiary education in Canada (Tables C4.3, C4.4 and C4.6).

In 2011, more than one in two foreign students in tertiary education were enrolled in Australia, Canada, France, Germany, the United Kingdom or the United States. In absolute terms, the United States hosted most of these students, with 17% of all foreign students, followed by the United Kingdom (13%), Australia (6%), Germany (6%), France (6%), and Canada (5%). Although these destinations account for more than half of all tertiary students pursuing their studies abroad, some new players have emerged on the international education market in the past few years (Chart C4.2 and Table C4.7, available on line). Besides the six major destinations, significant numbers of foreign students were enrolled in Japan (4%), the Russian Federation (4%) and Spain (2%) in 2011. The figures for Australia and the United States refer to international students (Table C4.4).

New players in the international education market

Compared to 2000, the share of international students who chose the United States as their country of destination for tertiary education dropped from 23% to 17% in 2011, and the share of international students who chose Germany fell by almost three percentage points. In contrast, the shares of international students who chose Australia, Korea, New Zealand or Spain as their country of destination grew by at least one percentage point, while the share of students who chose the United Kingdom or the Russian Federation grew by around two percentage points (Chart C4.3). Some of these changes reflect differences in countries' approaches to internationalisation, ranging from marketing campaigns in the Asia-Pacific region to a more local and university-driven approach in the United States.

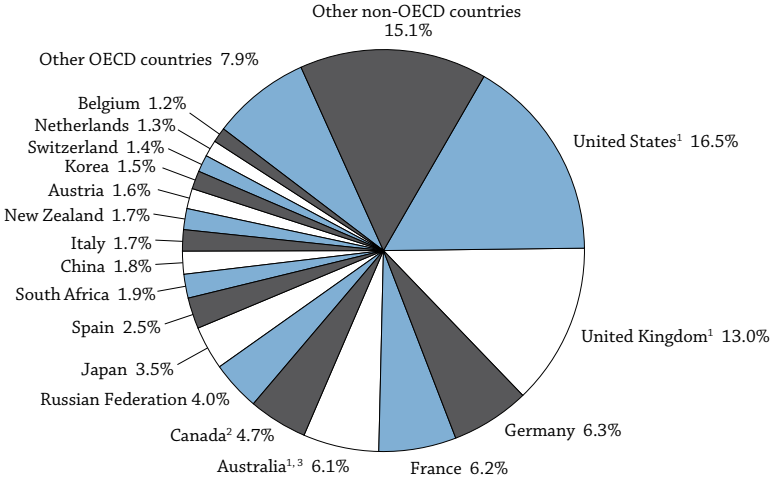
Underlying factors in students' choice of a country of study

Language of instruction

The language spoken and used in instruction sometimes determines the country in which a student chooses to study. Countries whose language of instruction is widely spoken and read, such as English, French, German, Russian and Spanish, are therefore leading destinations for foreign students, both in absolute and relative terms. Japan is a notable exception: despite a language of instruction that is not widely used around the world, it enrols large numbers of foreign students, 93% of whom are from Asia (Table C4.3 and Chart C4.2).

Chart C4.2. Distribution of foreign students in tertiary education, by country of destination (2011)

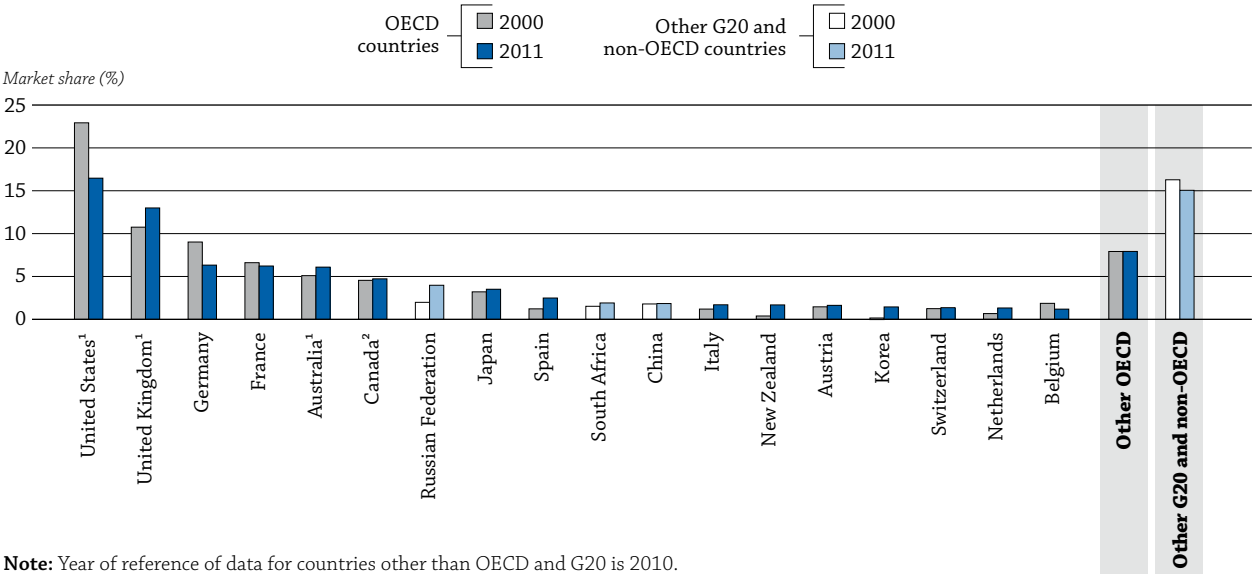
Percentage of foreign tertiary students reported to the OECD who are enrolled in each country of destination



Note: Year of reference of data for countries other than OECD and G20 is 2010.
1. Data relate to international students defined on the basis of their country of residence.
2. Year of reference 2010.
3. Student stocks are derived from different sources and therefore results are indicative only.
Source: OECD and UNESCO Institute for Statistics for most data on non-OECD destinations. Table C4.4 and Table C4.7, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847564

Chart C4.3. Trends in international education market shares (2000, 2011)

Percentage of all foreign tertiary students enrolled, by destination



Note: Year of reference of data for countries other than OECD and G20 is 2010.

1. Data relate to international students defined on the basis of their country of residence. For the United Kingdom, data for 2011 is based on citizenship.

2. Year of reference 2010 instead of 2011.

Countries are ranked in descending order of 2011 market shares.

Source: OECD and UNESCO Institute for Statistics for most data on non-OECD countries. Table C4.7, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847583

The prevalence of predominantly English-speaking destinations, such as Australia, Canada, New Zealand, the United Kingdom and the United States, reflects the progressive adoption of English as a global language. It may also reflect the fact that students intending to study abroad are likely to have learned English in their home country or wish to improve their English-language skills through immersion in a native English-speaking context. Hence, around 40% of the overall increase in enrolments of foreign students in tertiary education around the world between 2000 and 2011 can be explained by increases of such enrolments in Australia, Canada, Ireland, the United Kingdom and the United States (Table C4.7, available on line). The large number of countries using English either as an official language or as the *lingua franca* reinforces this pattern. Between one in five and one in three foreign tertiary students in all English-speaking OECD countries (and one in two in New Zealand) come from other English-speaking countries. On average across all OECD countries in 2011, around one in four foreign students came from a country with the same official or widely-spoken language as the country of destination (Table C4.5).

Given this pattern, an increasing number of institutions in non-English-speaking countries now offer courses in English. This trend is especially noticeable in countries in which the use of English is widespread, such as the Nordic countries (Box C4.2).

Quality of programmes

International students increasingly select their study destination based on the quality of education offered, as perceived from a wide array of information on, and rankings of, higher education programmes now available, both in print and on line. For instance, the high proportion of top-ranked higher education institutions in the principal destination countries and the emergence in rankings of institutions based in fast-growing student destinations draws attention to the increasing importance of the perception of quality, even if a correlation between patterns of student mobility and quality judgments on individual institutions is difficult to establish.

Box C4.2. **Countries offering tertiary programmes in English (2011)**

Use of English in instruction	
All or nearly all programmes offered in English	Australia, Canada,[1] Ireland, New Zealand, the United Kingdom, the United States
Many programmes offered in English	Denmark, Finland, the Netherlands, Sweden
Some programmes offered in English	Belgium (Fl.), [2] the Czech Republic, France, Germany, Hungary, Iceland, Japan, Korea, Norway, Poland, Portugal, the Slovak Republic, Switzerland,[3] Turkey
No or nearly no programmes offered in English	Austria, Belgium (Fr.), Brazil, Chile, Greece, Israel, Italy, Luxembourg, Mexico,[3] the Russian Federation, Spain

Note: The extent to which a country offers a few or many programmes in English takes into account the size of the population in the country. Hence, France and Germany are classified among countries with comparatively few English programmes, although they have more English programmes than Sweden, in absolute terms.

1. In Canada, tertiary institutions are either French- (mostly Quebec) or English-speaking.

2. Master's programmes.

3. At the discretion of tertiary education institutions.

Source: OECD, compiled from brochures for prospective international students by OAD (Austria), CHES and NARIC (Czech Republic), Cirius (Denmark), CIMO (Finland), EduFrance (France), DAAD (Germany), Campus Hungary (Hungary), University of Iceland (Iceland), JPSS (Japan), NIIED (Korea), NUFFIC (Netherlands), SIU (Norway), CRASP (Poland), Swedish Institute (Sweden) and Middle-East Technical University (Turkey).

Tuition fees

Among all EU countries, international students from another EU country are treated as domestic students with respect to tuition fee charges. This is also true in Ireland, but only if the EU student has lived in the EU, the European Economic Area (EEA) or Switzerland, for three out of the five previous years. If this condition is satisfied, the EU student is eligible for free tuition in a given academic year.

While there are no tuition fees charged in Finland, Iceland and Norway, in Germany, tuition fees are collected in all government-dependent private institutions and, in some *Bundesländer*, tuition fees have been introduced in public tertiary institutions as well. In Denmark, students from Norway, Iceland and EU countries are treated like domestic students and pay no tuition fees, as their education is fully subsidised. Most international students from non-EU or non-European Economic Area (EEA) countries, however, must pay the full amount of tuition fees, although a limited number of talented students from non-EU/EEA countries can obtain scholarships covering all or part of their tuition fees (Box C4.3).

Among some non-EU countries, including Iceland, Japan, Korea, Norway and the United States, the same treatment applies to all domestic and international students. In Norway, tuition fees are the same for both domestic and international students: no fees in public institutions, but fees in some private institutions. In Iceland, all students have to pay registration fees, and students in private institutions have to pay tuition fees as well. In Japan, domestic and international students are generally charged the same tuition fees, although international students with Japanese government scholarships do not have to pay tuition fees, and many scholarships are available for privately financed international students.

In Korea, tuition fees and subsidies for international students vary, depending on the contract between their school of origin and the school they attend in Korea. In general, most international students in Korea pay tuition fees that are somewhat lower than those paid by domestic students. In New Zealand, international students, except those in advanced research programmes, generally pay higher tuition fees; but international students from Australia receive the same subsidies as domestic students. Typically in Australia (with the exceptions noted in Box C4.3) and in Canada, all international students pay higher tuition fees than domestic students. This is also true in the Russian Federation, unless students are subsidised by the Russian government.

Box C4.3. Structure of tuition fees

Tuition fee structure	OECD and other G20 countries
Higher tuition fees for international students than for domestic students	Australia,[1] Austria,[2] Belgium,[2, 3] Canada, the Czech Republic,[2, 4] Denmark,[2, 4], Estonia,[2] Ireland,[4] the Netherlands,[2] New Zealand,[5] Poland,[2] the Russian Federation, Sweden,[6] Turkey, the United Kingdom,[2] the United States[7]
Same tuition fees for international and domestic students	France, Germany, Italy, Japan, Korea, Mexico,[8] Spain, Switzerland.[9]
No tuition fees for either international or domestic students	Finland, Iceland, Norway

1. International students are not eligible for government-subsidised places in Australia and therefore pay the full fee. While this typically results in international students having higher tuition fees than domestic students, who are usually given subsidised places, some domestic students in public universities and all students in independent-private universities are full-fee paying and pay the same tuition fees as international students.

2. For non-European Union or non-European Economic Area students.

3. In Belgium (Flemish Community), different tuition is allowed only if at least 2% of students in the institutions are from outside the EEA area.

4. No tuition fees for full-time domestic students in public institutions.

5. Except for students in advanced research programmes, or for students from Australia.

6. For students from outside EEA area and Switzerland.

7. In public institutions, international students pay the same fees as domestic out-of-state students. However, since most domestic students are enrolled in-state, international students pay higher tuition fees than most domestic students, in practice. In private universities, the fees are the same for national and international students.

8. Some institutions charge higher tuition fees for international students.

9. There is a negligible difference between the average annual tuition fees charged to domestic and mobile students.

Source: OECD. Indicator B5. See Annex 3 for notes (*www.oecd.org/edu/eag.htm)*.

The fact that Finland, Iceland and Norway do not have tuition fees for international students, combined with the availability of programmes taught in English, probably explains part of the growth in the number of foreign students enrolled in some of these countries between 2005 and 2011 (Table C4.1). However, given the absence of fees, the high unit costs of tertiary education mean that international students place a heavy financial burden on their countries of destination (see Table B1.1a). For this reason, Denmark, which previously had no tuition fees, adopted tuition fees for non-EU and non-EEA international students as of 2006-07. Similar options are being discussed and tested in Finland, and were adopted in Sweden which introduced tuition fees compensated by scholarships for students from outside the EU/EEA, starting from the academic year 2011-12. This will be covered in future analysis.

Countries that charge international students the full cost of education reap significant economic benefits. Several countries in the Asia-Pacific region have actually made international education an explicit part of their socio-economic development strategy and have initiated policies to attract international students on a revenue-generating or at least a cost-recovery basis. Australia and New Zealand have successfully adopted differentiated tuition fees for international students, and this has not hampered their important growth in foreign students over recent years (Table C4.1). This shows that tuition costs do not necessarily discourage prospective international students, as long as the quality of education provided is high and its potential returns make the investment worthwhile.

However, in choosing between similar educational opportunities, cost considerations are important. In this respect, the deterioration of the United States' market share may be attributed to the high tuition fees charged to international students compared with those charged in other, primarily English-speaking, destinations

that offer similar educational opportunities at a lower cost (Chart C4.3). Advanced research programmes in New Zealand, for example, have become more attractive since 2005 when tuition fees for international students were reduced to the same level as those paid by domestic students (Box C4.3).

Public funding that is "portable" across borders, or student support for tertiary education, can ease the cost of studying abroad, as is evident in Chile, Finland, Iceland, the Netherlands, Norway and Sweden.

Immigration policy

In recent years, several OECD countries have eased their immigration policies to encourage the temporary or permanent immigration of international students (OECD, 2008). This makes these countries more attractive to students and strengthens their labour force. As a result, immigration considerations as well as tuition fees may also affect some students' decisions on where to study abroad (OECD, 2011).

Other factors

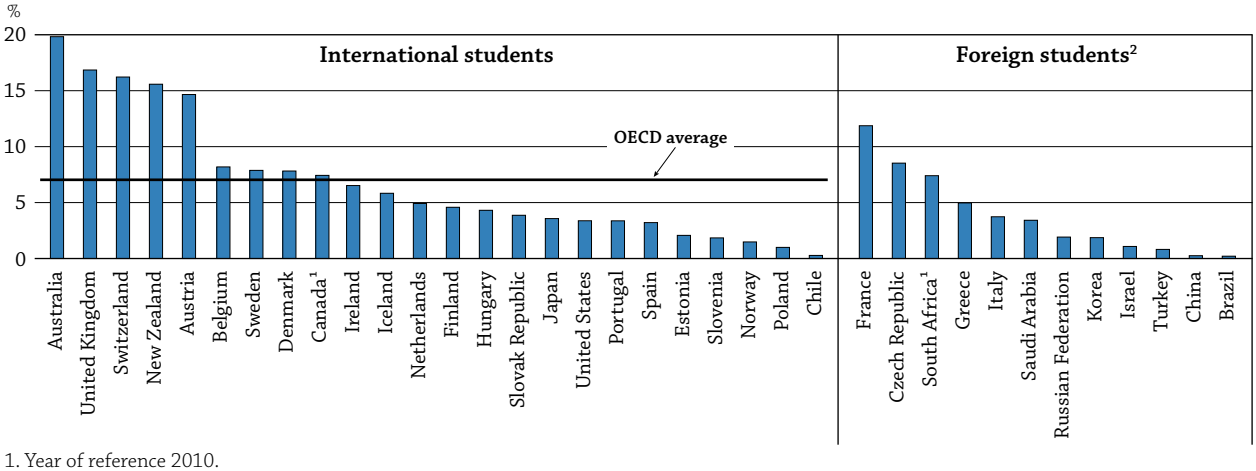
Students also make decisions on where to study based on other factors such as: the academic reputation of particular institutions or programmes; the flexibility of programmes in counting time spent abroad towards degree requirements; recognition of foreign degrees; the limitations of tertiary education in the home country; restrictive university admission policies at home; geographical, trade or historical links between countries; future job opportunities; cultural aspirations; and government policies to facilitate the transfer of credits between home and host institutions.

Extent of international student mobility in tertiary education

Among countries for which data on international students are available, Australia, Austria, New Zealand, Switzerland and the United Kingdom show the highest levels of incoming student mobility, measured as the proportion of international students in their total tertiary enrolment. In Australia, 19.8% of tertiary students enrolled are from another country. Similarly, international students represent 14.7% of total tertiary enrolments in Austria, 15.6% in New Zealand, 16.2% in Switzerland, and 16.8% in the United Kingdom. In contrast, international students account for less than 2% of total tertiary enrolments in Chile, Norway, Poland and Slovenia (Table C4.1 and Chart C4.4).

Chart C4.4. Student mobility in tertiary education (2011)

International or foreign student enrolment as a percentage of total tertiary enrolment



1. Year of reference 2010.
2. Foreign students are defined on the basis of their country of citizenship, these data are not comparable with data on international students and are therefore presented separately in the chart.

Countries are ranked in descending order of the percentage of international or foreign students in total tertiary education.

Source: OECD and UNESCO Institute for Statistics for most data on non-OECD countries. Table C4.1.

See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847602

Among countries using the definition of international students based on country of citizenship, France had the largest proportion of foreign students (11.9%) of the total enrolled at the tertiary level. In contrast, foreign enrolments represented 1% or less of total tertiary enrolments in Brazil, China, and Turkey (Table C4.1).

Proportion of international students at different levels and types of tertiary education

The share of international students in the different types of tertiary education in each country of destination also reveals patterns of student mobility. In 2011, on average across OECD countries, international students represented close to 4% of total enrolments in tertiary-type B programmes (typically shorter and vocationally-oriented). The largest proportion of international students in these programmes was in New Zealand (21%). In contrast, international students enrolled in tertiary-type A programmes (largely theory-based) accounted for an OECD average of 7% of total enrolments at this level in 2011. Australia was the country with the largest proportion of international students at this level with 21% of the total (Table C4.1).

All reporting countries, except for Germany, have a larger proportion of international students enrolled in advanced research programmes than in any other tertiary-level programme. In Switzerland, for example, almost one in two students enrolled in advanced research programmes is an international student. In 12 of the 25 countries reporting data on international students, more than 20% of all students enrolled in advanced research programmes are international. In the United Kingdom, more than 40% of all students enrolled in this type of programme are international students, and in the Netherlands and New Zealand, around 40% are. At least 25% of students in advanced research programmes in Australia, Belgium, Ireland, Sweden and the United States are international students. Based on the criteria of citizenship, France has the largest proportion (more than 40%) of foreign students at this level of education (Table C4.1). These large proportions of international or foreign students may reflect the attractiveness of advanced research programmes in these countries, or a preference for recruiting international students at higher levels of education because of their potential contribution to domestic research and development, or the potential for recruiting these students as highly qualified immigrants.

Within host countries, the distribution of international and foreign students by level and type of tertiary education gives a fair indication of the programmes countries offer. In some countries, a large proportion of international students are enrolled in tertiary-type B programmes. This is the case in Chile, where 44% of international students chose these programmes, Greece (33%), New Zealand (32%), Spain (31%, foreign students), Belgium (22%) and Japan (22%) (Table C4.1).

In other countries, a large proportion of international students enrol in advanced research programmes. This is particularly true in Switzerland, where 25% of all international students choose these programmes. This preference can also be observed in the United States, where 19% of international students are enrolled in advanced research programmes, as well as in Spain (18%), Slovenia (17%) and Sweden (15%).

In countries reporting data on foreign students only, such as the Czech Republic, Israel and the Russian Federation, nine in ten foreign students are enrolled in tertiary-type A programmes. In China, 25% of all foreign students are enrolled in advanced research programmes, as are 11% in France and 10% in Brazil (Table C4.1). All of these host countries are likely to benefit from the contribution of these highly qualified international students to their research and development programmes.

Profile of international student intake in different destinations

Global balance of student mobility in OECD countries

OECD countries receive more international students than they send to study abroad for tertiary education. In 2011, OECD countries hosted 2.9 foreign students for every citizen who was studying outside his or her country of origin. In absolute terms, this represents 3.3 million foreign students in OECD countries, compared to nearly one million students studying outside their OECD country of citizenship. While 93% of OECD citizens study in another OECD country, more than two out of three foreign students in the OECD area come from a country that is not an OECD member (Tables C4.4 and C4.5).

At the country level, the balance varies greatly. While in Australia there are almost 20 foreign students for each Australian student abroad, the ratio is 0.1 to 1 in Mexico. Other countries that have a high ratio of foreign students per national student abroad are New Zealand (12:1), the United Kingdom (15:1) and the United States (11:1). The countries that report fewer than one foreign student per national student abroad are Argentina, Brazil, Chile, Estonia, Greece, Iceland, Israel, Korea, Mexico, Norway, Poland, Portugal, Saudi Arabia, the Slovak Republic, Slovenia and Turkey (Table C4.5).

Main regions of origin

Asian students form the largest group of international students enrolled in countries reporting data to the OECD or the UNESCO Institute for Statistics: 53% of the total in all reporting destinations. The proportions of Asian students among all international and foreign tertiary students are particularly large in Korea (94%), Japan (93%), Australia (81%), the United States (72%) and New Zealand (68%). Of all international and foreign students in OECD countries, 25% are from European countries (or 17% when considering only EU21 citizens), 9% are from Africa, 6% are from Latin America and the Caribbean, and 3% are from North America. Altogether, 30% of international students enrolled in OECD countries originate from another OECD country (Table C4.3).

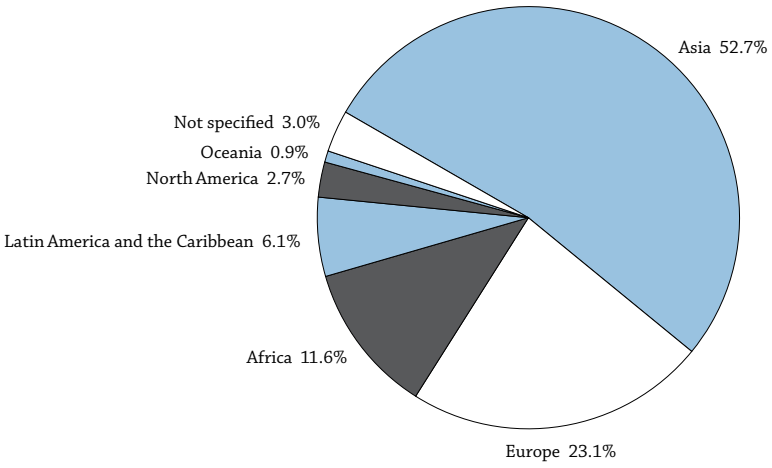
Main countries of origin

In 2011, students from China accounted for 21% of all international students enrolled in tertiary education in the OECD area, the highest share among all reporting countries (Table C4.3). Some 25% of all Chinese students studying abroad are enrolled in the United States, while 12% choose Australia, 7% choose Korea, 13% choose Japan, and 10% study in the United Kingdom (Table C4.4). The second-largest proportion of international students in OECD countries comes from India (6.5%). Some 46% of Indian students abroad are enrolled in the United States; 22% are in the United Kingdom; 6% in Australia; and 5% are in Canada (Table C4.4).

The predominance of students from Asia and Europe can also be observed at the country level within the OECD area. Students from France (2.0%), Germany (3.9%), and Korea (4.4%) are the largest groups of international OECD students enrolled in OECD countries, followed by students from the United States (1.7%), Canada (1.5%), Italy (1.4%), Japan (1.2%) and the Slovak Republic (1.2%) (Table C4.3).

Chart C4.5. Distribution of foreign students in tertiary education, by region of origin (2011)

Percentage of foreign tertiary students enrolled worldwide



Note: Year of reference of data for countries other than OECD and G20 is 2010.
Source: OECD and UNESCO Institute for Statistics for most data on non-OECD destinations. Table C4.3.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847621

A large proportion of foreign students in OECD countries come from neighbouring countries. In all OECD countries in 2011, an average of 21% of all foreign students came from countries that share land or maritime borders with the host country. Higher levels of mobility from neighbouring countries are not only the result of being in a particular geographic situation, as in the Czech Republic, but may also reveal cost, quality and enrolment advantages that are more apparent to students in neighbouring countries. Higher percentages of foreign students from countries beyond the immediate borders are seen in countries that have the largest market shares in international education, and in countries like Portugal and Spain, which have close historic and cultural ties with other countries far from their borders (Table C4.5 and Table C4.7, available on line).

Among OECD countries, the highest percentages of students from neighbouring countries are found in Japan (80%), Korea (78%), Estonia (where 74% of foreign students come from Finland, Latvia, the Russian Federation or Sweden), Greece (70%), and the Czech Republic (where 67% of foreign students come from Austria, Germany, Poland or the Slovak Republic). Foreign students from neighbouring countries are also strongly represented in Austria, Belgium, Hungary, the Netherlands, Poland, the Russian Federation, the Slovak Republic, Slovenia and Switzerland. In contrast, only 5% of foreign students in Canada come from the United States; and only 7% of students in the United States come from the Bahamas, Canada, Mexico or the Russian Federation (Table C4.5 and Table C4.7, available on line). Language is the main attraction for students coming to Portugal to study: 64% of foreign students in Portugal come from Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, Sao Tomé and Principe or Timor-Leste, all of them countries where Portuguese is an official language (Table C4.5 and Table C4.7, available on line).

Language and cultural considerations, geographic proximity and similarity of education systems are all factors that students consider when determining the country where they will study. Geographic considerations and differences in entry requirements (such as *numerus clausus* or greater selectivity for some programmes) are the most likely explanations for the concentration of students from Germany in Austria, from Belgium in France and the Netherlands, from France in Belgium, from Canada in the United States, from New Zealand in Australia, etc. Language and academic traditions also explain the tendency of English-speaking students to concentrate in other countries of the British Commonwealth or in the United States, even if they are geographically distant. This is also true for other historic geopolitical areas, such as the former Soviet Union, the *Francophonie* and Latin America. Migration networks also play a role, as illustrated by the concentration of students with Portuguese citizenship in France, students from Turkey in Germany or those from Mexico in the United States.

Definitions

The **country of prior education** is the country in which students obtained the qualification required to enrol in their current level of education, i.e. the country in which students obtained their upper secondary or post-secondary, vocationally oriented education for international students enrolled in academically or vocationally oriented tertiary programmes, and the country in which they obtained their academically oriented tertiary education for international students enrolled in advanced research programmes. Country-specific operational definitions of international students are indicated in the tables as well as in Annex 3 (*www.oecd.org/edu/eag.htm*).

Foreign students are those who are not citizens of the country in which the data are collected. While pragmatic and operational, this classification is inappropriate for capturing student mobility because of differing national policies regarding the naturalisation of immigrants. For instance, Australia has a greater propensity to grant permanent residence to its immigrant populations than Switzerland. This implies that even when the proportion of foreign students in tertiary enrolment is similar for both countries, the proportion of international students in tertiary education is smaller in Switzerland than in Australia. Therefore, for student mobility and bilateral comparisons, interpretations of data based on the concept of foreign students should be made with caution.

International or mobile students are those who left their country of origin and moved to another country for the purpose of study. Depending on country-specific immigration legislation, mobility arrangements, such as

the free mobility of individuals within the EU and the EEA, and data availability, international students may be defined as students who are not permanent or usual residents of their country of study or alternatively as students who obtained their prior education in a different country, including another EU country.

Permanent or **usual residence** in the reporting country is defined according to national legislation. In practice, this means holding a student visa or permit, or electing a foreign country of domicile in the year prior to entering the education system of the country reporting the data.

Methodology

Data on international and foreign students refer to the academic year 2010-11 unless otherwise indicated and are based on the UOE data collection on education statistics administered by the OECD in 2012. The fields of education used in the UOE data collection instruments follow the revised ISCED classification by field of education. The same classification is used for all levels of education (for details see Annex 3 at *www.oecd.org/edu/eag.htm*). Additional data from the UNESCO Institute for Statistics are also included, although the year of reference is 2010.

Data on international and foreign students are obtained from enrolments in their countries of destination. The method used for obtaining data on international and foreign students is therefore the same as that used for collecting data on total enrolments, i.e. records of regularly enrolled students in an education programme.

Domestic and international students are usually counted on a specific day or period of the year. This procedure makes it possible to measure the proportion of international enrolments in an education system, but the actual number of individuals involved may be much higher since many students study abroad for less than a full academic year, or participate in exchange programmes that do not require enrolment, such as inter-university exchanges or short-term advanced research programmes. Moreover, the international student body includes some distance-learning students who are not, strictly speaking, international students. Distance enrolments are fairly common in the tertiary institutions of Australia, the United Kingdom and the United States (OECD, 2004).

Since data on international and foreign students are obtained from tertiary enrolments in their country of destination, the data relate to incoming students rather than to students going abroad. Countries of destination covered by this indicator include all OECD and other G20 countries except Chile, Luxembourg, Mexico, the Russian Federation and Slovenia, as well as countries reporting similar data to the UNESCO Institute for Statistics. These data are used to derive global figures and to examine the destinations of students and trends in market shares.

Data on students enrolled abroad as well as trend analyses are not based on the numbers of international students, but on the number of foreign citizens on whom data that is consistent across countries and over time are readily available. The data do not include students enrolled in countries that did not report foreign students to the OECD or to the UNESCO Institute for Statistics. All statements on students enrolled abroad may therefore underestimate the real number of citizens studying abroad (Table C4.3), especially in cases where many citizens study in countries that do not report their foreign students to the OECD or UNESCO Institute for Statistics, such as China and India.

The relative proportion of international students in the education system affects tertiary entry and graduation rates, and may artificially increase them in some fields or levels of education (see Indicators A2 and A3). It may also affect the mix recorded between public and private expenditure (see Indicator B3).

In countries in which different tuition fees are applied to international students, student mobility may boost the financial resources of tertiary education institutions and help to finance the education system. International students may represent a heavy financial burden for countries in which tertiary tuition fees are low or non-existent, given the high level of unit costs in tertiary education (see Indicator B5).

Students enrolled in a country different from their own represent only one aspect of the internationalisation of tertiary education. New forms of cross-border education have emerged in the past decade, including mobility of education programmes and institutions across borders. Yet, cross-border tertiary education has developed differently, and for different reasons, in the various regions around the world. For a detailed analysis of these issues, as well as the trade and policy implications of the internationalisation of tertiary education, see OECD (2004).

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator C4 Tables

Table C4.1	**International student mobility and foreign students in tertiary education (2005, 2011)**	StatLink http://dx.doi.org/10.1787/888932850737
Table C4.2	**Distribution of international and foreign students enrolled in tertiary programmes, by field of education (2011)**	StatLink http://dx.doi.org/10.1787/888932850756
Table C4.3	**Distribution of international and foreign students in tertiary education, by country of origin (2011)**	StatLink http://dx.doi.org/10.1787/888932850775
Table C4.4	**Citizens studying abroad in tertiary education, by country of destination (2011)**	StatLink http://dx.doi.org/10.1787/888932850794
Table C4.5	**Mobility patterns of foreign and international students (2011)**	StatLink http://dx.doi.org/10.1787/888932850813
Table C4.6	**Trends in the number of foreign students enrolled in tertiary education, by region of destination and origin (2000 to 2011)**	StatLink http://dx.doi.org/10.1787/888932850832
WEB Table C4.7	**Number of foreign students in tertiary education, by country of origin and destination (2011), and market shares in international education (2000, 2011)**	StatLink http://dx.doi.org/10.1787/888932850851

C4

Table C4.1. International student mobility and foreign students in tertiary education (2005, 2011)

International and foreign students enrolled as a percentage of all students (international plus domestic) and distribution of international mobility by level and type of tertiary education

Reading the first column of the upper section of the table (international): 19.8% of all students in tertiary education in Australia are international students and 16.2% of all students in tertiary education in Switzerland are international students. The data presented in this table on international student mobility represent the best available proxy of student mobility for each country.

Reading the first column of the lower section of the table (foreign): 11.9% of all students in tertiary education in France are not French citizens, and 1.9% of all students in tertiary education in Korea are not Korean citizens.

		International or foreign students as a percentage of all tertiary enrolment						Distribution of international or foreign students		
		Total tertiary	Tertiary-type B programmes	Tertiary-type A programmes	Advanced research programmes	Index of change in the **percentage** of mobile/ foreign students, total tertiary (2005=100)	Index of change in the **number** of foreign students, total tertiary (2005=100)	Tertiary-type B programmes	Tertiary-type A programmes	Advanced research programmes
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		International students								
OECD	Australia	**19.8**	13.5	20.8	30.7	115	148	12.5	81.6	5.8
OECD	Austria	**14.7**	2.0	15.7	21.5	133	205	1.4	88.0	10.6
OECD	Belgium	**8.2**	3.6	11.5	29.8	126	114	21.7	67.8	10.5
OECD	Canada[1, 2]	**7.4**	6.3	7.2	21.8	m	138	18.3	72.4	9.3
OECD	Chile	**0.3**	0.3	0.3	4.4	m	556	44.4	49.7	5.9
OECD	Denmark	**7.8**	11.1	6.7	22.6	177	170	18.4	71.7	9.9
OECD	Estonia	**2.1**	0.2	2.7	6.3	159	304	3.4	83.8	12.9
OECD	Finland	**4.6**	n	4.2	9.5	128	186	n	86.0	14.0
OECD	Germany	**m**	m	7.9	6.4	m	105	m	m	m
OECD	Hungary	**4.3**	0.4	4.8	6.1	158	139	1.0	96.3	2.7
OECD	Iceland	**5.8**	1.1	5.6	19.7	m	256	0.4	91.1	8.6
OECD	Ireland	**6.5**	4.6	5.9	25.7	94	181	15.3	67.2	17.5
OECD	Japan	**3.6**	4.0	3.1	18.5	126	120	22.0	68.1	9.9
OECD	Luxembourg	**m**	m	m	m	m	m	m	m	m
OECD	Mexico	**m**	m	m	m	m	m	m	m	m
OECD	Netherlands	**4.9**	0.1	4.6	36.1	105	182	n	89.6	10.4
OECD	New Zealand	**15.6**	20.6	12.9	39.7	92	105	32.3	59.8	7.8
OECD	Norway	**1.5**	0.5	1.4	4.6	80	124	0.1	89.0	10.9
OECD	Poland	**1.0**	0.1	1.0	1.6	m	225	0.1	97.0	2.9
OECD	Portugal	**3.4**	1.0	3.1	9.0	m	128	n	87.6	12.4
OECD	Slovak Republic	**3.9**	0.5	3.7	7.4	436	544	0.1	89.6	10.3
OECD	Slovenia	**1.8**	0.7	1.8	8.3	190	185	7.1	76.2	16.7
OECD	Spain	**3.2**	6.3	2.0	16.6	329	236	30.7	51.1	18.2
OECD	Sweden	**7.9**	0.3	7.5	26.8	178	127	0.2	84.6	15.1
OECD	Switzerland[3]	**16.2**	m	16.9	49.5	122	160	n	75.2	24.8
OECD	United Kingdom[4]	**16.8**	5.4	18.3	40.9	121	176	5.7	85.5	8.8
OECD	United States[4]	**3.4**	1.0	3.3	28.0	99	120	6.8	73.7	19.4
	OECD average	**6.9**	3.6	6.9	19.6	156	197	11.0	78.4	11.5
Other G20	Argentina	**m**	m	m	m	m	m	m	m	m
Other G20	India	**m**	m	m	m	m	m	m	m	m
		Foreign students[5]								
OECD	Czech Republic	**8.5**	1.4	8.9	11.4	155	205	1.2	90.9	7.9
OECD	France	**11.9**	4.4	13.1	42.2	110	113	9.3	79.5	11.2
OECD	Greece[6, 7]	**5.0**	4.8	5.4	m	205	m	33.3	66.7	n
OECD	Israel	**1.1**	m	1.3	2.4	m	m	n	93.5	6.5
OECD	Italy	**3.7**	7.9	3.6	10.5	167	164	0.5	94.3	5.2
OECD	Korea	**1.9**	0.3	2.2	7.5	387	404	4.0	88.8	7.2
OECD	Turkey	**0.8**	0.2	1.0	3.2	95	171	6.2	89.4	4.5
Other G20	Brazil	**0.2**	0.1	n	2.0	341	1 292	8.7	81.5	9.7
Other G20	China	**0.3**	n	0.4	1.0	m	m	0.7	74.6	24.7
Other G20	Indonesia	**m**	m	m	m	m	m	m	m	m
Other G20	Russian Federation[7]	**1.9**	0.6	2.3	m	160	190	7.0	93.0	n
Other G20	Saudi Arabia	**3.4**	m	m	m	m	271	m	m	m
Other G20	South Africa[1]	**7.4**	m	m	m	m	165	m	m	m

1. Year of reference 2010.
2. Index of change based on year 2004=100 instead of 2005 and year of reference 2010.
3. Excludes tertiary-type B programmes.
4. International students in column 6.
5. Foreign students are defined on the basis of their country of citizenship, these data are not comparable with data on international students and are therefore presented separately in the table.
6. Excludes private institutions.
7. Excludes advanced research programmes.

Source: OECD. China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850737

C4

Table C4.2. Distribution of international and foreign students enrolled in tertiary programmes, by field of education (2011)

		Humanities, arts and education (1)	Health and welfare (4)	Social sciences, business and law (5)	Services (6)	Engineering, manufacturing and construction (7)	Sciences (8)	Agriculture (13)	Not known or unspecified (14)	Total all fields of education (15)
		International students								
OECD	Australia	9	10	55	2	12	11	1	n	100
	Austria[1]	23	9	39	1	13	12	2	n	100
	Belgium	17	32	21	2	14	8	5	n	100
	Canada[2]	8	6	42	1	16	15	1	10	100
	Chile	14	11	39	9	13	11	4	n	100
	Denmark	12	12	41	1	21	10	4	n	100
	Estonia	22	9	44	1	5	9	10	n	100
	Finland[1]	11	9	28	7	32	11	2	n	100
	Germany[1]	25	6	27	2	23	15	2	1	100
	Greece	m	m	m	m	m	m	m	n	m
	Hungary	12	44	19	3	9	4	9	n	100
	Iceland	42	3	23	1	11	19	2	n	100
	Ireland	m	m	m	m	m	m	m	m	100
	Japan	26	2	39	2	15	1	2	12	100
	Korea	m	m	m	m	m	m	m	m	m
	Luxembourg	m	m	m	m	m	m	m	n	m
	Mexico	m	m	m	m	m	m	m	m	m
	Netherlands[3]	14	15	44	9	10	6	2	1	100
	New Zealand	15	7	39	7	7	18	1	6	100
	Norway	33	10	29	5	5	13	2	3	100
	Portugal	18	8	40	6	17	10	2	n	100
	Slovenia	19	9	34	6	18	11	2	n	100
	Spain[1]	12	18	19	2	10	7	1	31	100
	Sweden	13	10	24	1	32	19	1	n	100
	Switzerland[1]	21	7	33	3	16	17	1	2	100
	United Kingdom	15	9	44	2	15	13	1	n	100
	United States	15	7	33	2	18	17	1	7	100
Other G20	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m
	South Africa[2]	m	m	m	m	m	m	m	m	m
		Foreign students[4]								
OECD	Czech Republic	14	15	39	3	10	15	2	n	100
	France	19	8	41	2	13	17	n	n	100
	Israel	44	14	27	n	6	7	1	n	100
	Italy	20	18	33	2	20	6	2	1	100
	Poland	16	26	39	5	7	5	1	n	100
	Slovak Republic	18	49	19	2	8	2	2	n	100
	Turkey	22	14	34	4	15	10	2	n	100

Note: Columns showing the breakdown of humanities, arts and education (2 and 3) and science (9-12) are available for consultation on line (see *StatLink* below).

1. Excludes tertiary-type B programmes.
2. Year of reference 2010.
3. Excludes programmes in private education.
4. Foreign students are defined on the basis of their country of citizenship; these data are not comparable with data on international students and are therefore presented separately in the table and chart.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850756

C4

Table C4.3. [1/2] Distribution of international and foreign students in tertiary education, by country of origin (2011)

Number of international and foreign students enrolled in tertiary education from a given country of origin as a percentage of all international or foreign students in the country of destination, based on head counts

The table shows for each country the proportion of international students in tertiary education who are residents of or had their prior education in a given country of origin. When data on student mobility are not available, the table shows the proportion of foreign students in tertiary education that have citizenship of a given country of origin.

Reading the second column: 14.3% of international tertiary students in Belgium come from France, 9.7% of international tertiary students in Belgium come from the Netherlands, etc.

Reading the sixth column: 44.7% of international tertiary students in Estonia come from Finland, 1.5% of international tertiary students in Estonia come from Italy, etc.

Reading the 22th column: 39.3% of foreign tertiary students in Austria are German citizens, 2.5% of foreign tertiary students in Austria are Hungarian citizens, etc.

		OECD destination countries																			
		International students																			
	Countries of origin	Australia	Belgium	Canada [1,2]	Chile	Denmark	Estonia	Germany[3,4]	Hungary	Iceland	Ireland	Netherlands[2]	New Zealand	Portugal	Slovak Rep.	Slovenia	Spain	Sweden[5]	Switzerland[3]	United Kingdom	United States
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	Australia	a	0.1	0.3	n	0.2	0.1	0.2	0.1	0.5	0.5	0.1	6.7	0.1	n	0.1	0.1	0.3	0.3	0.4	0.5
	Austria	0.1	0.2	0.1	n	0.3	0.1	3.8	0.7	1.9	0.3	0.5	0.1	0.2	1.0	1.4	0.3	0.2	2.6	0.4	0.1
	Belgium	n	a	0.2	0.1	0.3	0.1	0.5	0.1	0.9	0.7	4.1	n	1.1	n	0.3	0.5	0.1	0.6	0.7	0.1
	Canada	1.5	0.2	a	0.1	0.3	0.5	0.3	1.1	3.5	5.2	0.3	1.0	0.3	n	0.4	0.2	0.8	1.1	1.4	3.8
	Chile	0.2	0.1	0.2	a	0.1	0.1	0.3	n	0.2	0.1	0.1	0.3	0.2	n	n	3.8	0.1	0.3	0.1	0.3
	Czech Republic	n	0.1	n	n	0.6	0.3	0.7	0.4	1.3	2.7	0.3	n	0.3	56.9	0.5	0.3	0.1	0.3	0.3	0.1
	Denmark	0.1	n	0.1	n	a	0.6	0.2	0.1	4.7	0.1	0.3	0.3	n	n	0.2	0.1	0.7	0.2	0.4	0.2
	Estonia	n	0.1	n	n	1.3	a	0.3	n	0.9	0.1	0.2	n	n	n	n	0.1	0.3	0.1	0.3	n
	Finland	n	0.1	0.1	n	0.9	44.7	0.4	0.2	4.5	0.4	0.5	0.1	0.2	0.1	0.2	0.2	3.9	0.2	0.4	0.1
	France	0.5	14.3	6.8	1.1	1.3	0.6	3.0	1.2	6.4	4.0	1.6	0.8	2.7	0.2	0.5	3.4	1.2	16.2	3.1	1.1
	Germany	0.7	1.7	0.8	1.0	9.6	2.0	a	12.2	13.6	2.1	52.2	2.0	1.8	4.8	0.7	2.4	3.4	27.9	3.8	1.3
	Greece	n	0.6	0.1	n	1.0	0.2	1.0	1.2	0.1	0.4	1.2	n	0.3	11.1	0.2	0.4	0.6	1.0	2.8	0.3
	Hungary	n	0.2	n	n	1.5	0.3	0.9	a	0.6	0.3	0.6	n	0.1	0.8	0.7	0.2	0.2	0.5	0.3	0.1
	Iceland	n	n	n	n	5.1	0.1	0.1	0.5	a	n	0.1	n	n	n	n	n	0.6	0.1	0.1	0.1
	Ireland	0.1	0.1	0.1	n	0.2	0.2	0.2	1.2	0.3	a	0.2	0.2	0.1	0.4	0.2	0.1	0.1	0.1	4.0	0.2
	Israel	0.1	n	0.2	0.1	0.1	0.1	0.8	4.8	0.5	0.1	0.2	n	n	0.9	n	0.1	0.1	0.2	0.1	0.4
	Italy	0.2	1.3	0.3	0.2	2.2	1.5	1.9	0.6	4.3	2.7	1.8	0.1	2.4	0.5	9.1	6.3	0.9	8.1	1.7	0.6
	Japan	0.8	0.2	1.5	n	0.1	0.4	0.9	1.1	1.1	0.3	0.2	1.7	0.1	0.1	0.1	0.2	0.4	0.5	0.8	2.9
	Korea	3.0	0.2	4.1	0.4	n	0.2	1.9	1.2	0.4	0.2	0.4	4.3	n	0.1	n	0.1	0.3	0.4	1.1	10.1
	Luxembourg	n	1.1	n	n	n	n	1.6	n	0.1	0.1	0.2	n	0.3	n	0.1	n	n	1.0	0.2	n
	Mexico	0.2	0.3	1.2	1.7	0.3	0.3	0.8	n	0.3	0.2	0.3	0.2	0.3	0.1	0.3	5.9	0.6	0.7	0.3	1.9
	Netherlands	0.1	9.7	0.2	n	0.9	0.5	0.4	0.2	1.1	0.7	a	0.2	0.6	0.1	0.2	0.4	0.5	0.7	0.8	0.3
	New Zealand	1.1	n	0.1	n	n	n	0.1	n	0.2	0.1	n	a	n	n	n	n	0.1	0.1	0.1	0.2
	Norway	0.5	0.1	0.2	n	12.9	0.4	0.2	4.6	1.2	0.3	0.5	0.5	0.1	3.9	0.1	0.1	1.2	0.2	0.9	0.3
	Poland	0.1	0.9	0.2	n	4.2	0.3	3.7	0.3	7.8	2.3	1.8	n	1.8	1.5	0.8	1.0	0.7	1.2	1.7	0.3
	Portugal	n	0.4	0.1	n	0.4	0.2	0.2	0.4	0.4	0.4	0.6	0.1	a	0.3	0.3	3.9	0.3	0.5	0.6	0.1
	Slovak Republic	n	0.1	n	n	0.6	0.1	0.5	13.3	0.8	0.3	0.3	n	0.1	a	0.5	0.2	0.1	0.3	0.3	0.1
	Slovenia	n	0.1	n	n	0.2	0.1	0.1	0.1	0.4	0.1	0.1	n	0.1	n	a	0.1	n	0.1	0.1	n
	Spain	0.1	0.7	0.2	0.7	1.5	0.5	2.4	1.4	5.8	1.9	1.1	0.1	9.3	0.2	0.4	a	0.7	1.4	1.4	0.6
	Sweden	0.3	0.1	0.1	0.1	10.8	1.1	0.3	2.5	3.5	0.4	0.5	0.3	0.3	0.7	0.2	0.2	a	0.4	0.8	0.4
	Switzerland	0.1	0.2	0.3	n	0.2	0.1	1.1	0.1	0.5	0.2	0.3	0.1	0.4	0.1	n	0.3	0.2	a	0.6	0.2
	Turkey	0.2	0.7	0.6	n	0.4	2.0	3.0	2.3	0.3	0.3	1.2	0.1	0.6	0.2	0.3	0.4	1.8	1.5	0.8	1.7
	United Kingdom	0.6	0.3	0.9	0.1	0.9	0.8	0.7	1.1	3.5	17.7	1.1	1.2	2.1	0.9	n	0.7	0.5	1.0	a	1.2
	United States	1.1	0.7	7.1	0.7	1.1	2.0	2.0	1.9	5.6	8.0	0.7	6.0	1.6	0.2	0.6	1.2	1.7	2.0	3.3	a
	OECD total	11.9	34.9	26.0	6.4	59.7	60.8	34.2	55.4	77.1	53.0	73.4	26.8	27.6	85.1	17.9	33.3	22.5	71.5	34.1	29.5
Other G20	Argentina	n	0.1	0.1	6.7	0.1	n	0.2	n	0.1	0.1	0.1	0.1	0.2	n	0.3	4.3	0.1	0.4	0.1	0.3
	Brazil	0.3	0.3	0.6	2.5	0.3	0.5	1.0	0.1	0.2	0.3	0.4	0.5	26.8	n	0.3	3.3	0.3	1.2	0.3	1.2
	China	34.3	2.8	24.7	0.1	5.3	5.1	10.1	1.7	5.3	3.9	8.0	25.3	0.6	0.2	1.3	1.7	11.1	2.3	15.7	25.2
	India	5.4	1.3	5.5	n	1.1	0.8	1.9	0.3	1.7	2.9	1.3	18.4	0.4	n	0.8	0.4	6.0	1.4	9.2	14.4
	Indonesia	3.7	0.3	0.6	n	0.1	0.3	0.8	n	0.2	n	1.2	0.9	0.1	n	n	n	0.2	0.1	0.3	1.0
	Russian Federation	0.3	0.6	0.5	0.2	0.5	10.4	5.0	0.7	1.7	0.6	0.9	0.8	0.6	0.3	1.3	1.1	1.8	1.9	0.8	0.6
	Saudi Arabia	2.2	n	2.2	n	n	n	0.1	1.2	n	1.0	n	2.0	n	0.8	n	n	0.1	n	2.4	3.1
	South Africa	0.3	0.2	0.2	n	0.1	0.1	0.1	n	n	0.5	0.2	0.3	0.4	n	n	n	0.1	0.2	0.3	0.2
	G20 countries	46.6	5.6	34.4	9.6	7.4	17.1	19.2	4.1	9.2	9.2	12.0	48.2	29.3	1.3	3.9	10.8	19.6	7.6	29.1	46.1
	Main geographic regions																				
	Africa	2.8	7.1	11.1	0.2	2.3	2.1	8.7	3.8	1.6	10.9	2.1	1.0	34.9	1.0	0.6	7.9	5.8	5.2	8.7	5.1
	Asia	80.7	9.6	54.1	0.8	11.6	14.5	31.4	22.3	13.3	20.0	15.9	67.9	4.8	6.8	3.8	4.4	46.0	10.5	51.9	71.7
	Europe	4.2	35.6	12.1	3.8	77.9	79.0	44.4	70.5	73.2	41.3	77.2	7.4	28.5	91.6	92.1	30.4	22.0	73.5	30.9	9.7
	of which, from EU21 countries	3.0	32.1	10.3	3.4	38.9	54.5	22.6	37.5	62.9	37.6	69.0	5.8	23.9	79.5	16.2	20.8	14.6	64.2	24.0	7.2
	North America	2.6	0.9	7.5	0.8	1.4	2.4	2.4	3.1	9.2	13.2	1.0	7.0	2.0	0.2	0.9	1.4	2.5	3.1	4.8	3.9
	Oceania	1.8	0.1	0.5	n	0.3	0.1	0.3	0.1	0.6	0.6	0.1	9.6	0.2	n	0.1	0.1	0.3	0.4	0.5	0.8
	Latin America and the Caribbean	1.5	2.0	7.2	89.8	1.1	1.9	4.6	0.3	2.0	1.2	2.8	1.4	29.5	0.4	1.0	52.5	2.1	5.0	1.9	8.9
	Not specified	6.4	44.6	7.5	4.6	5.5	0.1	8.1	n	n	12.8	0.9	5.8	n	n	1.6	3.4	21.3	2.5	1.3	n
	Total from all countries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Year of reference of data for countries other than OECD and G20 is 2010.

1. Year of reference 2010.
2. Excludes private institutions.
3. Excludes tertiary-type B programmes.
4. Excludes advanced research programmes (for Germany, advanced research programmes are included only in main geographic regions).
5. Students with origin not specified come mainly from other Nordic countries.
6. Foreign students are defined on the basis of their country of citizenship; these data are not comparable with data on international students and are therefore presented separately in the table.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850775

C4

Table C4.3. [2/2] Distribution of international and foreign students in tertiary education, by country of origin (2011)

Number of international and foreign students enrolled in tertiary education from a given country of origin as a percentage of all international or foreign students in the country of destination, based on head counts

The table shows for each country the proportion of international students in tertiary education who are residents of or had their prior education in a given country of origin. When data on student mobility are not available, the table shows the proportion of foreign students in tertiary education that have citizenship of a given country of origin.

Reading the second column: 14.3% of international tertiary students in Belgium come from France, 9.7% of international tertiary students in Belgium come from the Netherlands, etc.

Reading the sixth column: 44.7% of international tertiary students in Estonia come from Finland, 1.5% of international tertiary students in Estonia come from Italy, etc.

Reading the 22th column: 39.3% of foreign tertiary students in Austria are German citizens, 2.5% of foreign tertiary students in Austria are Hungarian citizens, etc.

		Countries of destination																
		OECD												Other G20				
		Foreign students												Foreign students				
	Countries of origin	Austria[3, 6]	Czech Rep.[6]	Greece[6]	Finland[6]	France[6]	Italy[6]	Israel[6]	Japan[6]	Korea[6]	Norway[6]	Poland[6]	Turkey[6]	Total OECD destinations	Brazil[6]	Russian Federation[2, 4, 6]	Total non-OECD destinations	Total all reporting destinations
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)
OECD	Australia	0.1	n	0.1	0.3	0.1	0.1	0.4	0.2	0.1	0.3	0.1	0.2	**0.4**	0.1	n	**0.1**	**0.3**
	Austria	a	0.2	0.1	0.4	0.2	0.2	0.4	n	n	0.3	0.3	0.3	**0.5**	0.1	n	**0.1**	**0.4**
	Belgium	0.1	n	0.1	0.2	1.2	0.3	1.6	n	n	0.3	0.1	0.2	**0.4**	0.3	n	**n**	**0.3**
	Canada	0.1	0.1	0.1	0.7	0.6	0.2	2.6	0.2	0.6	0.5	2.0	0.1	**1.5**	0.4	n	**0.2**	**1.2**
	Chile	0.1	n	n	0.2	0.3	0.3	0.2	n	n	0.5	n	n	**0.3**	2.6	n	**0.3**	**0.3**
	Czech Republic	0.9	a	n	0.4	0.3	0.2	0.1	n	n	0.4	2.5	n	**0.4**	n	n	**n**	**0.3**
	Denmark	0.1	n	n	0.3	0.3	0.1	0.3	n	n	4.9	0.2	0.1	**0.2**	n	n	**n**	**0.2**
	Estonia	0.1	n	0.1	4.5	n	0.1	n	n	n	0.5	0.1	n	**0.1**	0.1	0.4	**0.1**	**0.1**
	Finland	0.2	n	0.1	a	0.1	0.1	0.3	0.1	n	1.9	0.2	n	**0.3**	0.1	n	**0.2**	**0.2**
	France	0.6	0.3	0.2	1.1	a	1.5	4.6	0.5	0.1	0.9	1.6	0.4	**2.0**	2.0	0.1	**0.2**	**1.6**
	Germany	39.3	1.0	1.0	3.3	2.8	2.0	2.4	0.4	0.1	5.4	3.1	3.7	**3.9**	2.1	0.1	**0.3**	**3.1**
	Greece	0.6	1.0	a	0.5	0.7	4.8	0.1	n	n	0.3	0.2	3.5	**0.9**	n	0.1	**0.5**	**0.8**
	Hungary	2.5	0.3	0.1	0.8	0.2	0.3	0.3	0.1	n	0.3	0.3	n	**0.3**	n	n	**n**	**0.2**
	Iceland	n	n	n	0.1	n	n	n	n	n	1.9	n	n	**0.1**	n	n	**n**	**0.1**
	Ireland	0.1	0.1	n	0.2	0.2	n	n	n	n	0.1	0.2	n	**0.7**	n	n	**n**	**0.6**
	Israel	0.2	0.3	0.2	0.1	0.1	2.2	a	n	n	0.1	0.2	0.1	**0.3**	0.2	0.2	**0.9**	**0.4**
	Italy	10.9	0.1	0.3	1.5	2.3	a	1.2	0.1	n	0.8	0.8	0.1	**1.4**	1.7	n	**0.2**	**1.2**
	Japan	0.5	0.1	0.1	0.8	0.6	0.3	0.5	a	1.9	0.3	0.2	0.1	**1.2**	1.5	0.1	**0.2**	**1.0**
	Korea	0.6	0.1	n	0.4	0.9	0.6	1.1	17.1	a	0.2	0.2	0.1	**4.4**	1.6	0.3	**0.6**	**3.6**
	Luxembourg	1.0	n	n	n	0.5	n	0.1	n	n	n	n	n	**0.3**	n	n	**n**	**0.2**
	Mexico	0.2	n	n	0.7	0.8	0.5	0.4	0.1	0.1	0.3	0.2	n	**0.9**	0.7	n	**0.2**	**0.8**
	Netherlands	0.3	n	0.1	0.5	0.3	0.2	0.5	0.1	n	1.8	0.2	0.4	**0.5**	0.2	n	**n**	**0.4**
	New Zealand	n	n	n	0.1	n	n	0.1	0.1	0.1	0.1	n	n	**0.2**	n	n	**n**	**0.1**
	Norway	0.1	0.7	n	0.4	0.1	0.1	0.3	0.1	n	a	6.1	n	**0.5**	n	n	**n**	**0.4**
	Poland	2.4	1.0	0.5	1.3	1.0	1.9	0.1	0.1	n	2.1	a	0.1	**1.0**	0.1	n	**0.1**	**0.8**
	Portugal	0.2	1.3	n	0.4	1.3	0.2	0.1	n	n	0.3	0.7	n	**0.4**	4.3	n	**0.2**	**0.4**
	Slovak Republic	2.4	64.5	n	0.2	0.2	0.3	0.1	n	n	0.3	0.6	n	**1.2**	n	n	**n**	**0.9**
	Slovenia	1.2	0.1	n	0.1	n	0.4	0.1	n	n	n	0.1	n	**0.1**	n	n	**n**	**0.1**
	Spain	0.5	0.1	0.2	1.2	1.7	0.8	0.4	0.1	n	0.7	4.8	0.1	**0.9**	1.2	n	**0.1**	**0.7**
	Sweden	0.2	0.4	0.1	3.4	0.2	0.2	0.4	0.1	n	8.9	4.8	0.1	**0.6**	0.1	n	**0.1**	**0.5**
	Switzerland	1.1	n	0.1	0.2	0.7	1.2	0.4	n	n	0.4	0.1	0.2	**0.4**	0.4	n	**0.1**	**0.3**
	Turkey	4.4	0.2	0.5	1.0	0.9	1.2	0.3	0.1	0.1	0.6	1.4	a	**1.1**	0.1	0.3	**2.1**	**1.4**
	United Kingdom	0.3	1.1	0.4	1.4	1.1	0.3	0.9	0.3	0.1	2.0	0.7	0.3	**0.8**	1.6	n	**0.2**	**0.7**
	United States	0.7	0.5	0.5	1.8	1.3	0.6	23.2	1.6	1.9	2.2	4.4	0.6	**1.7**	3.7	0.1	**0.7**	**1.4**
	OECD total	72.1	73.7	5.1	28.7	21.1	21.3	43.1	21.7	5.4	39.5	36.5	10.7	**29.9**	25.3	1.8	**7.8**	**24.9**
Other G20	Argentina	n	n	n	0.1	0.3	0.6	0.3	n	0.1	0.2	n	n	**0.3**	5.3	n	**0.3**	**0.3**
	Brazil	0.2	n	0.1	0.6	1.5	1.6	0.5	0.4	0.1	0.7	0.1	n	**0.9**	a	0.1	**0.4**	**0.8**
	China	1.6	0.2	0.1	13.3	9.7	8.5	1.2	62.3	75.8	4.9	2.3	0.8	**20.7**	2.2	5.7	**10.9**	**18.5**
	India	0.5	0.4	n	3.2	0.6	1.3	0.6	0.4	0.9	1.8	1.3	n	**6.5**	0.1	2.0	**2.3**	**5.5**
	Indonesia	0.1	n	n	0.2	0.2	0.1	n	1.4	0.8	0.5	0.1	0.5	**0.9**	n	n	**1.6**	**1.0**
	Russian Federation	1.4	6.8	1.3	11.3	1.6	2.1	0.9	0.2	0.5	6.0	2.8	1.7	**1.3**	0.2	a	**2.5**	**1.6**
	Saudi Arabia	0.1	n	n	n	0.1	n	n	0.2	0.2	n	1.2	0.1	**1.5**	n	n	**1.4**	**1.5**
	South Africa	0.1	0.1	0.1	0.1	n	n	0.7	n	0.1	0.2	0.1	n	**0.2**	1.0	n	**0.2**	**0.2**
	G20 total	4.0	7.7	1.7	28.8	13.9	14.2	4.2	65.0	78.4	14.3	7.8	3.0	**32.3**	9.0	7.9	**19.6**	**29.4**
	Main geographic regions																	
	Africa	1.4	1.3	2.9	17.7	42.8	12.0	1.3	0.8	1.3	9.6	3.4	3.3	**9.3**	26.5	3.9	**19.1**	**11.6**
	Asia	11.9	9.8	46.1	38.1	21.8	22.8	4.4	93.3	94.1	20.4	17.6	57.0	**52.0**	7.2	60.6	**54.9**	**52.7**
	Europe	84.6	86.8	36.9	38.5	22.0	53.4	16.4	2.7	1.3	48.8	71.5	22.4	**25.0**	15.1	31.1	**16.8**	**23.1**
	of which, EU21 countries	63.9	71.5	3.4	21.9	14.6	13.9	13.8	2.0	0.6	32.2	21.4	9.4	**16.8**	14.0	0.8	**2.5**	**13.5**
	North America	0.8	0.6	0.6	2.5	1.9	0.8	25.7	1.9	2.5	2.7	6.4	0.7	**3.2**	4.1	0.1	**0.8**	**2.7**
	Oceania	0.1	n	0.1	0.4	0.2	0.1	0.5	0.3	0.2	0.3	0.1	0.2	**0.7**	0.5	n	**1.5**	**0.9**
	Latin America and the Caribbean	1.1	0.6	0.3	2.6	5.9	9.3	2.8	1.0	0.6	2.7	0.8	0.1	**5.8**	30.5	0.5	**6.9**	**6.1**
	Not specified	0.1	0.8	13.1	0.3	5.5	1.6	48.8	n	n	15.4	0.1	16.3	**3.9**	16.1	3.8	**m**	**3.0**
	Total from all countries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	**100.0**	**100.0**

Note: Year of reference of data for countries other than OECD and G20 is 2010.

1. Year of reference 2010.
2. Excludes private institutions.
3. Excludes tertiary-type B programmes.
4. Excludes advanced research programmes (for Germany, advanced research programmes are included only in main geographic regions).
5. Students with origin not specified come mainly from other Nordic countries.
6. Foreign students are defined on the basis of their country of citizenship; these data are not comparable with data on international students and are therefore presented separately in the table.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table C4.4. [1/2] Citizens studying abroad in tertiary education, by country of destination (2011)

Number of foreign students enrolled in tertiary education in a given country of destination as a percentage of all students enrolled abroad, based on head counts

The table shows for each country the proportion of students studying abroad in tertiary education in a given country of destination.

Reading the second column: 4.4% of Czech citizens enrolled in tertiary education abroad study in Austria, 12.3% of Italian citizens enrolled in tertiary education abroad study in Austria, etc.

Reading the first row: 2.5% of Australian citizens enrolled in tertiary education abroad study in France, 21.4% of Australian citizens enrolled in tertiary education abroad study in New Zealand, etc.

		Countries of destination																			
		OECD																			
	Country of origin	Australia[1]	Austria[2]	Belgium	Canada[3, 4]	Chile	Czech Republic	Denmark	Estonia	Finland	France	Germany[5]	Greece[6]	Hungary	Iceland	Ireland[7]	Israel	Italy	Japan	Korea	Netherlands[4]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	Australia	a	0.4	0.3	4.0	n	0.1	0.6	n	0.3	2.5	3.0	0.2	0.1	n	0.7	0.1	0.4	2.5	0.6	0.5
	Austria	1.4	a	0.5	0.8	n	0.4	0.5	n	0.4	2.6	51.2	0.2	0.8	0.1	0.3	0.1	1.0	0.3	0.1	1.8
	Belgium	0.8	0.7	a	3.2	n	0.1	0.6	n	0.3	24.8	8.4	0.3	0.1	0.1	0.4	0.5	1.5	0.4	n	19.1
	Canada	8.5	0.2	0.3	a	n	0.1	0.2	n	0.2	3.3	1.2	0.1	0.4	0.1	1.3	0.2	0.3	0.8	0.8	0.5
	Chile	4.2	0.3	0.9	3.3	a	0.1	0.3	n	0.2	6.9	4.6	0.1	n	n	n	0.1	1.7	0.3	0.2	0.5
	Czech Republic	0.7	4.4	0.7	0.7	n	a	1.0	n	0.4	5.2	12.0	0.1	0.6	0.1	0.6	n	1.1	0.4	0.1	1.5
	Denmark	2.4	0.8	0.6	1.5	n	0.1	a	0.1	0.6	8.8	6.1	0.1	0.2	1.0	0.5	0.1	0.7	0.4	n	2.2
	Estonia	0.4	1.3	0.5	0.2	n	0.2	6.0	a	12.6	2.4	10.4	0.7	0.2	0.2	1.1	n	1.0	0.5	n	2.0
	Finland	1.1	1.3	0.5	0.7	n	0.1	2.3	5.2	a	2.8	7.3	0.2	0.4	0.4	0.7	0.1	0.7	1.0	n	2.6
	France	1.7	0.5	22.2	12.0	0.1	0.2	0.5	n	0.2	a	8.3	0.1	0.3	0.1	0.8	0.2	1.4	0.9	0.1	1.3
	Germany	1.4	21.1	0.8	1.1	0.1	0.3	2.0	n	0.4	5.6	a	0.2	1.6	0.1	0.7	0.1	1.1	0.4	0.1	18.7
	Greece	0.1	1.0	1.5	0.3	n	1.0	0.7	n	0.2	5.0	14.7	a	0.5	n	0.2	n	9.2	0.1	n	3.0
	Hungary	0.5	16.8	1.3	1.0	n	1.0	3.3	n	1.2	5.9	18.7	0.2	a	0.1	0.9	0.1	1.9	0.8	0.1	3.7
	Iceland	0.6	0.8	0.3	1.1	n	0.1	42.5	n	0.4	1.0	2.8	n	2.2	a	0.1	n	0.5	0.5	n	2.5
	Ireland	0.9	0.2	0.3	0.9	n	0.2	0.3	n	0.1	1.9	1.4	n	0.7	n	a	n	0.1	0.1	n	0.7
	Israel	0.9	0.7	0.2	5.5	n	0.7	0.2	n	0.1	1.6	8.4	0.4	4.4	n	0.1	a	8.9	0.2	n	0.7
	Italy	0.7	12.3	3.4	0.7	n	0.1	0.9	n	0.4	9.8	14.1	0.2	0.2	0.1	0.8	0.1	a	0.3	n	1.9
	Japan	5.5	0.9	0.4	4.8	n	0.1	0.1	n	0.3	4.4	4.8	0.1	0.5	n	0.1	n	0.7	a	3.1	0.4
	Korea	5.7	0.3	n	6.2	n	n	n	n	n	1.7	3.4	n	0.2	n	n	n	0.3	18.7	a	0.2
	Luxembourg	0.2	8.9	20.6	0.1	n	n	n	n	n	18.3	37.2	n	0.1	n	0.1	n	0.3	n	n	1.3
	Mexico	2.0	0.5	0.5	7.1	0.6	n	0.3	n	0.4	7.2	5.2	n	n	n	0.1	0.1	1.3	0.6	0.2	0.9
	Netherlands	1.4	1.1	27.3	2.1	n	0.1	1.6	n	0.4	4.1	7.4	0.2	0.2	0.1	0.8	0.1	0.6	0.5	n	a
	New Zealand	46.4	0.2	0.1	2.7	n	0.1	0.3	n	0.2	1.4	1.4	n	0.1	n	0.5	n	0.2	1.3	1.0	0.3
	Norway	8.2	0.3	0.2	1.3	n	1.5	18.9	n	0.4	1.8	2.3	n	4.4	0.1	0.2	0.1	0.4	0.5	n	2.2
	Poland	0.4	3.7	1.6	1.4	n	0.8	2.7	n	0.5	5.7	23.0	0.4	0.2	0.2	2.3	n	3.0	0.3	0.1	2.4
	Portugal	0.5	0.5	3.9	1.1	n	2.1	0.6	n	0.2	14.5	8.1	0.1	0.3	n	0.4	n	0.7	0.2	n	2.1
	Slovak Republic	0.2	4.7	0.3	0.3	n	69.0	0.4	n	0.1	1.3	3.2	n	7.2	n	0.4	n	0.6	0.1	n	0.6
	Slovenia	0.8	26.7	1.0	0.8	n	0.7	1.6	n	0.6	2.9	15.6	0.1	0.6	0.1	0.2	0.1	9.6	0.5	n	3.6
	Spain	0.5	1.0	3.2	0.7	0.2	0.1	1.2	n	0.6	13.7	16.3	0.2	0.7	0.2	1.3	0.1	1.8	0.4	0.1	2.8
	Sweden	4.0	0.9	0.4	1.0	n	0.7	13.3	0.1	2.7	2.3	3.2	0.1	2.2	0.2	0.5	0.1	0.7	1.1	0.1	1.5
	Switzerland	2.8	6.7	1.1	3.5	0.1	0.1	0.7	n	0.3	15.8	21.4	0.3	0.2	0.1	0.4	0.1	7.4	0.6	0.1	1.9
	Turkey	0.6	3.8	0.5	1.2	n	0.1	0.7	n	0.2	2.8	38.2	0.2	0.5	n	0.1	n	1.1	0.2	0.1	1.5
	United Kingdom	4.1	0.6	0.8	6.2	n	1.1	1.6	n	0.6	8.0	5.5	0.4	0.5	0.1	10.6	0.1	0.7	1.3	0.2	2.7
	United States	4.6	0.7	0.5	15.4	0.1	0.3	0.6	n	0.5	5.6	6.5	0.3	0.5	0.1	6.9	1.5	0.7	4.0	1.9	1.0
	OECD total	2.8	4.5	3.0	3.8	0.1	2.5	1.5	0.1	0.4	5.0	10.1	0.1	0.9	0.1	1.2	0.2	1.4	2.9	0.3	3.6
	EU21 total	1.2	7.0	5.0	2.6	n	4.2	1.7	0.1	0.5	6.1	9.8	0.2	1.0	0.1	1.3	0.1	1.6	0.5	0.1	5.6
Other G20	Argentina	0.7	0.2	0.4	3.7	3.8	n	0.2	n	0.1	6.2	2.8	0.1	n	n	0.1	0.1	3.2	0.5	0.3	0.3
	Brazil	2.2	0.5	0.7	3.9	0.6	0.1	0.4	n	0.3	11.2	6.5	0.1	0.1	n	0.2	0.1	3.4	1.8	0.1	0.6
	China	12.5	0.2	0.2	5.4	n	n	0.2	n	0.3	3.6	3.0	n	n	n	0.3	n	0.9	13.1	6.6	0.6
	India	6.3	0.2	0.2	5.2	n	0.1	0.1	n	0.2	0.8	1.7	n	n	n	0.3	n	0.4	0.3	0.3	0.3
	Indonesia	22.6	0.2	0.3	2.2	n	n	0.1	n	0.1	1.1	5.3	n	n	n	n	n	0.2	5.1	1.2	2.3
	Russian Federation	1.3	1.4	0.7	2.0	n	3.6	0.5	1.8	2.5	5.9	18.4	0.6	0.2	n	0.3	n	2.1	0.5	0.5	0.8
	Saudi Arabia	10.3	0.1	n	4.3	n	n	n	n	n	0.4	0.3	n	0.3	n	0.2	n	n	0.4	0.2	n
	South Africa	6.8	0.3	0.6	3.5	n	0.3	0.2	n	0.2	1.0	1.3	0.3	n	n	1.3	0.2	0.2	0.2	0.3	0.9
	Other G20 total	10.4	0.2	0.2	4.9	0.1	0.2	0.2	0.1	0.4	3.2	3.7	n	0.1	n	0.3	n	0.9	8.4	4.2	0.6
	Total all countries	6.1	1.6	1.2	4.7	0.3	0.9	0.7	0.1	0.4	6.2	6.3	0.8	0.4	n	0.5	0.1	1.7	3.5	1.5	1.3

Note: The proportion of students abroad is based only on the total of students enrolled in countries reporting data to the OECD and UNESCO Institute for Statistics.

Year of reference of data for countries other than OECD and G20 is 2010.

1. Data refers to international students.
2. Excludes tertiary-type B programmes.
3. Year of reference 2010.
4. Excludes private institutions.
5. Excludes advanced research programmes (for Germany, advanced research programmes are included only in main geographic regions).
6. Total based on the estimation by the UNESCO Institute for Statistics.
7. Excludes part-time students.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850794

C4

Table C4.4. [2/2] Citizens studying abroad in tertiary education, by country of destination (2011)

Number of foreign students enrolled in tertiary education in a given country of destination as a percentage of all students enrolled abroad, based on head counts

The table shows for each country the proportion of students studying abroad in tertiary education in a given country of destination.

Reading the second column: 4.4% of Czech citizens enrolled in tertiary education abroad study in Austria, 12.3% of Italian citizens enrolled in tertiary education abroad study in Austria, etc.

Reading the first row: 2.5% of Australian citizens enrolled in tertiary education abroad study in France, 21.4% of Australian citizens enrolled in tertiary education abroad study in New Zealand, etc.

		Countries of destination																	
		OECD														Other G20			
	Country of origin	New Zealand	Norway	Poland	Portugal	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States[1]	Total OECD destinations	Total EU21 destinations	Brazil	Russian Federation[4,5]	Total non-OECD destinations	Total all reporting destinations
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)
OECD	Australia	21.4	0.3	0.1	0.2	n	n	0.5	0.8	0.9	0.5	26.9	28.1	**96**	**38**	0.1	n	**4**	**100.0**
	Austria	0.7	0.3	0.3	0.2	0.5	0.1	1.6	1.0	8.5	0.5	13.2	5.8	**95**	**77**	0.1	0.1	**5**	**100.0**
	Belgium	0.4	0.4	0.2	1.3	n	n	4.5	0.4	3.6	0.5	18.8	6.6	**98**	**82**	0.3	0.1	**2**	**100.0**
	Canada	1.6	0.2	1.0	0.3	n	n	0.4	0.6	1.0	n	15.4	57.5	**96**	**26**	0.1	n	**4**	**100.0**
	Chile	1.7	0.7	n	0.2	n	n	27.7	1.0	1.0	n	5.0	16.8	**78**	**50**	3.0	n	**22**	**100.0**
	Czech Republic	0.4	0.5	4.2	0.6	37.4	0.1	2.0	0.5	1.5	0.1	16.1	5.5	**99**	**89**	n	0.2	**1**	**100.0**
	Denmark	2.2	10.0	0.6	0.1	n	n	1.3	10.2	1.4	0.3	30.9	13.8	**97**	**64**	0.1	n	**3**	**100.0**
	Estonia	0.1	1.4	0.3	0.1	0.1	n	1.8	4.1	0.6	n	27.0	4.0	**79**	**72**	0.1	10.9	**21**	**100.0**
	Finland	0.4	2.8	0.3	0.2	0.1	n	1.6	23.9	1.2	0.1	22.9	5.5	**87**	**73**	0.1	0.5	**13**	**100.0**
	France	0.5	0.2	0.5	0.7	n	n	4.5	0.6	8.1	0.1	21.4	10.0	**97**	**63**	0.4	0.1	**3**	**100.0**
	Germany	1.1	0.7	0.5	0.3	0.3	n	2.3	1.4	11.3	0.9	16.1	7.0	**98**	**73**	0.2	0.1	**2**	**100.0**
	Greece	n	0.1	0.1	0.1	2.5	n	1.1	0.8	1.4	2.9	34.8	4.8	**86**	**77**	n	0.5	**14**	**100.0**
	Hungary	0.6	0.5	0.7	0.4	0.8	0.1	1.9	1.3	2.3	0.1	23.1	6.2	**96**	**83**	n	0.2	**4**	**100.0**
	Iceland	0.2	7.6	0.2	n	n	n	0.6	11.3	0.7	n	14.6	8.8	**99**	**80**	n	n	**1**	**100.0**
	Ireland	1.1	0.1	0.2	0.1	0.1	n	0.5	0.3	0.2	n	84.6	4.2	**99**	**92**	n	n	**1**	**100.0**
	Israel	0.3	0.1	0.3	n	0.4	n	0.7	0.1	0.5	0.1	3.9	14.6	**54**	**32**	0.1	2.0	**46**	**100.0**
	Italy	0.2	0.2	0.3	1.0	0.1	0.3	11.9	0.7	9.8	n	19.5	6.8	**97**	**78**	0.4	0.1	**3**	**100.0**
	Japan	2.8	0.1	0.1	n	n	n	0.5	0.6	0.7	n	9.6	54.2	**95**	**24**	0.6	0.2	**5**	**100.0**
	Korea	2.5	n	n	n	n	n	0.1	0.1	0.2	n	3.9	51.9	**96**	**10**	0.2	0.4	**4**	**100.0**
	Luxembourg	0.1	n	n	0.4	n	n	0.3	n	5.2	n	5.4	0.7	**100**	**93**	n	n	**n**	**100.0**
	Mexico	0.4	0.2	0.2	0.2	n	n	10.4	0.6	1.2	n	5.6	46.2	**92**	**33**	0.3	0.1	**8**	**100.0**
	Netherlands	2.5	1.4	0.2	0.6	n	n	2.3	1.6	2.5	0.6	30.1	8.6	**99**	**79**	0.1	n	**1**	**100.0**
	New Zealand	a	0.2	0.1	n	n	n	0.3	0.5	0.6	n	21.5	18.7	**98**	**27**	n	n	**2**	**100.0**
	Norway	1.3	a	8.1	0.1	2.0	n	0.8	7.2	0.6	n	24.3	10.3	**98**	**75**	n	0.1	**2**	**100.0**
	Poland	0.1	0.8	a	0.7	0.3	n	3.0	1.5	1.3	n	38.7	3.9	**99**	**90**	n	0.1	**1**	**100.0**
	Portugal	0.1	0.2	0.6	a	0.1	n	15.7	0.6	6.1	n	30.0	4.1	**93**	**80**	2.7	n	**7**	**100.0**
	Slovak Republic	0.1	0.1	0.4	0.1	a	n	0.6	0.1	0.6	n	8.1	1.2	**100**	**97**	n	0.1	**n**	**100.0**
	Slovenia	0.4	0.2	0.5	1.0	0.1	a	2.8	0.6	1.7	0.2	12.6	5.6	**91**	**81**	n	0.2	**9**	**100.0**
	Spain	0.3	0.3	3.3	4.7	0.1	n	a	1.2	4.6	0.1	25.4	12.7	**98**	**77**	0.5	n	**2**	**100.0**
	Sweden	0.8	7.5	5.5	0.2	0.3	n	1.4	a	1.7	0.2	26.5	16.0	**95**	**62**	0.1	0.1	**5**	**100.0**
	Switzerland	0.9	0.5	0.1	1.4	0.1	n	3.4	0.8	a	0.4	13.4	10.4	**95**	**75**	0.5	n	**5**	**100.0**
	Turkey	0.1	0.1	0.4	0.1	n	n	0.4	0.7	1.3	a	5.4	14.4	**75**	**57**	n	0.6	**25**	**100.0**
	United Kingdom	17.9	0.9	0.4	0.4	0.2	n	2.9	1.7	1.6	0.3	a	23.4	**95**	**39**	0.6	0.1	**5**	**100.0**
	United States	5.3	0.6	1.6	0.3	n	n	1.9	1.1	1.2	0.3	25.4	a	**90**	**55**	0.9	0.2	**10**	**100.0**
	OECD total	2.0	0.6	0.7	0.5	0.7	n	2.9	1.2	3.6	0.3	17.9	18.5	**93**	**58**	0.3	0.3	**7**	**100.0**
	EU21 total	1.6	0.8	0.8	0.7	1.1	n	3.6	1.5	5.6	0.5	23.4	7.9	**96**	**75**	0.3	0.2	**4**	**100.0**
Other G20	Argentina	0.7	0.2	n	0.3	n	n	35.7	0.3	0.9	n	2.4	15.5	**79**	**52**	5.8	n	**21**	**100.0**
	Brazil	1.1	0.3	0.1	15.1	n	n	6.5	0.5	1.7	n	6.8	24.4	**89**	**53**	a	0.6	**11**	**100.0**
	China	2.2	0.1	0.1	n	n	n	0.4	0.6	0.2	n	10.0	24.7	**85**	**20**	n	1.4	**15**	**100.0**
	India	4.4	0.1	0.1	n	n	n	0.2	0.9	0.4	n	21.5	45.7	**90**	**27**	n	1.5	**10**	**100.0**
	Indonesia	1.3	0.2	n	n	n	n	0.1	0.2	0.3	0.3	3.2	15.9	**63**	**13**	n	0.2	**37**	**100.0**
	Russian Federation	0.9	1.4	0.9	0.3	0.1	0.1	2.2	1.2	1.5	0.7	6.5	6.5	**65**	**50**	0.1	a	**35**	**100.0**
	Saudi Arabia	1.5	n	0.5	n	0.1	n	0.1	n	n	n	18.1	38.9	**76**	**20**	n	n	**24**	**100.0**
	South Africa	21.0	0.3	0.1	0.8	n	n	0.2	0.3	0.6	n	33.4	13.1	**87**	**41**	1.2	n	**13**	**100.0**
	Other G20 total	2.6	0.2	0.2	0.5	n	n	1.0	0.6	0.4	0.1	12.2	27.7	**84**	**25**	0.1	1.1	**16**	**100.0**
	Total all countries	1.7	0.4	0.5	0.5	0.2	0.1	2.5	1.2	1.4	0.7	13.0	16.5	**77**	**40**	0.3	4.0	**23**	**100.0**

Note: The proportion of students abroad is based only on the total of students enrolled in countries reporting data to the OECD and UNESCO Institute for Statistics.

Year of reference of data for countries other than OECD and G20 is 2010.

1. Data refers to international students.
2. Excludes tertiary-type B programmes.
3. Year of reference 2010.
4. Excludes private institutions.
5. Excludes advanced research programmes (for Germany, advanced research programmes are included only in main geographic regions).
6. Total based on the estimation by the UNESCO Institute for Statistics.
7. Excludes part-time students.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850794

Table C4.5. Mobility patterns of foreign and international students (2011)

Regional and cross-border mobility, balance on mobility and use of the official language of the host country in countries of origin

		Percentage of national tertiary students enrolled abroad	Number of foreign students per national student abroad	Percentage of foreign students coming from neighbouring countries[1]	Percentage of students from countries with the same official language
		(1)	(2)	(3)	(4)
OECD	Australia	1.2	19.9	36.0	18.4
OECD	Austria	5.3	4.1	58.6	52.8
OECD	Belgium	3.1	3.9	51.2	66.3
OECD	Canada[2]	3.4	4.3	4.7	32.9
OECD	Chile	1.2	0.9	31.9	55.9
OECD	Czech Republic[3]	3.2	2.8	66.7	n
OECD	Denmark	3.3	3.6	36.1	n
OECD	Estonia	7.7	0.5	73.9	n
OECD	Finland	3.7	1.4	19.7	3.4
OECD	France[3]	3.8	3.4	14.9	28.8
OECD	Germany	4.8	2.1	14.3	8.9
OECD	Greece[3]	5.8	0.9	70.0	40.3
OECD	Hungary	2.8	1.8	44.6	n
OECD	Iceland	18.9	0.3	8.4	n
OECD	Ireland	13.0	0.8	17.1	51.2
OECD	Israel[3]	4.8	0.2	n	n
OECD	Italy[3]	3.2	1.2	30.6	5.2
OECD	Japan	1.0	3.9	80.1	n
OECD	Korea[3]	4.0	0.5	77.6	n
OECD	Luxembourg	m	m	m	m
OECD	Mexico	1.0	0.1	m	m
OECD	Netherlands	2.7	2.7	49.4	5.8
OECD	New Zealand	2.7	11.9	10.9	46.6
OECD	Norway	7.1	1.0	25.6	n
OECD	Poland	2.2	0.5	53.0	n
OECD	Portugal	5.7	0.9	7.2	64.1
OECD	Slovak Republic	14.1	0.3	61.3	n
OECD	Slovenia	2.9	0.7	39.2	7.7
OECD	Spain	1.7	3.2	20.7	42.3
OECD	Sweden	4.4	2.5	17.6	5.4
OECD	Switzerland	5.3	4.9	50.2	54.6
OECD	Turkey[3]	2.1	0.4	29.9	9.5
OECD	United Kingdom	1.8	14.9	13.8	34.6
OECD	United States	0.3	11.4	6.6	26.9
	OECD total	2.0	2.9	20.6	25.4
	EU21 total	3.6	2.7	23.3	26.7
Other G20	Argentina	0.5	0.2	m	73.5
Other G20	Brazil[3]	0.5	0.4	25.9	27.4
Other G20	China[3]	2.3	m	m	m
Other G20	India	m	m	m	m
Other G20	Indonesia[3]	0.8	n	m	m
Other G20	Russian Federation[3]	0.8	2.4	60.3	37.2
Other G20	Saudi Arabia[3]	5.5	0.6	27.2	36.7
Other G20	South Africa[3]	1.5	6.6	47.1	51.3

Note: Year of reference of data for countries other than OECD and G20 is 2010.
1. Neighbour countries considered have land or maritime borders with the host country.
2. Year of reference 2010.
3. National tertiary students are calculated as total enrolment minus foreign students instead of total enrolment minus international students.
Source: OECD. CIA World Factbook 2013 for worldwide official languages. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932850813

Table C4.6. Trends in the number of foreign students enrolled in tertiary education, by region of destination and origin (2000 to 2011)

Number of foreign students enrolled in tertiary education, head counts

Foreign students enrolled in the following destinations	Number of foreign students					Index of change (2010)				Foreign students enrolled in OECD countries from the following regions of origin (2011)
	2011	2010	2009	2005	2000	2010=100	2009=100	2005 = 100	2000 = 100	
Africa	176 990	155 293	147 338	107 851	99 117	114	120	164	179	344 784
Asia	500 947	486 076	446 055	322 449	214 744	103	112	155	233	1 610 203
Europe	2 033 082	1 968 418	1 665 829	1 388 027	920 140	103	122	146	221	916 895
North America	913 464	880 427	850 966	738 401	569 640	104	107	124	160	102 888
Latin America & the Caribbean	78 760	77 735	77 546	39 227	31 058	101	102	201	254	209 580
Oceania	343 298	350 013	335 305	251 904	118 646	98	102	136	289	26 219
Worldwide	**4 265 579**	**4 119 002**	**3 707 756**	**2 982 588**	**2 071 963**	**104**	**115**	**143**	**206**	**3 316 209**
OECD	3 283 381	3 181 939	2 838 027	2 373 011	1 588 862	103	116	138	207	1 053 978
EU countries	1 734 334	1 686 306	1 413 462	1 201 503	806 286	103	123	144	215	736 978
of which in EU21 countries	1 695 758	1 647 730	1 378 961	1 174 107	776 672	103	123	144	218	623 887
G20 countries	3 550 625	3 418 367	3 040 151	2 488 585	1 718 429	104	117	143	207	1 659 923

Note: Figures are based on the number of foreign students enrolled in OECD and non-OECD countries reporting data to the OECD (2011 figures) and to UNESCO Institute for Statistics (2010 figures), in order to provide a global picture of foreign students worldwide. The coverage of these reporting countries has evolved over time, therefore missing data have been imputed wherever necessary to ensure the comparability of time series over time. Given the inclusion of UNESCO data for non-OECD countries and the imputation of missing data, the estimates of the number of foreign students may differ from those published in previous editions of Education at a Glance. Totals refering to years 2006 to 2008 and 2001 to 2004 are available for consultation on line (see *StatLink* below).

Source: OECD and UNESCO Institute for Statistics for most data on non-OECD countries. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

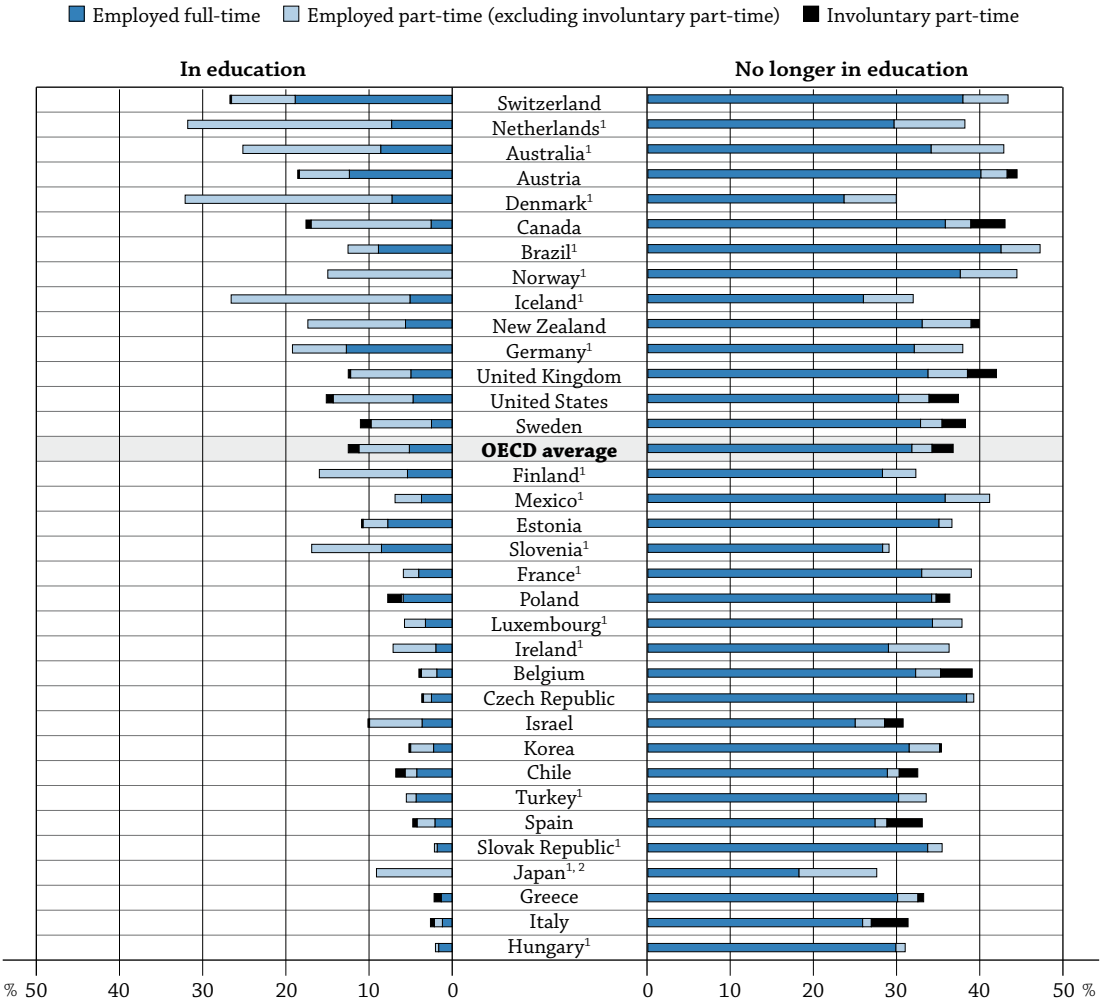
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850832

TRANSITION FROM SCHOOL TO WORK: WHERE ARE THE 15-29 YEAR-OLDS?

- During the height of the economic crisis, the proportion of 15-29 year-olds no longer in education and employed shrank from 41% in 2008 to 37% in 2011, on average across OECD countries.
- In 2011, 16% of individuals between the ages of 15 and 29 were neither employed nor in education or training (the "NEET" population), on average across OECD countries.
- On average across OECD countries, almost 30% of 15-29 year-olds working part time in 2011 would have liked to work more.

Chart C5.1. Proportion of part-time (PT), involuntary part-time and full-time (FT) workers among 15-29 year-olds in education and no longer in education (2011)



Note: In this chart part time (PT) includes voluntary PT and unknowns.
1. No data on involuntary part-time workers available.
2. Japan refers to 15-24 year-olds.
Countries are ranked in descending order of total employment among 15-29 year-olds.
Source: OECD. Table C5.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847640

Context

The length and the quality of the schooling individuals receive have an impact on students' transition from education to work; so do labour-market conditions, the economic environment and demographics. National traditions also play an important role. For example, in some countries, young people traditionally complete schooling before they look for work; in others, education and employment are concurrent. In some countries, there is little difference between how young women and men experience their transitions from school to work, while in other countries, significant proportions of young women raise families full-time after leaving the education system and do not enter employment.

The ageing of the population in OECD countries should favour employment among young adults, as, theoretically, when older people leave the labour market, their jobs are made available to the young. However, during recessionary periods, high general unemployment rates make the transition from school to work substantially more difficult for young people, as those with more work experience are favoured over new entrants into the labour market. In addition, when labour-market conditions are unfavourable, younger people often tend to stay in education longer, because high unemployment rates drive down the opportunity costs of education.

To improve the transition from school to work, regardless of the economic climate, education systems should work to ensure that individuals have the skills that are needed in the labour market, and reduce the proportion of young adults who are neither in school nor in work. In these circumstances, public investment in education can be a sensible way to counterbalance unemployment and invest in future economic growth by building the needed skills. In addition, public investment could be directed towards potential employers in the form of incentives to hire these young people.

Other findings

- On average across OECD countries in 2011, **47% of 15-29 year-olds were in education. Of the remaining 53%, 37% held a job, 7% were unemployed, and 9% were outside of the labour force**.
- In 2011, a typical **15-year-old in an OECD country could expect to spend about 7.1 additional years in formal education (compared to 6.8 years in 2007)**. In addition, before turning 30, he/she could expect to hold a job for 5.6 years, to be unemployed for a total of 1 year, and to be out of the labour force – that is, neither in education nor seeking work – for 1.4 years.
- **Women between 15 and 29 years old were twice as likely as men of that age to be inactive**. During that period, they could expect to be completely out of the labour force for 1.9 years, compared to 0.9 years for men.
- On average across OECD countries, in 2011, **14% of 25-29 year-olds who had not completed upper secondary education were unemployed as compared with 8% of those who had completed upper secondary or post-secondary non-tertiary education, and 6% of 25-29 year-olds who had completed tertiary education**.

Trends

Governments' efforts to improve educational attainment among their populations have resulted in significant changes in participation in education over the years. In 2000, an average of 41% of 15-29 year-olds in OECD countries were in education; by 2011, that proportion had grown to 47% (Table C5.4a).

During the same period, the proportion of 15-29 year-olds not in education but employed fell from 44% to 37%. While the percentage of individuals in education increased steadily between 2000 and 2011, trends in youth employment have been marked by two periods of large drops: between 2000 and 2003 (-3.3 percentage points) and between 2008 and 2011 (-3.7 percentage points). These decreases in youth employment coincided with the burst of the so-called "Internet bubble" (2000-03) and the burst of the real estate bubble in 2008. The proportion of 15-29 year-olds neither employed nor in education or training (NEET) remained stable at around 15% between 2000 and 2011 (Table C5.4a).

Analysis

Transition from education to work and the crisis

The transition from education to work is affected by the prevailing economic conditions – as was made evident during the last economic crisis. In 2000, an average of 44% of 15-29 year-olds in OECD countries were not in education, but employed. In 2008, this proportion fell to 41% and dropped again in 2011 to 37%. The rates for those neither in education nor employed changed only marginally from 15% in 2000 to 14% in 2008 to 16% in 2011 (Table C5.4a).

The worsening conditions in the labour market between 2008 and 2011 had different impacts on 15-19 year-olds and 25-29 year-olds. In 2011, the large majority of 15-19 year-olds (about 86%, on average across OECD countries) were still in education, a 2 percentage-point increase from 2008. This increase in the proportion of 15-19 year-olds in education coincided with a 2 percentage-point decrease in the proportion of 15-19 year-olds employed and not in education. During the same period of time, the proportion of 15-19 year-olds employed and not in education fell from 8.5% in 2008 to 6.2% in 2011. For those neither in education nor employed, the proportion remain stable at roughly 8%. Among 25-29 year-olds, the proportion of those in education increased from 14% in 2008 to 16% in 2011, on average across OECD countries, while employment rates for those not in education fell from 68% to 64% during the same period. That drop in the employment rate of 25-29 year-olds not in education is linked to a 1 percentage-point increase in the proportion of 25-29 year-olds in education (from 14.4% in 2008 to 15.8% in 2011), and a 3 percentage-point increase in proportion of 25-29 year-olds neither in education nor employed (from 17.4% in 2008 to 20% in 2011) (Table C5.4a).

The transition between education and work has typically been smoother in countries with work-study programmes at the upper secondary and post-secondary non-tertiary levels of education. Australia, Austria, Belgium, the Czech Republic, Germany, Italy, the Slovak Republic, Switzerland and the United Kingdom offer work-study programmes at these levels of education, although there is somewhat less participation in these programmes in Belgium and Italy (Table C5.2a).

Trend data show some signs of recovery, or at least improvements, between 2010 and 2011. During that period, 20 of 34 countries reported an increase in the proportion of 15-29 year-olds employed and no longer in education. The increase was above 3 percentage points in Estonia and Sweden. However, only 2012 data will be able to confirm whether that trend continues (Table C5.4a).

Young people in employment, including those in education and those not in education

The 15-29 year-olds

When unemployment rates rise, usually during periods of economic crisis, it may be more difficult for students to find a job. On average across OECD countries, 11% of 15-29 year-olds held a job while participating in education in 2011 (Table C5.2a).

In some countries, being a student and holding a job at the same time is common and may also reflect labour-market conditions and the structure of the education system (e.g. the availability of vocational education and training programmes). In Denmark and the Netherlands, more than 32% of 15-29 year-olds held a job while they also participated in education. As a result, the employment rate among the student population in this age group surpassed 50% in these countries, even among the youngest cohorts (Table C5.2a).

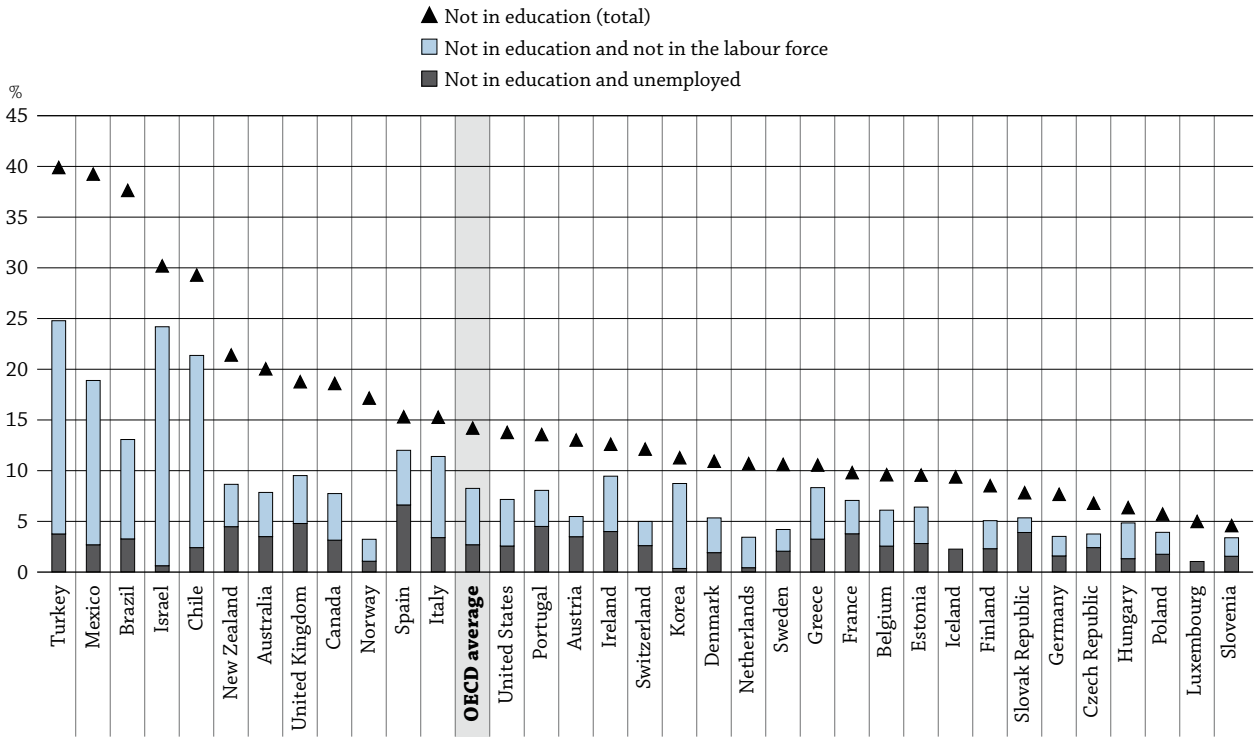
In Belgium, the Czech Republic, Greece, Hungary, Italy, the Slovak Republic and Spain, fewer than 5% of 15-29 year-olds held a job while in education, representing less than 12% of all students (Table C5.2d, available on line). Indicator A6 in this publication provides further information on student earnings.

The youngest cohort: 15-19 year-olds

Because access to upper secondary education has expanded over the years, fewer 15-19 year-olds are outside the education system. Those not engaged in employment, education or training are at particular risk. Individuals without upper secondary education are less likely to participate in continuous education or training and

lifelong learning, and have lower-paying jobs than secondary school graduates. Since they earn lower wages, they also pay less taxes, which translates into lower income-tax revenues (OECD, 2012a). They are also more likely to rely on public assistance – although they receive little or no support from welfare systems in most countries. Compared with older age groups, they are twice as likely to give up looking for work and lose contact with the labour market (Quintini et al., 2007).

Chart C5.2. Percentage of 15-19 year-olds not in education and unemployed or not in the labour force (2011)



Note: Missing bars refer to cells below reliability thresholds.
Countries are ranked in descending order of the percentage of 15-19 year-olds not in education.
Source: OECD. Table C5.2d, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847659

The employment rate among 15-19 year-olds varies across countries. When the labour market deteriorates, young people making the transition from school to work are often the first to encounter difficulties. Employers tend to prefer more experienced workers for the few jobs on offer. Some countries are more successful than others in providing employment for 15-19 year-olds (indicated by the difference between the bars and the triangles in Chart C5.2). In Australia, Austria, Brazil, Canada, Denmark, Germany, Iceland, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Sweden and Switzerland, one young adult out of two who is no longer in education is employed. In Denmark and Iceland, employment rates among 15-19 year-olds no longer in education remain relatively high, despite the drops that occurred between 2008 and 2011. Conversely, in Greece, Hungary, Israel (because of military conscription), Korea and Spain, fewer than one young adult in four who is no longer in education is employed (Chart C5.2).

Young people neither in employment nor in education or training (NEET)

Young adults leaving school and entering a difficult labour market may be unemployed or may exit the labour force entirely. Unemployment and employment rates are useful indicators of how young people engage in the labour market, but these individuals are particularly likely to drop out of the labour force and become inactive (i.e. not employed and not looking actively for a job; see *Definitions* section below). While increasing numbers

of young people tend to stay in education beyond the age of compulsory schooling and are counted as inactive individuals too, it would be inappropriate to consider these young people as a high-risk group. Consequently, the proportion of young people neither in employment nor in education or training is a better measure of the difficulties young adults face in finding a job, as it includes not only inactive but also unemployed youth.

On average across OECD countries, 16% of 15-29 year-olds were neither employed nor in education or training in 2011 (7% unemployed and 9% inactive), as were 8% of 15-19 year-olds (2.7% unemployed and 5.8% inactive), and 20% of 25-29 year-olds (8% unemployed and 12% inactive). Inactivity is more of a problem among the NEET population than unemployment is among all age cohorts. The 6% of inactive individuals among 15-19 year-olds represented 40% of 15-19 year-olds not in education. The 12% of inactive young adults among 25-29 year-olds represented 14% of all 25-29 year-olds not in education (Table C5.2d, available on line, and Chart C5.3). These proportions grew by 2 percentage points between 2010 and 2011 (OECD, 2012b).

A large NEET population often reflects a declining economic situation; it can also indicate a break in the traditional pathway from school to work. In some countries, the NEET population is a source of concern for authorities, because people who are not in education or the labour force may be more likely to be involved in the "informal" economy (i.e. that part of an economy that is not taxed, monitored by any part of government, or included in any calculation of gross national product, unlike the formal economy). Individuals in the NEET population are also less likely to be reintegrated into the labour market and more likely to experience long-term effects on their future employment and earnings prospects, which, in turn, may result in a loss of human capital and foregone tax revenues for national economies. Many studies have confirmed the association between unemployment and poor mental health, including depression, which may also translate into extra social costs for society (OECD, 2008).

During the recent economic crisis, the number of NEETs increased as employment among young people and low-skilled workers fell sharply. While unemployment rates will probably fall as the world's economies recover, it will be more difficult for governments to integrate the population of young people who have withdrawn from the labour market entirely.

In Chile, Greece, Ireland, Israel, Italy, Mexico, Spain and Turkey, more than 20% of 15-29 year-olds were neither in education nor employment in 2011. Unemployment levels are particularly worrying in Greece (14.6%) and Spain (17.0%), as is inactivity among young people in those countries (7.1% and 7.5%, respectively). In Chile, Israel, Italy, Korea, Mexico and Turkey, more than 15% of people in this age group were inactive and 8% or fewer were unemployed in 2011.

The size of the NEET population can also be influenced by other factors. In Brazil, Chile, Mexico and Turkey, for example, the high percentage of NEETs may reflect the large proportion of women who are neither employed nor in education or training because they are raising families.

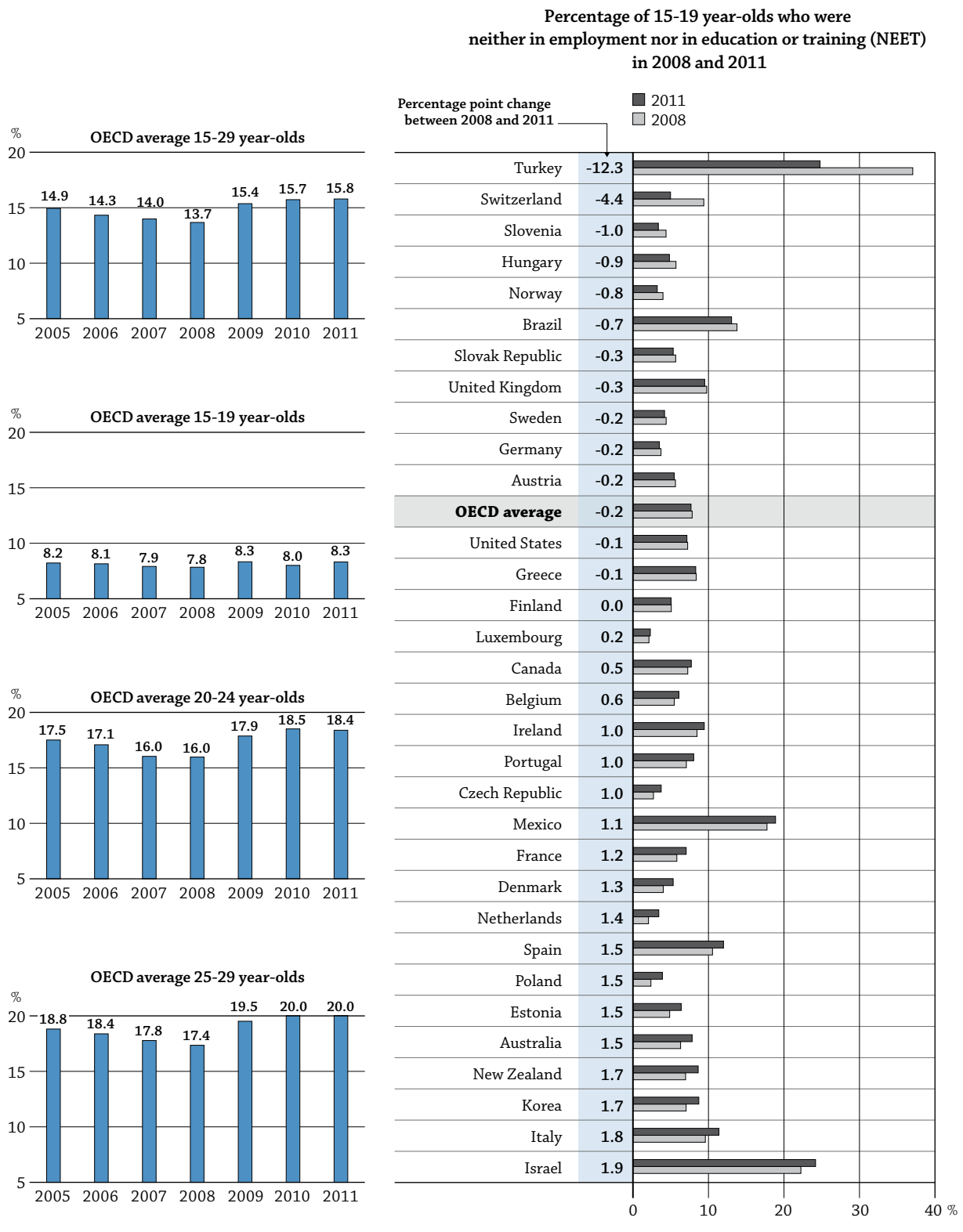
In Austria, Iceland, Luxembourg, the Netherlands, Norway, Sweden and Switzerland, fewer than 10% of 15-29 year-olds were neither in education or nor employed. In Iceland and Sweden, unemployment is a larger problem than inactivity. In Luxembourg, there are nearly equal proportions of inactive (3.7%) and unemployed (3.6%) young people, while in Austria, the Netherlands, Norway and Switzerland, inactivity is a larger problem than unemployment (Table C5.2a).

On average across OECD countries in 2011, 18% of 15-29 year-old women were NEET (12% inactive and 6% unemployed) as were 13% of 15-29 year-old men (7% unemployed and 6% inactive) (Tables C5.2b and c, available on line).

Higher levels of education reduce the rate of unemployment

Completing upper secondary education dramatically reduces the unemployment rate among 25-29 year-olds who are not in school. On average across OECD countries, 14.0% of 25-29 year-olds who had completed below upper secondary education were unemployed in 2011, 7.9% of those who had completed upper secondary education were unemployed, and 6.5% of those who had completed tertiary education were unemployed.

Chart C5.3. Change in the percentage of NEETs across different age groups[1] (2005-2011)



1.Young people who are neither in employment nor in education or training.

Countries are ranked in ascending order of the percentage-point difference in the proportion of NEETs between 2008 and 2011.

Source: OECD. Table C5.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847678

Since it has become the norm in most OECD countries to complete upper secondary education (see Indicator A2), those who do not are potentially more likely to have difficulties finding employment when they enter the labour market. In Ireland, the Slovak Republic and Spain, at least 25% of 25-29 year-olds who have not attained an upper secondary education are not in school and are unemployed (Table C5.5b, available on line).

The incidence of long-term unemployment decreases as the level of educational attainment rises. On average across OECD countries, the proportion of 25-29 year-olds who are not in school, and who have been unemployed for more than six months is 9.3% among those with below upper secondary education, 5.1% among those with upper secondary education, and 3.7% among those with tertiary education (Table C5.5b, available on line).

Full-time, part-time, and involuntary part-time work

Part-time work is positive when voluntary; but of the 15 countries with available data on involuntary part-time work, Belgium, Canada, Chile, Italy, Poland, Spain and Sweden report more than half of part-time work as involuntary for young people no longer in education (Table C5.3a). When part-time work is involuntary it signals that individuals are having difficulty finding full-time jobs, and suggests that this employment is precarious. A part-time worker will progress more slowly up the salary and experience scales than a full-time worker, making it potentially more difficult for the individual to "catch up", in pay and in status in the work force, with his or her full-time peers (OECD, 2010).

Job quality appears to be an issue among many young workers. In 2011, 5% of 15-29 year-olds no longer in education were part-time workers; 32% worked full time. In Australia, Belgium, Canada, Denmark, France, Iceland, Ireland, the Netherlands, New Zealand, Norway, the United Kingdom and the United States, between 6% and almost 10% of 15-29 year-olds worked part-time after education (Table C5.7).

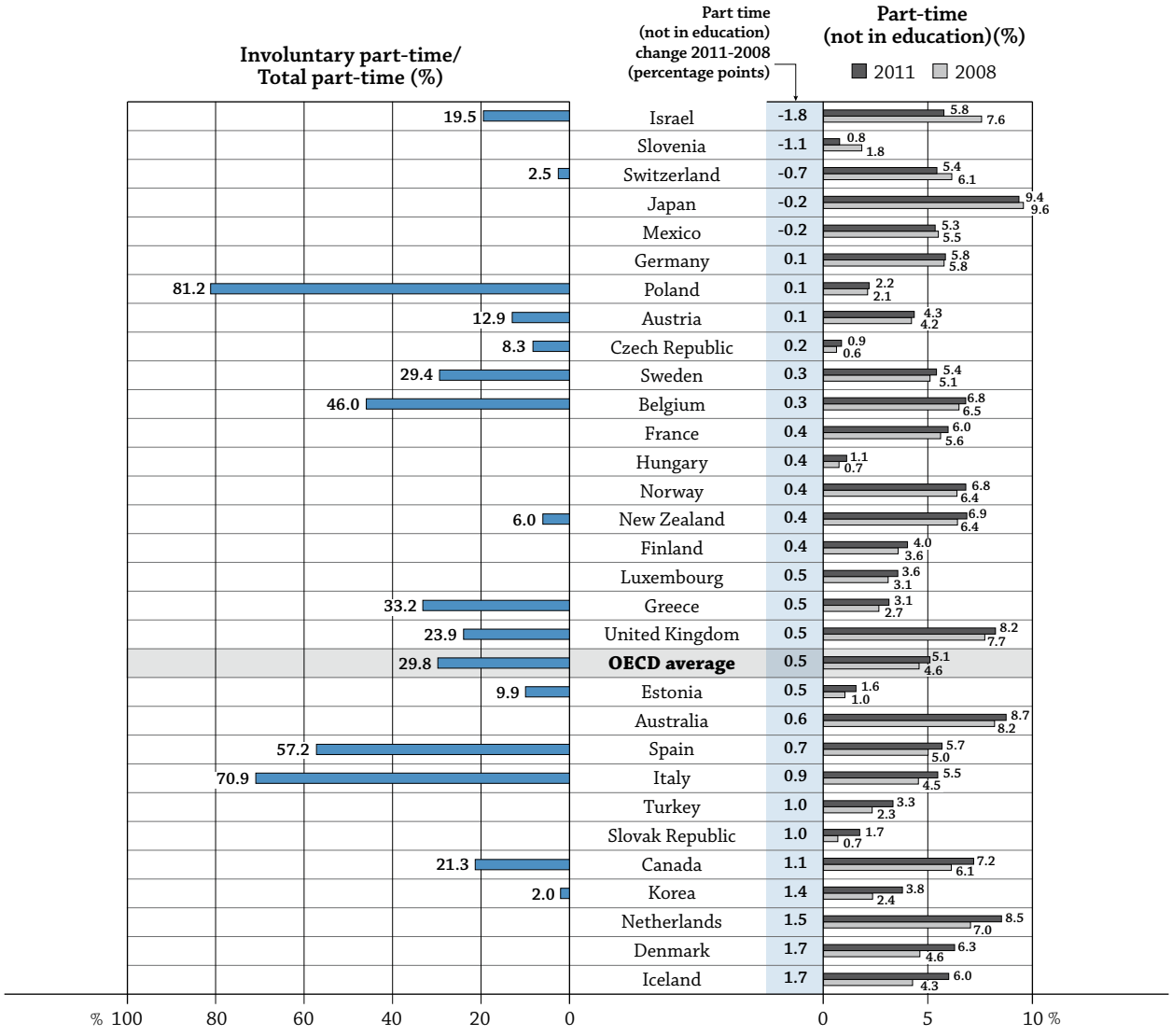
Many young people working part time want to work more. On average across the 17 countries that reported on involuntary part-time work or on people wishing to work more and available to do so, about a third of 15-29 year-olds are underemployed part-time workers. This proportion varies widely from fewer than 10% in the Czech Republic, Estonia, Korea, New Zealand and Switzerland, to almost 60% in Chile and Spain, 70% in Italy, and more than 80% in Poland. No correlation is apparent between part-time underemployment and the size or evolution of part-time employment (Chart C5.4). Considering countries in the European Union, CEDEFOP reported that "compared to 2008, the share of young people who work part-time although they would like to have a full-time job increased in all EU countries except for Germany, where it remained at a similar level" (CEDEFOP, 2012).

While further education improves young people's economic opportunities, the downturn in the global economy over the past several years has made it difficult for young people to find work. On average across OECD countries, in 2011 the proportion of 15-29 year-olds no longer in education and working part-time increased as the education level increased: 3% for those who completed below upper secondary education, 6% for those who completed upper secondary, and 7% for those who completed tertiary education. As individuals with higher education are more likely to work, the relative share of part-time work in employment shrinks as education levels rise: 11% of employed 15-29 year-olds with tertiary education who are no longer in education work part time (7.5% of 63.6%), while 18% of employed 15-29 year-olds with below upper secondary education who are no longer in education work part time (3.2% of 16.7%). The relative share of involuntary part-time work in employment also decreases as the education level increases: 6% of employed 15-29 year-olds with tertiary education who are no longer in education work part time involuntarily (3.9% of 63.6%), while 9% of employed 15-29 year-olds with below upper secondary education who are no longer in education work part time involuntarily (1.5% of 16.7%) (Table C5.6).

The gender gap in part-time employment among young people who are no longer in school is significant (OECD, 2012c). On average across the 34 OECD countries, in 2011, 15-29 year-old women were twice as likely (6%) as men (3%) of the same age to be part-time workers when no longer in education. Across the 17 countries that reported information on involuntary part-time work, the proportion of young women working part time involuntarily was larger than that of men (3% versus 2%); but as a proportion of total

part-time employment, according to gender, the share of involuntary part-time work was larger among men than women. Men are less likely to work part time; and when they do, it is less likely to be their choice (Tables C5.3b and c, available on line).

Chart C5.4. Involuntary part-time 15-29 year-old workers among total part-time workers (2011), and change in part-time employment (2008-11)



Countries are ranked in ascending order of the percentage-point difference of part-time workers among 15-29 year-olds no longer in education between 2008 and 2011.

Source: OECD. Table C5.7. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847697

Expected years in education

On average across OECD countries, in 2011, individuals spent 7 years in education and almost 8 years not in education between the ages of 15 and 29 (Table C5.1a).

In most OECD countries, education policies encourage young people to complete at least upper secondary education. The effect of these efforts is seen in young people's participation in education beyond compulsory schooling. In addition, the average number of years of formal education expected after compulsory schooling has changed considerably over the past decade (Table C5.4a).

In 2011, in all countries except Chile, Germany, Ireland, Japan, Korea, Luxembourg, Mexico, the Netherlands, Switzerland and Turkey, young women spent more time in education than young men. Only in Brazil are young women are expected to spend the same number of years studying (5 years) as their male counterparts. In the Slovak Republic and Slovenia, young women are likely to spend one full year more in education than their male counterparts. On average, 15-29 year-old men are expected to spend 7 years in education, 6 years employed, 1 year unemployed and almost 1 year out of the labour force; 15-29 year-old women are expected to spend 7 years studying, 5 years employed, less than one year unemployed, and almost 2 years out of the labour force (Tables C5.1b and c, available on line).

Definitions

Employed individuals includes individuals employed according to the ILO definition, but excludes those attending work-study programmes who are already counted. Please refer to A5 and Annex 3 for further explanations.

Full-time workers are those working usually 30 hours or more on their main job. A threshold ranging from 30 to 36 working hours is applied in a number of countries while others report self-designated full time status. Please refer to A6 and Annex 3 for further explanation.

Inactive individuals are those who are not in the labour force, including those who are neither working nor unemployed, i.e. individuals who are not looking for a job. Please refer to A5 and Annex 3 for further explanations.

NEET: Young people neither in employment nor in education or training.

Part-time work is split between voluntary part-time, involuntary part-time and unknowns. Involuntary part-time comprises the following three categories, as measured in labour-force surveys: persons who usually work full-time, but during the reference week worked fewer hours than usual at their job for economic reasons, irrespective of how many fewer hours, or who worked part-time for economic reasons; persons who usually work part-time because they cannot find a full-time job; and persons who usually work part-time for reasons other than the inability to find full-time work and who worked fewer hours than usual at their job during the reference week for economic reasons. Involuntary part-time includes also people wanting to work more hours, not necessarily full-time.

Unemployed individuals are those who are, during the survey reference week, without work (i.e. neither had a job nor were at work for one hour or more in paid employment or self-employment), actively seeking employment (i.e. had taken specific steps during the four weeks prior to the reference week to seek paid employment or self-employment), and currently available to start work (i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week). Please refer to A5 and Annex 3 for further explanations.

Methodology

Data for this indicator are collected as part of the annual OECD Labour Force Survey (for certain European countries the data are from the annual European Labour Force Survey; see Annex 3) and usually refer to the first quarter, or the average of the first three months of the calendar year, thereby excluding summer employment.

Some discrepancies may exist in the data collected. Some countries may refer to all jobs instead of main job, or part time may refer to less than 35 hours per week instead of 30 hours. Details regarding coverage of involuntary part-time work are available in Annex 3.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator C5 Tables

	Table C5.1a	**Expected years in education and not in education for 15-29 year-olds, by work status (2011)**
	StatLink	http://dx.doi.org/10.1787/888932850889
WEB	Table C5.1b	Expected years in education and not in education for 15-29 year-old men, by work status (2011)
	StatLink	http://dx.doi.org/10.1787/888932850908
WEB	Table C5.1c	Expected years in education and not in education for 15-29 year-old women, by work status (2011)
	StatLink	http://dx.doi.org/10.1787/888932850927
WEB	Table C5.1d	Trends in expected years in education and not in education for 15-29 year-olds, by gender (1999-2011)
	StatLink	http://dx.doi.org/10.1787/888932850946
	Table C5.2a	**Percentage of 15-29 year-olds in education and not in education, by work status, including duration of unemployment (2011)**
	StatLink	http://dx.doi.org/10.1787/888932850965
WEB	Table C5.2b	Percentage of 15-29 year-old men in education and not in education, by work status, including duration of unemployment (2011)
	StatLink	http://dx.doi.org/10.1787/888932850984
WEB	Table C5.2c	Percentage of 15-29 year-old women in education and not in education, by work status, including duration of unemployment (2011)
	StatLink	http://dx.doi.org/10.1787/888932851003
WEB	Table C5.2d	Percentage of young people in education and not in education, by age group and work status, including duration of unemployment (2011)
	StatLink	http://dx.doi.org/10.1787/888932851022
	Table C5.3a	**Percentage of 15-29 year-olds in education and not in education, by work status, including part-time workers (2011)**
	StatLink	http://dx.doi.org/10.1787/888932851041
WEB	Table C5.3b	Percentage of 15-29 year-old men in education and not in education, by work status, including part-time workers (2011)
	StatLink	http://dx.doi.org/10.1787/888932851060

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WEB	Table C5.3c	Percentage of 15-29 year-old women in education and not in education, by work status, including part-time workers (2011) StatLink http://dx.doi.org/10.1787/888932851079
WEB	Table C5.3d	Percentage of young people in education and not in education, by 5-year age group and work status, including part-time workers (2011) StatLink http://dx.doi.org/10.1787/888932851098
	Table C5.4a	Trends in the percentage of young people in education and not in education, employed or not, by 5-year age group (1997-2011) StatLink http://dx.doi.org/10.1787/888932851117
WEB	Table C5.4b	Trends in the percentage of young men in education and not in education, employed or not, by 5-year age group (1997-2011) StatLink http://dx.doi.org/10.1787/888932851136
WEB	Table C5.4c	Trends in the percentage of young women in education and not in education, employed or not, by 5-year age group (1997-2011) StatLink http://dx.doi.org/10.1787/888932851155
WEB	Table C5.4d	Trends in the percentage of 15-29 year-olds in education and not in education, employed or not, by educational attainment (2006-11) StatLink http://dx.doi.org/10.1787/888932851174
	Table C5.5a	Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including duration of unemployment (2011) StatLink http://dx.doi.org/10.1787/888932851193
WEB	Table C5.5b	Percentage of 25-29 year-olds in education and not in education, by educational attainment and work status (2011) StatLink http://dx.doi.org/10.1787/888932851212
	Table C5.6	Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including part-time (PT) workers (2011) StatLink http://dx.doi.org/10.1787/888932851231
	Table C5.7	Trends in the percentage of 15-29 year-old part-time (PT) and full-time (FT) workers in education and not in education (2006-11) StatLink http://dx.doi.org/10.1787/888932851250

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Table C5.1a. Expected years in education and not in education for 15-29 year-olds, by work status (2011)

		Expected years in education			Expected years not in education			
		Not employed	Employed (including work-study programmes)[1]	Sub-total	Employed	Unemployed	Not in the labour force	Sub-total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD	Australia	3.1	3.8	6.8	6.4	0.6	1.1	8.2
	Austria	4.1	2.8	6.9	6.7	0.6	0.9	8.1
	Belgium	6.4	0.7	7.1	5.9	0.9	1.2	7.9
	Canada	3.9	2.6	6.6	6.5	0.9	1.1	8.4
	Chile	5.5	1.0	6.6	4.9	0.8	2.8	8.4
	Czech Republic	5.8	1.4	7.2	5.9	0.8	1.1	7.8
	Denmark	4.0	4.8	8.9	4.5	0.7	0.9	6.1
	Estonia	5.6	1.6	7.2	5.5	1.2	1.1	7.8
	Finland	6.0	2.4	8.4	4.8	0.8	1.0	6.6
	France	5.8	0.9	6.7	5.8	1.4	1.1	8.3
	Germany	4.8	2.9	7.7	5.7	0.7	1.0	7.3
	Greece	6.4	0.3	6.8	5.0	2.2	1.1	8.2
	Hungary	6.9	0.3	7.3	5.0	1.1	1.6	7.7
	Iceland	5.0	4.0	9.0	4.8	0.8	0.4	6.0
	Ireland	5.2	1.1	6.3	5.4	1.8	1.5	8.7
	Israel	4.6	1.6	6.2	4.7	0.5	3.7	8.8
	Italy	6.4	0.4	6.8	4.7	1.2	2.3	8.2
	Japan[2]	5.3	0.9	6.2	2.8	0.3	0.7	3.8
	Korea	6.1	0.8	6.9	5.3	0.4	2.4	8.1
	Luxembourg	7.4	0.9	8.2	5.7	0.5	0.5	6.8
	Mexico	4.0	1.0	5.1	6.2	0.6	3.1	9.9
	Netherlands	3.4	4.9	8.2	5.7	0.3	0.8	6.8
	New Zealand	4.3	2.6	6.9	6.0	0.7	1.4	8.1
	Norway	4.6	2.3	6.9	6.8	0.4	0.9	8.1
	Poland	6.0	1.2	7.2	5.5	1.1	1.2	7.8
	Portugal	5.9	0.8	6.7	6.0	1.5	0.8	8.3
	Slovak Republic	6.1	0.7	6.8	5.3	1.6	1.2	8.2
	Slovenia	6.5	2.5	9.0	4.4	1.0	0.6	6.0
	Spain	5.7	0.7	6.4	5.0	2.5	1.1	8.6
	Sweden	6.2	1.7	7.9	5.8	0.7	0.6	7.1
	Switzerland	3.1	4.0	7.1	6.5	0.6	0.8	7.9
	Turkey	3.9	0.8	4.8	5.0	1.1	4.1	10.2
	United Kingdom	4.2	2.1	6.2	6.5	1.0	1.3	8.8
	United States	4.7	2.3	7.0	5.6	0.9	1.5	8.0
	OECD average (excluding Japan)	5.2	1.9	7.1	5.6	1.0	1.4	7.9
	EU21 average	5.7	1.7	7.3	5.5	1.1	1.1	7.7
Other G20	Argentina	m	m	m	m	m	m	m
	Brazil	3.1	1.9	5.0	7.1	0.9	2.0	10.0
	China	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850889

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Table C5.2a. Percentage of 15-29 year-olds in education and not in education, by work status, including duration of unemployment (2011)

		In education						Not in education							Total in education and not in education
				Unemployed						Unemployed					
		Students in work-study programmes[1]	Other employed	For any length of time	Less than 6 months	Not in the labour force	Sub-total	Employed	NEETs[2]	For any length of time	Less than 6 months	More than 6 months	Not in the labour force	Sub-total	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (9) + (12)	(9) = (10) + (11) + unknowns	(10)	(11)	(12)	(13)	(14)
OECD	Australia	4.0	21.1	2.4	1.9	18.1	45.6	42.9	11.5	3.9	2.8	1.1	7.6	54.4	100
	Austria	9.0	9.6	1.1	0.9	26.1	45.8	44.5	9.8	3.9	2.4	1.5	5.8	54.2	100
	Belgium	1.0	3.5	0.7	0.3	41.9	47.0	39.1	13.9	6.1	2.8	3.2	7.8	53.0	100
	Canada	a	17.6	2.6	2.3	23.5	43.7	43.0	13.3	5.7	4.8	0.8	7.5	56.3	100
	Chile	a	6.8	1.8	1.7	35.2	43.8	32.5	23.7	5.4	5.1	0.2	18.3	56.2	100
	Czech Republic	5.9	3.6	0.4	0.3	38.1	48.0	39.3	12.7	5.3	2.3	3.0	7.4	52.0	100
	Denmark	a	32.1	4.6	3.5	22.4	59.1	29.9	11.0	4.9	3.5	1.4	6.0	40.9	100
	Estonia	a	10.9	1.9	1.2	35.4	48.2	36.6	15.2	8.1	2.8	5.3	7.0	51.8	100
	Finland	a	16.0	4.3	3.9	35.6	56.0	32.3	11.8	5.2	3.8	1.3	6.6	44.0	100
	France	a	5.9	0.4	0.3	38.4	44.6	39.0	16.4	9.3	4.4	4.8	7.1	55.4	100
	Germany	10.7	8.5	0.8	0.6	31.0	51.1	37.9	11.0	4.6	2.1	2.4	6.4	48.9	100
	Greece	a	2.2	1.2	0.6	41.6	45.0	33.2	21.8	14.6	5.3	9.4	7.1	55.0	100
	Hungary	a	2.2	0.3	c	45.8	48.4	33.1	18.5	7.6	2.6	5.0	10.9	51.6	100
	Iceland	a	26.6	4.2	3.3	29.3	60.1	32.0	7.9	5.1	3.6	c	2.9	39.9	100
	Ireland	a	7.1	1.1	0.5	33.5	41.7	36.3	22.0	12.0	3.3	8.6	10.0	58.3	100
	Israel	a	10.5	0.8	0.6	29.8	41.1	31.3	27.6	3.3	2.3	0.8	24.4	58.9	100
	Italy	0.1	2.5	0.7	0.3	42.2	45.5	31.3	23.2	8.2	2.8	5.4	15.0	54.5	100
	Japan[3]	a	9.1	0.3	m	52.9	62.3	27.6	10.1	3.1	m	m	7.0	37.7	100
	Korea	a	5.2	0.5	0.5	40.2	45.9	35.3	18.8	2.8	2.6	0.2	16.0	54.1	100
	Luxembourg	a	5.9	0.9	0.8	48.2	54.9	37.8	7.2	3.6	1.7	1.9	3.7	45.1	100
	Mexico	a	6.9	0.6	0.5	26.4	33.9	41.4	24.7	3.9	3.4	0.3	20.8	66.1	100
	Netherlands	a	32.4	2.5	m	20.0	54.9	38.2	6.9	1.8	m	m	5.1	45.1	100
	New Zealand	a	17.4	3.7	2.7	24.7	45.8	39.9	14.3	4.9	3.5	1.2	9.4	54.2	100
	Norway	a	15.3	1.8	1.6	29.0	46.1	45.4	8.5	2.8	1.9	0.7	5.7	53.9	100
	Poland	a	7.8	1.8	1.0	38.4	47.9	36.4	15.7	7.5	3.4	4.1	8.3	52.1	100
	Portugal	a	5.3	2.0	1.0	37.5	44.8	39.9	15.3	10.2	4.4	5.8	5.1	55.2	100
	Slovak Republic	2.8	2.1	0.3	c	40.1	45.4	35.4	19.1	10.9	2.4	8.5	8.2	54.6	100
	Slovenia	a	16.9	2.1	1.1	41.2	60.2	29.1	10.7	6.7	2.9	3.8	4.0	39.8	100
	Spain	a	4.7	3.1	1.2	34.6	42.5	33.1	24.4	17.0	5.9	10.3	7.5	57.5	100
	Sweden	a	11.1	6.1	4.4	35.4	52.6	38.4	9.0	4.9	3.5	1.1	4.1	47.4	100
	Switzerland	14.9	11.9	1.3	0.7	19.5	47.6	43.4	9.0	3.8	2.1	1.7	5.2	52.4	100
	Turkey	a	5.5	1.5	0.8	24.8	31.8	33.5	34.6	7.1	4.1	3.0	27.6	68.2	100
	United Kingdom	2.4	11.3	2.6	1.6	25.2	41.4	43.1	15.5	6.7	3.5	3.2	8.8	58.6	100
	United States	a	15.1	2.4	1.7	29.2	46.7	37.4	15.9	5.9	3.5	2.5	9.9	53.3	100
	OECD average (excluding Japan)		11.0	1.9	1.4	32.8	47.2	37.0	15.8	6.5	3.3	3.3	9.3	52.8	100
	EU21 average		9.6	1.9	1.3	35.8	48.8	36.4	14.8	7.6	3.3	4.5	7.2	51.2	100
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	a	12.5	2.6	m	18.2	33.4	47.2	19.3	5.8	m	m	13.6	66.6	100
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds who are neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932850965

Table C5.3a. Percentage of 15-29 year-olds in education and not in education, by work status, including part-time workers (2011)

		In education							Not in education						Total in education and not in education
		Students in work-study programmes[1] + Other employed	Employed, including			Unemployed	Not in the labour force	Sub-total	Employed	Employed, including			NEETs[2]	Sub-total	
			Full time	Part time (PT)	Voluntary PT					Full time	Part time (PT)	Involuntary PT			
		(1)	(2)	(3) = (4) + involuntary PT + unknowns	(4)	(5)	(6)	(7)	(8)	(9)	(10) = (11) + voluntary PT + unknowns	(11)	(12)	(13)	(14)
OECD	Australia	25.2	8.6	16.6	m	2.4	18.1	45.6	42.9	34.1	8.7	m	11.5	54.4	100
	Austria	18.6	12.4	6.2	6.0	1.1	26.1	45.8	44.5	40.1	4.3	1.2	9.8	54.2	100
	Belgium	4.4	1.9	2.2	1.8	0.7	41.9	47.0	39.1	32.3	6.8	3.8	13.9	53.0	100
	Canada	17.6	2.5	15.0	14.4	2.6	23.5	43.7	43.0	35.8	7.2	4.1	13.3	56.3	100
	Chile	6.8	4.3	2.5	1.4	1.8	35.2	43.8	32.5	28.9	3.7	2.2	23.7	56.2	100
	Czech Republic	9.6	2.5	1.1	1.1	0.4	38.1	48.0	39.3	38.4	0.9	c	12.7	52.0	100
	Denmark	32.1	7.2	24.9	m	4.6	22.4	59.1	29.9	23.6	6.3	m	11.0	40.9	100
	Estonia	10.9	7.8	3.1	3.1	1.9	35.4	48.2	36.6	35.1	1.6	c	15.2	51.8	100
	Finland	16.0	5.4	10.6	m	4.3	35.6	56.0	32.3	28.3	4.0	m	11.8	44.0	100
	France	5.9	4.0	1.8	m	0.4	38.4	44.6	39.0	33.0	6.0	m	16.4	55.4	100
	Germany	19.2	12.7	6.5	m	0.8	31.0	51.1	37.9	32.1	5.8	m	11.0	48.9	100
	Greece	2.2	1.3	0.9	c	1.2	41.6	45.0	33.2	30.1	3.1	0.7	21.8	55.0	100
	Hungary	2.2	1.6	0.4	m	0.3	45.8	48.4	33.1	29.9	1.1	m	18.5	51.6	100
	Iceland	26.6	5.1	21.5	m	4.2	29.3	60.1	32.0	26.0	6.0	m	7.9	39.9	100
	Ireland	7.1	2.0	5.1	m	1.1	33.5	41.7	36.3	29.0	7.3	m	22.0	58.3	100
	Israel	10.5	3.6	6.5	6.4	0.8	29.8	41.1	31.3	25.0	5.8	2.2	27.6	58.9	100
	Italy	2.6	1.2	1.4	1.0	0.7	42.2	45.5	31.3	25.9	5.5	4.4	23.2	54.5	100
	Japan[3]	9.1	m	9.1	m	0.3	52.9	62.3	27.6	18.2	9.4	m	10.1	37.7	100
	Korea	5.2	2.2	2.9	2.9	0.5	40.2	45.9	35.3	31.5	3.8	0.1	18.8	54.1	100
	Luxembourg	5.9	3.2	2.5	m	0.9	48.2	54.9	37.8	34.3	3.6	m	7.2	45.1	100
	Mexico	6.9	3.7	3.2	m	0.6	26.4	33.9	41.4	35.8	5.3	m	24.7	66.1	100
	Netherlands	32.4	7.3	24.5	24.5	2.5	20.0	54.9	38.2	29.7	8.5	m	6.9	45.1	100
	New Zealand	17.4	5.6	11.7	m	3.7	24.7	45.8	39.9	33.1	6.9	1.0	14.3	54.2	100
	Norway	15.3	c	15.0	m	1.8	29.0	46.1	45.4	37.6	6.8	m	8.5	53.9	100
	Poland	7.8	5.9	1.8	0.2	1.8	38.4	47.9	36.4	34.2	2.2	1.6	15.7	52.1	100
	Portugal	5.3	m	m	m	2.0	37.5	44.8	39.9	m	m	m	15.3	55.2	100
	Slovak Republic	4.9	1.8	0.3	m	0.3	40.1	45.4	35.4	33.7	1.7	m	19.1	54.6	100
	Slovenia	16.9	8.5	8.4	m	2.1	41.2	60.2	29.1	28.3	0.8	m	10.7	39.8	100
	Spain	4.7	2.1	2.7	2.1	3.1	34.6	42.5	33.1	27.4	5.7	4.3	24.4	57.5	100
	Sweden	11.1	2.5	8.5	7.3	6.1	35.4	52.6	38.4	32.8	5.4	2.8	9.0	47.4	100
	Switzerland	26.7	18.9	7.8	7.8	1.3	19.5	47.6	43.4	38.0	5.4	c	9.0	52.4	100
	Turkey	5.5	4.3	1.2	m	1.5	24.8	31.8	33.5	30.2	3.3	m	34.6	68.2	100
	United Kingdom	13.7	5.0	7.5	7.2	2.6	25.2	41.4	43.1	33.8	8.2	3.5	15.5	58.6	100
	United States	15.1	4.7	10.4	9.6	2.4	29.2	46.7	37.4	30.2	7.2	3.5	15.9	53.3	100
	OECD average (excluding Japan)	12.5	5.2	7.3	6.1	1.9	32.8	47.2	37.0	31.8	5.0	2.5	15.8	52.8	100
	EU21 average	11.1	4.8	6.0	5.4	1.9	35.8	48.8	36.4	31.6	4.4	2.8	14.8	51.2	100
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	12.5	8.9	3.7	m	2.6	18.2	33.4	47.2	42.6	4.7	m	19.3	66.6	100
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds who are neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851041

C5

Table C5.4a. [1/3] Trends in the percentage of young people in education and not in education, employed or not, by age group (1997-2011)[1]

		Age group	2000			2005			2008			2011		
			In education	Not in education		In education	Not in education		In education	Not in education		In education	Not in education	
			Total	Employed	Not employed	Total	Employed	Not employed	Total	Employed	Not employed	Total	Employed	Not employed
			(10)	(11)	(12)	(25)	(26)	(27)	(34)	(35)	(36)	(37)	(38)	(39)
OECD	Australia	15-19	79.5	13.7	6.8	78.3	14.3	7.4	79.4	14.3	6.3	80.0	12.2	7.8
		20-24	35.9	50.9	13.3	39.4	49.0	11.6	39.3	50.0	10.7	42.1	46.2	11.7
		25-29	15.5	65.5	19.0	16.6	68.0	15.4	15.4	70.5	14.1	18.9	66.6	14.6
		15-29	42.8	44.0	13.2	45.0	43.5	11.4	44.4	45.2	10.4	45.6	42.9	11.5
	Austria	15-19	m	m	m	84.4	8.7	6.9	84.3	10.0	5.6	87.0	7.5	5.5
		20-24	m	m	m	30.4	57.2	12.4	32.3	56.3	11.4	36.0	53.6	10.5
		25-29	m	m	m	12.0	74.6	13.4	14.6	71.7	13.7	19.1	68.1	12.8
		15-29	m	m	m	41.3	47.7	11.0	42.6	47.0	10.4	45.8	44.5	9.8
	Belgium	15-19	89.9	3.6	6.5	90.1	3.7	6.2	90.5	4.0	5.5	90.4	3.5	6.1
		20-24	43.8	40.2	16.0	38.1	43.6	18.3	41.5	44.4	14.1	43.1	39.8	17.1
		25-29	11.8	72.5	15.7	7.4	74.9	17.7	7.7	75.8	16.5	10.6	71.4	18.0
		15-29	46.9	40.2	12.9	44.4	41.4	14.2	45.9	42.0	12.1	47.0	39.1	13.9
	Canada	15-19	80.6	11.2	8.2	80.3	12.7	7.0	80.2	12.5	7.3	81.4	10.9	7.7
		20-24	35.8	48.5	15.7	39.2	46.4	14.5	38.9	48.1	13.0	40.1	45.3	14.6
		25-29	10.6	72.2	17.2	12.5	71.7	15.8	12.4	72.6	14.9	12.7	70.3	17.1
		15-29	42.5	43.9	13.7	44.0	43.5	12.4	43.8	44.5	11.7	43.7	43.0	13.3
	Chile	15-19	m	m	m	m	m	m	m	m	m	70.7	7.9	21.4
		20-24	m	m	m	m	m	m	m	m	m	39.9	35.2	24.9
		25-29	m	m	m	m	m	m	m	m	m	15.8	59.1	25.0
		15-29	m	m	m	m	m	m	m	m	m	43.8	32.5	23.7
	Czech Republic	15-19	82.1	10.0	7.9	90.3	4.4	5.3	92.7	4.5	2.7	93.2	3.0	3.7
		20-24	19.7	60.0	20.3	35.9	47.5	16.6	44.8	44.7	10.6	50.0	37.2	12.8
		25-29	2.4	72.1	25.6	4.4	72.4	23.2	11.1	71.2	17.7	11.9	68.6	19.5
		15-29	31.7	49.7	18.5	39.5	44.6	15.9	46.6	42.5	10.9	48.0	39.3	12.7
	Denmark	15-19	89.9	7.4	2.7	88.4	7.3	4.3	86.3	9.7	4.0	89.1	5.6	5.3
		20-24	54.8	38.6	6.6	54.4	37.2	8.3	51.3	40.6	8.2	55.8	32.3	11.9
		25-29	36.1	56.4	7.5	27.0	61.3	11.6	23.7	67.6	8.6	29.3	54.5	16.2
		15-29	57.7	36.5	5.8	55.5	36.3	8.2	54.3	38.8	6.9	59.1	29.9	11.0
	Estonia	15-19	m	m	m	92.0	2.9	5.2	88.8	6.3	4.9	90.5	3.2	6.4
		20-24	m	m	m	50.9	32.7	16.3	46.5	42.8	10.7	48.5	35.7	15.8
		25-29	m	m	m	14.2	61.8	24.0	14.9	66.6	18.5	17.6	61.6	20.8
		15-29	m	m	m	54.0	31.3	14.8	49.9	38.7	11.3	48.2	36.6	15.2
	Finland	15-19	m	m	m	90.2	4.5	5.2	90.3	4.6	5.1	91.5	3.4	5.1
		20-24	m	m	m	52.8	34.1	13.0	50.5	37.5	12.0	52.4	33.3	14.3
		25-29	m	m	m	25.7	60.3	14.0	29.2	58.4	12.4	26.5	57.9	15.6
		15-29	m	m	m	55.4	33.7	10.9	56.2	34.0	9.9	56.0	32.3	11.8
	France	15-19	88.2	4.8	7.0	90.5	3.2	6.3	90.3	3.9	5.8	90.2	2.7	7.1
		20-24	39.4	43.0	17.6	42.5	39.7	17.8	42.2	41.2	16.6	40.7	39.0	20.3
		25-29	5.9	73.7	20.4	5.1	75.1	19.8	5.2	75.1	19.7	4.9	73.6	21.5
		15-29	44.1	40.9	15.0	46.8	38.7	14.5	45.8	40.2	14.0	44.6	39.0	16.4
	Germany	15-19	87.4	6.8	5.7	92.9	2.7	4.4	92.4	3.9	3.7	92.3	4.1	3.5
		20-24	34.1	49.0	16.9	44.2	37.1	18.7	46.7	39.3	14.0	49.0	38.5	12.6
		25-29	12.7	69.8	17.5	18.5	60.3	21.2	19.2	63.8	17.0	18.5	65.8	15.7
		15-29	44.9	41.8	13.3	52.2	33.1	14.7	52.3	36.1	11.6	51.1	37.9	11.0
	Greece	15-19	82.6	8.1	9.3	82.2	6.1	11.7	86.8	4.8	8.4	89.5	2.2	8.3
		20-24	30.7	43.4	25.9	40.4	38.0	21.6	48.5	34.4	17.1	47.0	28.7	24.3
		25-29	5.1	65.8	29.2	6.4	69.8	23.7	8.9	70.0	21.1	9.8	60.2	30.0
		15-29	39.0	39.4	21.5	38.6	41.7	19.7	43.7	40.1	16.2	45.0	33.2	21.8
	Hungary	15-19	83.7	7.7	8.6	90.6	3.0	6.4	91.8	2.5	5.7	93.7	1.5	4.8
		20-24	32.3	45.7	22.0	46.6	34.5	18.9	48.4	33.2	18.4	47.9	29.7	22.4
		25-29	9.4	61.4	29.2	13.1	63.0	24.0	9.9	67.1	23.1	10.3	63.1	26.6
		15-29	40.7	39.1	20.2	46.3	36.5	17.2	47.2	36.5	16.3	48.4	33.1	18.5

1. Years 1997, 1998, 1999, 2001, 2002, 2003, 2004, 2006, 2007, 2009 and 2010 are available for consultation on line (see *Statlink* below).
Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932851117

Table C5.4a. [2/3] Trends in the percentage of young people in education and not in education, employed or not, by age group (1997-2011)[1]

		Age group	2000			2005			2008			2011		
			In education	Not in education		In education	Not in education		In education	Not in education		In education	Not in education	
			Total	Employed	Not employed	Total	Employed	Not employed	Total	Employed	Not employed	Total	Employed	Not employed
			(10)	(11)	(12)	(25)	(26)	(27)	(34)	(35)	(36)	(37)	(38)	(39)
OECD	Iceland	15-19	83.1	14.8	c	86.4	10.7	c	85.5	12.0	c	90.6	5.4	c
		20-24	48.0	47.7	c	53.0	37.1	10.0	56.7	39.8	c	58.7	32.8	8.5
		25-29	34.9	59.2	5.9	30.9	61.5	7.6	30.6	62.6	6.9	28.8	59.6	11.6
		15-29	56.0	39.9	4.1	57.0	36.2	6.8	57.5	38.2	4.3	60.1	32.0	7.9
	Ireland	15-19	80.0	15.6	4.4	82.4	13.1	4.5	81.4	10.1	8.5	87.4	3.1	9.4
		20-24	26.7	63.6	9.7	27.7	60.0	12.3	30.2	55.3	14.6	38.7	34.9	26.4
		25-29	3.3	83.4	13.3	5.3	80.9	13.8	10.1	75.6	14.3	10.6	61.3	28.1
		15-29	37.9	53.2	9.0	36.2	53.4	10.5	36.1	51.1	12.8	41.7	36.3	22.0
	Israel	15-19	m	m	m	68.9	6.3	24.7	70.7	7.1	22.2	69.8	6.0	24.2
		20-24	m	m	m	28.3	31.4	40.3	28.9	33.6	37.5	26.9	35.7	37.4
		25-29	m	m	m	21.4	54.3	24.2	24.0	53.1	22.9	27.4	51.2	21.5
		15-29	m	m	m	40.2	30.2	29.6	42.1	30.3	27.5	41.1	31.3	27.6
	Italy	15-19	77.1	9.8	13.1	81.8	7.0	11.2	84.5	5.9	9.6	84.7	3.9	11.4
		20-24	36.0	36.5	27.5	38.6	37.3	24.1	42.6	35.4	22.0	41.0	30.6	28.4
		25-29	17.0	56.1	26.9	14.4	59.8	25.8	15.5	60.0	24.5	16.2	55.3	28.4
		15-29	39.9	36.8	23.3	41.5	37.5	21.1	45.3	35.5	19.2	45.5	31.3	23.2
	Japan	15-24	62.1	29.2	8.8	59.7	31.5	8.8	58.6	34.0	7.4	62.3	27.6	10.1
	Korea	15-19	m	m	m	m	m	m	90.6	2.3	7.0	88.7	2.5	8.7
		20-24	m	m	m	m	m	m	41.1	36.7	22.2	42.3	34.4	23.3
		25-29	m	m	m	m	m	m	9.4	65.1	25.5	8.5	66.6	24.9
		15-29	m	m	m	m	m	m	44.8	36.7	18.5	45.9	35.3	18.8
	Luxembourg	15-19	92.2	6.1	c	93.4	4.4	2.2	94.0	3.8	2.1	95.0	2.7	2.3
		20-24	42.8	48.9	8.2	47.4	43.3	9.3	55.9	34.3	9.8	62.1	29.4	8.5
		25-29	11.6	75.5	12.9	8.6	81.2	10.3	11.2	75.8	13.0	12.8	76.6	10.5
		15-29	45.3	46.6	8.1	48.5	44.2	7.3	51.9	39.6	8.5	54.9	37.8	7.2
	Mexico	15-19	47.9	33.8	18.3	57.6	24.2	18.2	60.0	22.2	17.8	60.8	20.4	18.9
		20-24	17.7	55.2	27.1	24.3	48.7	27.0	25.1	48.4	26.5	26.2	46.6	27.2
		25-29	4.0	65.8	30.2	5.7	62.8	31.5	6.6	63.9	29.5	7.0	63.5	29.5
		15-29	25.4	50.0	24.6	31.9	43.2	24.9	33.7	42.5	23.9	33.9	41.4	24.7
	Netherlands	15-19	80.6	15.7	3.7	89.2	7.0	3.9	90.7	7.2	2.1	89.3	7.3	3.4
		20-24	36.5	55.2	8.2	49.1	41.8	9.1	52.1	42.3	5.6	55.2	37.9	6.9
		25-29	5.0	83.0	12.1	18.2	70.2	11.6	18.7	73.5	7.8	20.0	69.7	10.3
		15-29	38.1	53.6	8.3	52.1	39.7	8.2	54.3	40.6	5.1	54.9	38.2	6.9
	New Zealand	15-19	m	m	m	75.6	17.2	7.2	76.2	16.8	7.0	78.6	12.8	8.6
		20-24	m	m	m	39.3	46.7	14.0	39.9	46.0	14.1	40.5	43.0	16.5
		25-29	m	m	m	19.1	65.4	15.5	15.9	68.1	16.0	16.1	65.9	18.0
		15-29	m	m	m	46.4	41.7	12.0	45.7	42.2	12.1	45.8	39.9	14.3
	Norway	15-19	92.4	5.9	c	87.4	10.1	2.5	78.3	17.7	4.0	82.9	13.9	3.2
		20-24	41.7	50.3	8.0	41.5	48.9	9.6	39.3	53.6	7.0	41.0	48.6	10.4
		25-29	17.5	72.1	10.4	15.7	72.0	12.3	12.6	78.2	9.2	13.8	74.2	11.9
		15-29	48.4	44.6	7.0	48.6	43.4	8.1	44.1	49.2	6.8	46.1	45.4	8.5
	Poland	15-19	92.8	2.6	4.5	97.9	0.4	1.7	95.8	1.9	2.4	94.3	1.8	3.9
		20-24	34.9	34.3	30.8	62.7	17.2	20.1	56.8	27.6	15.6	51.6	29.7	18.7
		25-29	8.0	62.9	29.1	16.4	54.3	29.3	11.4	67.1	21.5	11.5	66.7	21.8
		15-29	43.8	34.1	22.1	55.7	26.0	18.4	52.5	33.8	13.7	47.9	36.4	15.7
	Portugal	15-19	72.6	19.7	7.7	79.3	12.2	8.4	81.7	11.2	7.1	86.5	5.5	8.0
		20-24	36.5	52.6	11.0	37.4	48.4	14.1	36.5	50.0	13.5	41.3	40.0	18.7
		25-29	11.0	76.6	12.5	11.5	73.6	14.9	11.9	73.0	15.1	15.2	66.7	18.1
		15-29	38.2	51.2	10.5	38.9	48.2	12.9	40.1	47.6	12.2	44.8	39.9	15.3
	Slovak Republic	15-19	67.3	6.4	26.3	90.4	3.3	6.3	90.6	3.8	5.7	92.2	2.5	5.3
		20-24	18.1	48.8	33.1	31.0	43.8	25.2	39.3	44.1	16.6	46.2	32.4	21.4
		25-29	1.3	66.9	31.8	6.1	64.9	29.0	6.5	68.7	24.7	8.3	63.9	27.8
		15-29	29.3	40.3	30.4	41.1	38.3	20.5	43.2	40.6	16.2	45.4	35.4	19.1

1. Years 1997, 1998, 1999, 2001, 2002, 2003, 2004, 2006, 2007, 2009 and 2010 are available for consultation on line (see *Statlink* below).

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851117

C5

Table C5.4a. [3/3] Trends in the percentage of young people in education and not in education, employed or not, by age group (1997-2011)[1]

		Age group	2000			2005			2008			2011		
			In education	Not in education		In education	Not in education		In education	Not in education		In education	Not in education	
			Total	Employed	Not employed	Total	Employed	Not employed	Total	Employed	Not employed	Total	Employed	Not employed
			(10)	(11)	(12)	(25)	(26)	(27)	(34)	(35)	(36)	(37)	(38)	(39)
OECD	Slovenia	15-19	m	m	m	92.4	2.7	4.9	92.2	3.4	4.4	95.4	1.2	3.4
		20-24	m	m	m	55.7	31.3	13.0	60.6	29.2	10.3	68.7	20.0	11.3
		25-29	m	m	m	24.6	63.9	11.5	26.9	63.2	9.9	27.1	57.3	15.6
		15-29	m	m	m	55.5	34.4	10.1	57.1	34.5	8.5	60.2	29.1	10.7
	Spain	15-19	80.6	11.4	8.0	78.2	11.0	10.8	78.9	10.5	10.5	84.7	3.3	12.0
		20-24	44.6	40.3	15.0	35.1	45.5	19.4	34.0	46.5	19.4	40.8	30.0	29.2
		25-29	16.2	62.4	21.4	10.9	69.3	19.8	9.5	71.5	18.9	13.2	57.1	29.6
		15-29	45.0	39.8	15.3	37.1	45.7	17.2	36.3	46.9	16.8	42.5	33.1	24.4
	Sweden	15-19	90.6	5.8	3.6	89.6	5.8	4.7	87.4	8.2	4.4	89.4	6.4	4.2
		20-24	42.1	47.2	10.7	42.5	44.1	13.4	39.5	47.5	12.9	43.4	43.7	12.9
		25-29	21.9	68.9	9.2	23.6	66.5	10.0	21.7	68.7	9.5	24.1	66.1	9.8
		15-29	50.2	41.9	7.9	52.9	38.0	9.2	51.3	39.9	8.7	52.6	38.4	9.0
	Switzerland	15-19	84.6	7.5	7.9	85.3	7.2	7.5	82.9	7.7	9.4	87.9	7.1	5.0
		20-24	37.4	56.7	5.9	37.9	50.3	11.9	42.7	48.2	9.1	41.5	47.8	10.7
		25-29	15.1	73.9	11.0	12.3	75.9	11.8	14.4	75.5	10.1	17.7	71.4	10.9
		15-29	45.1	46.6	8.3	44.4	45.2	10.4	46.0	44.5	9.6	47.6	43.4	9.0
	Turkey	15-19	39.2	29.6	31.2	45.8	18.1	36.1	44.7	18.2	37.1	60.1	15.1	24.8
		20-24	12.7	43.1	44.2	15.4	34.9	49.7	20.0	33.9	46.1	25.6	34.7	39.6
		25-29	2.9	58.8	38.3	4.0	50.2	45.8	4.9	51.6	43.5	8.9	50.9	40.2
		15-29	18.5	43.7	37.8	22.4	34.0	43.6	23.4	34.6	42.0	31.8	33.5	34.6
	United Kingdom	15-19	77.0	15.0	8.0	76.0	14.6	9.3	76.5	13.7	9.8	81.2	9.3	9.5
		20-24	32.4	52.2	15.4	32.1	51.0	16.8	28.3	53.4	18.3	33.1	47.8	19.1
		25-29	13.3	70.3	16.3	13.3	70.1	16.6	12.3	71.9	15.8	13.7	69.0	17.3
		15-29	40.0	46.6	13.3	41.2	44.6	14.2	38.2	47.1	14.8	41.4	43.1	15.5
	United States	15-19	81.3	11.7	7.0	85.6	8.3	6.1	85.2	7.6	7.2	86.2	6.6	7.1
		20-24	32.5	53.1	14.4	36.1	48.4	15.5	36.9	45.9	17.2	39.9	41.6	18.5
		25-29	11.4	72.8	15.8	11.9	70.0	18.1	13.2	67.3	19.5	14.8	63.4	21.7
		15-29	43.1	44.6	12.2	45.2	41.7	13.1	45.3	40.1	14.6	46.7	37.4	15.9
	OECD average	15-19	80.1	11.4	9.4	83.7	8.3	8.2	83.8	8.5	7.8	85.6	6.2	8.3
		20-24	34.7	48.2	17.7	40.3	42.2	17.5	41.8	42.6	16.0	44.2	37.5	18.4
		25-29	12.2	68.7	19.1	14.1	67.1	18.8	14.4	68.3	17.4	15.8	64.2	20.0
		15-29	41.4	43.6	15.1	45.1	39.9	14.9	45.7	40.7	13.7	47.2	37.0	15.8
	EU21 average	15-19	83.2	9.2	7.9	87.7	6.1	6.2	88.0	6.4	5.6	89.9	4.0	6.1
		20-24	35.6	47.0	17.3	42.6	41.2	16.1	44.2	41.9	13.9	47.3	35.4	17.3
		25-29	11.3	69.3	19.4	13.7	68.0	18.3	14.3	69.4	16.4	15.8	64.5	19.7
		15-29	41.9	43.0	15.0	46.4	39.8	13.8	47.2	40.6	12.2	48.8	36.4	14.8
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	15-19	m	m	m	m	m	m	69.1	17.2	13.8	62.4	24.6	13.1
		20-24	m	m	m	m	m	m	23.8	53.7	22.5	22.5	53.2	24.3
		25-29	m	m	m	m	m	m	12.2	67.1	20.7	11.1	67.3	21.6
		15-29	m	m	m	m	m	m	35.4	45.7	19.0	33.4	47.2	19.3
	China		m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m

1. Years 1997, 1998, 1999, 2001, 2002, 2003, 2004, 2006, 2007, 2009 and 2010 are available for consultation on line (see *Statlink* below).

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851117

Table C5.5a. [1/3] Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including duration of unemployment (2011)

		Completed level of education	In education						Not in education						Total in education and not in education
			Students in work-study programmes[1]	Other employed	Unemployed		Not in the labour force	Sub-total	Employed	NEETs[2]	Unemployed		Not in the labour force	Sub-total	
					For any length of time	More than 6 months					For any length of time	More than 6 months			
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (9) + (11)	(9)	(10)	(11)	(12)	(13)
OECD	**Australia**	0/1/2	5.2	19.2	3.6	3.0	33.6	61.5	23.3	15.3	5.1	1.7	10.2	38.5	100
		3/4	5.1	23.7	2.2	1.7	12.7	43.7	46.0	10.2	3.6	1.0	6.7	56.3	100
		5/6	0.5	18.8	1.1	0.9	7.3	27.6	63.4	8.9	3.2	0.6	5.8	72.4	100
		Total	4.0	21.1	2.4	1.9	18.1	45.6	42.9	11.5	3.9	1.1	7.6	54.4	100
	Austria	0/1/2	22.4	3.9	0.8	0.4	47.4	74.5	13.2	12.3	4.8	2.2	7.6	25.5	100
		3/4	1.7	11.6	1.1	1.0	14.7	29.0	62.3	8.7	3.8	1.2	4.9	71.0	100
		5/6	c	20.5	2.7	2.1	10.6	34.0	60.2	5.8	1.4	c	4.4	66.0	100
		Total	9.0	9.6	1.1	0.9	26.1	45.8	44.5	9.8	3.9	1.5	5.8	54.2	100
	Belgium	0/1/2	1.1	2.1	0.7	0.4	61.6	65.5	16.2	18.3	7.4	4.2	10.9	34.5	100
		3/4	1.2	2.9	0.7	0.3	38.9	43.8	43.2	13.0	6.1	3.4	6.9	56.2	100
		5/6	c	6.9	0.5	c	13.8	21.5	70.6	8.0	3.6	1.2	4.4	78.5	100
		Total	1.0	3.5	0.7	0.3	41.9	47.0	39.1	13.9	6.1	3.2	7.8	53.0	100
	Canada	0/1/2	a	20.4	5.8	5.1	44.3	70.5	15.5	14.0	4.6	0.6	9.4	29.5	100
		3/4	a	18.4	2.1	1.8	20.5	41.0	44.1	14.9	6.8	0.9	8.0	59.0	100
		5/6	a	14.1	0.8	0.6	10.4	25.3	64.3	10.4	5.1	0.8	5.3	74.7	100
		Total	a	17.6	2.6	2.3	23.5	43.7	43.0	13.3	5.7	0.8	7.5	56.3	100
	Chile	0/1/2	a	3.5	1.8	1.7	51.2	56.5	18.7	24.8	4.2	0.1	20.7	43.5	100
		3/4	a	10.1	2.1	2.0	28.8	41.0	35.4	23.7	5.9	0.3	17.8	59.0	100
		5/6	a	1.1	0.0	0.0	0.9	2.1	79.2	18.7	7.7	0.7	11.0	97.9	100
		Total	a	6.8	1.8	1.7	35.2	43.8	32.5	23.7	5.4	0.2	18.3	56.2	100
	Czech Republic	0/1/2	18.3	0.7	c	c	64.5	83.7	5.8	10.5	4.5	3.3	6.0	16.3	100
		3/4	0.8	3.8	0.4	0.3	28.0	33.0	52.8	14.2	6.1	3.2	8.1	67.0	100
		5/6	a	9.6	0.6	c	20.9	31.2	57.2	11.6	4.0	1.5	7.7	68.8	100
		Total	5.9	3.6	0.4	0.3	38.1	48.0	39.3	12.7	5.3	3.0	7.4	52.0	100
	Denmark	0/1/2	a	38.1	6.5	5.0	31.7	76.3	13.4	10.3	3.9	1.3	6.3	23.7	100
		3/4	a	26.7	3.2	2.5	13.9	43.9	45.0	11.1	5.8	1.2	5.3	56.1	100
		5/6	a	29.7	1.9	1.5	10.1	41.7	50.1	8.2	6.7	1.5	1.5	58.3	100
		Total	a	32.1	4.6	3.5	22.4	59.1	29.9	11.0	4.9	1.4	6.0	40.9	100
	Estonia	0/1/2	a	3.0	1.7	1.4	63.0	67.7	18.0	14.4	6.8	4.4	7.6	32.3	100
		3/4	a	13.0	2.4	1.4	26.0	41.4	42.6	16.0	9.6	7.0	6.3	58.6	100
		5/6	a	19.8	c	c	9.7	30.5	55.0	14.5	6.7	2.8	7.8	69.5	100
		Total	a	10.9	1.9	1.2	35.4	48.2	36.6	15.2	8.1	5.3	7.0	51.8	100
	Finland	0/1/2	a	10.1	5.7	5.2	63.4	79.3	10.0	10.7	3.6	1.1	7.1	20.7	100
		3/4	a	20.7	3.7	3.3	21.6	46.0	41.0	13.0	6.9	1.7	6.1	54.0	100
		5/6	a	16.0	2.7	2.7	7.0	25.6	64.1	10.3	3.2	c	7.0	74.4	100
		Total	a	16.0	4.3	3.9	35.6	56.0	32.3	11.8	5.2	1.3	6.6	44.0	100
	France	0/1/2	a	4.3	0.2	0.1	60.3	64.8	15.8	19.4	10.0	6.4	9.4	35.2	100
		3/4	a	7.1	0.6	0.4	32.0	39.7	43.0	17.3	10.2	4.8	7.1	60.3	100
		5/6	a	6.1	0.3	0.3	17.1	23.5	66.1	10.4	6.4	2.4	3.9	76.5	100
		Total	a	5.9	0.4	0.3	38.4	44.6	39.0	16.4	9.3	4.8	7.1	55.4	100
	Germany	0/1/2	17.5	6.1	1.2	0.7	50.9	75.7	11.9	12.5	5.0	2.9	7.5	24.3	100
		3/4	6.9	9.9	0.6	0.5	19.4	36.9	52.4	10.8	4.8	2.2	6.0	63.1	100
		5/6	1.3	11.2	0.7	0.5	6.1	19.2	74.9	5.9	2.0	0.8	3.9	80.8	100
		Total	10.7	8.5	0.8	0.6	31.0	51.1	37.9	11.0	4.6	2.4	6.4	48.9	100
	Greece	0/1/2	a	0.7	c	c	59.2	60.0	20.7	19.3	9.9	6.1	9.3	40.0	100
		3/4	a	3.2	1.8	1.2	40.7	45.7	33.7	20.7	14.1	9.2	6.6	54.3	100
		5/6	a	2.8	1.9	c	5.5	10.1	59.6	30.3	26.4	17.0	3.9	89.9	100
		Total	a	2.2	1.2	0.6	41.6	45.0	33.2	21.8	14.6	9.4	7.1	55.0	100
	Hungary	0/1/2	a	0.5	c	c	72.0	72.6	8.4	19.0	6.0	4.1	13.0	27.4	100
		3/4	a	2.7	0.4	c	35.7	38.8	42.4	18.9	9.0	5.8	9.9	61.2	100
		5/6	a	5.6	c	c	8.9	15.2	69.1	15.7	7.3	5.1	8.4	84.8	100
		Total	a	2.2	0.3	c	45.8	48.4	33.1	18.5	7.6	5.0	10.9	51.6	100

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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C5

Table C5.a. [2/3] Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including duration of unemployment (2011)

		Completed level of education	In education						Not in education						Total in education and not in education
			Students in work-study programmes[1]	Other employed	Unemployed		Not in the labour force	Sub-total	Employed	NEETs[2]	Unemployed		Not in the labour force	Sub-total	
					For any length of time	More than 6 months					For any length of time	More than 6 months			
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (9) + (11)	(9)	(10)	(11)	(12)	(13)
OECD	**Iceland**	0/1/2	a	29.4	5.1	4.2	36.7	71.3	21.5	7.2	4.4	c	2.8	28.7	100
		3/4	a	26.1	3.4	2.7	25.8	55.3	37.3	7.4	4.5	c	3.0	44.7	100
		5/6	a	14.8	c	c	c	21.9	65.2	12.9	9.8	c	c	78.1	100
		Total	a	26.6	4.2	3.3	29.3	60.1	32.0	7.9	5.1	1.4	2.9	39.9	100
	Ireland	0/1/2	a	3.1	0.6	0.3	62.4	66.1	10.6	23.4	10.0	8.2	13.3	33.9	100
		3/4	a	10.8	1.5	0.8	26.0	38.3	36.7	25.0	15.6	10.9	9.5	61.7	100
		5/6	a	7.1	1.0	0.5	9.5	17.7	68.5	13.8	8.9	5.5	5.0	82.3	100
		Total	a	7.1	1.1	0.5	33.5	41.7	36.3	22.0	12.0	8.6	10.0	58.3	100
	Israel	0/1/2	a	3.2	0.4	0.3	68.3	71.9	10.9	17.2	2.2	0.6	15.0	28.1	100
		3/4	a	13.5	1.1	0.8	16.2	30.8	33.8	35.4	3.3	0.8	32.1	69.2	100
		5/6	a	13.3	0.8	0.6	7.5	21.6	59.1	19.3	4.9	1.0	14.4	78.4	100
		Total	a	10.5	0.8	0.6	29.8	41.1	31.3	27.6	3.3	0.8	24.4	58.9	100
	Italy	0/1/2	0.1	0.4	0.2	0.1	56.0	56.7	19.7	23.6	6.3	4.4	17.4	43.3	100
		3/4	0.1	3.6	1.0	0.5	31.9	36.6	40.4	23.0	9.8	6.5	13.1	63.4	100
		5/6	0.3	7.0	1.6	0.7	26.9	35.8	42.4	21.8	8.8	4.3	13.0	64.2	100
		Total	0.1	2.5	0.7	0.3	42.2	45.5	31.3	23.2	8.2	5.4	15.0	54.5	100
	Japan[3]	0/1/2/3	a	15.5	0.7	m	37.7	53.9	30.4	15.7	4.8	m	10.9	46.1	100
		3/4	m	m	m	m	m	m	m	m	m	m	m	m	m
		5/6	a	a	0.0	m	a	0.0	84.2	15.8	5.1	m	10.7	100.0	100
		Total	a	9.1	0.3	m	52.9	62.3	27.6	10.1	3.1	m	7.0	37.7	100
	Korea	0/1/2	a	1.5	0.2	0.2	90.0	91.7	2.4	5.9	0.8	0.1	5.1	8.3	100
		3/4	a	9.2	1.0	1.0	28.6	38.8	34.1	27.1	2.9	0.2	24.2	61.2	100
		5/6	a	1.7	0.1	0.1	1.6	3.4	72.6	24.0	5.0	0.4	19.0	96.6	100
		Total	a	5.2	0.5	0.5	40.2	45.9	35.3	18.8	2.8	0.2	16.0	54.1	100
	Luxembourg	0/1/2	a	7.1	0.8	c	72.6	80.5	14.1	5.4	2.1	1.3	3.3	19.5	100
		3/4	a	6.6	1.3	1.3	34.2	42.1	49.9	8.0	5.4	3.3	2.6	57.9	100
		5/6	a	1.8	c	c	16.4	18.7	73.5	7.8	3.1	c	4.7	81.3	100
		Total	a	5.9	0.9	0.8	48.2	54.9	37.8	7.2	3.6	1.9	3.7	45.1	100
	Mexico	0/1/2	a	5.3	0.4	0.4	26.8	32.5	39.8	27.6	3.4	0.2	24.2	67.5	100
		3/4	a	11.1	1.1	1.0	30.8	42.9	38.2	18.9	4.0	0.3	14.9	57.1	100
		5/6	a	8.5	0.6	0.5	10.9	19.9	63.3	16.8	7.4	0.8	9.4	80.1	100
		Total	a	6.9	0.6	0.5	26.4	33.9	41.4	24.7	3.9	0.3	20.8	66.1	100
	Netherlands	0/1/2	a	37.2	4.4	m	30.3	72.0	19.5	8.6	1.8	m	6.8	28.0	100
		3/4	a	33.0	1.7	m	15.9	50.6	43.3	6.1	1.8	m	4.3	49.4	100
		5/6	a	22.2	0.4	m	8.3	30.8	64.7	4.5	2.1	m	2.4	69.2	100
		Total	a	32.4	2.5	m	20.0	54.9	38.2	6.9	1.8	m	5.1	45.1	100
	New Zealand	0/1/2	a	12.2	5.9	4.3	38.5	56.6	23.7	19.8	5.5	1.8	14.3	43.4	100
		3/4	a	22.5	3.4	2.4	23.9	49.9	39.0	11.1	4.5	1.0	6.6	50.1	100
		5/6	a	15.6	1.2	1.0	7.5	24.4	62.8	12.8	5.1	0.7	7.8	75.6	100
		Total	a	17.4	3.7	2.7	24.7	45.8	39.9	14.3	4.9	1.2	9.4	54.2	100
	Norway	0/1/2	a	16.4	2.6	2.2	42.8	61.8	28.4	9.8	3.0	0.9	6.8	38.2	100
		3/4	a	16.8	1.3	1.1	20.0	38.1	54.7	7.2	2.5	c	4.7	61.9	100
		5/6	a	9.9	c	c	11.3	22.1	71.3	6.6	2.7	c	3.9	77.9	100
		Total	a	15.3	1.8	1.6	29.0	46.1	45.4	8.5	2.8	0.7	5.7	53.9	100
	Poland	0/1/2	a	3.3	0.6	0.3	75.7	79.6	8.2	12.2	4.0	2.3	8.2	20.4	100
		3/4	a	8.9	2.4	1.3	24.6	35.9	43.4	20.7	10.0	5.5	10.6	64.1	100
		5/6	a	12.4	2.1	1.3	10.1	24.6	62.6	12.8	7.5	3.9	5.3	75.4	100
		Total	a	7.8	1.8	1.0	38.4	47.9	36.4	15.7	7.5	4.1	8.3	52.1	100
	Portugal	0/1/2	a	3.9	2.0	0.8	43.6	49.4	32.6	18.1	10.5	6.2	7.6	50.6	100
		3/4	a	6.2	2.1	1.1	39.6	47.9	40.7	11.4	9.0	5.2	2.4	52.1	100
		5/6	a	8.7	2.0	1.5	11.2	21.9	63.9	14.2	12.1	6.1	2.1	78.1	100
		Total	a	5.3	2.0	1.0	37.5	44.8	39.9	15.3	10.2	5.8	5.1	55.2	100

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851193

Table C5.5a. [3/3] Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including duration of unemployment (2011)

		Completed level of education	In education						Not in education						Total in education and not in education
			Students in work-study programmes[1]	Other employed	Unemployed		Not in the labour force	Sub-total	Employed	NEETs[2]	Unemployed		Not in the labour force	Sub-total	
					For any length of time	More than 6 months					For any length of time	More than 6 months			
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (9) + (11)	(9)	(10)	(11)	(12)	(13)
OECD	Slovak Republic	0/1/2	8.7	c	0.1	m	73.9	82.8	4.0	13.3	6.6	5.7	6.7	17.2	100
		3/4	0.3	2.2	0.5	c	25.1	28.1	48.4	23.5	14.1	10.8	9.4	71.9	100
		5/6	a	6.3	c	c	25.9	32.5	52.7	14.8	7.9	5.9	6.8	67.5	100
		Total	2.8	2.1	0.3	c	40.1	45.4	35.4	19.1	10.9	8.5	8.2	54.6	100
	Slovenia	0/1/2	a	8.5	1.2	0.8	75.4	85.0	6.5	8.5	4.2	2.8	4.3	15.0	100
		3/4	a	21.1	2.6	1.3	32.2	55.9	33.0	11.1	7.0	4.0	4.1	44.1	100
		5/6	a	16.1	1.3	0.8	7.8	25.3	60.7	14.1	11.0	4.8	3.1	74.7	100
		Total	a	16.9	2.1	1.1	41.2	60.2	29.1	10.7	6.7	3.8	4.0	39.8	100
	Spain	0/1/2	a	1.6	2.3	0.9	41.0	44.9	26.1	28.9	19.9	13.1	9.1	55.1	100
		3/4	a	6.7	4.3	1.7	39.2	50.3	31.1	18.7	13.0	7.3	5.6	49.7	100
		5/6	a	9.4	3.5	1.3	14.2	27.1	51.5	21.4	15.2	7.6	6.2	72.9	100
		Total	a	4.7	3.1	1.2	34.6	42.5	33.1	24.4	17.0	10.3	7.5	57.5	100
	Sweden	0/1/2	a	11.9	10.1	7.4	59.8	81.7	10.1	8.1	3.5	1.1	4.6	18.3	100
		3/4	a	9.9	4.9	3.5	19.1	34.0	54.2	11.8	7.2	1.5	4.6	66.0	100
		5/6	a	15.8	4.0	3.0	17.3	37.1	58.0	4.9	2.7	c	2.2	62.9	100
		Total	a	11.1	6.1	4.4	35.4	52.6	38.4	9.0	4.9	1.1	4.1	47.4	100
	Switzerland	0/1/2	35.9	5.3	1.5	c	33.9	76.5	13.4	10.1	4.6	2.6	5.5	23.5	100
		3/4	2.8	14.5	1.5	1.0	12.4	31.1	60.0	8.9	3.7	1.3	5.2	68.9	100
		5/6	c	19.9	c	c	6.5	27.4	66.4	6.2	2.4	c	3.8	72.6	100
		Total	14.9	11.9	1.3	0.7	19.5	47.6	43.4	9.0	3.8	1.7	5.2	52.4	100
	Turkey	0/1/2	a	3.9	0.9	0.5	28.7	33.5	30.0	36.5	5.9	2.2	30.6	66.5	100
		3/4	a	7.4	2.2	1.1	23.6	33.3	33.7	33.0	7.3	3.3	25.7	66.7	100
		5/6	a	10.6	3.5	1.4	4.5	18.6	54.1	27.3	13.8	7.6	13.5	81.4	100
		Total	a	5.5	1.5	0.8	24.8	31.8	33.5	34.6	7.1	3.0	27.6	68.2	100
	United Kingdom	0/1/2	2.9	2.6	1.4	0.7	45.7	52.6	23.5	24.0	10.0	5.8	14.0	47.4	100
		3/4	3.0	14.1	3.9	2.3	25.6	46.5	39.1	14.4	6.5	2.8	7.9	53.5	100
		5/6	0.8	13.7	1.0	0.8	9.6	25.2	66.5	8.4	4.4	1.6	4.0	74.8	100
		Total	2.4	11.3	2.6	1.6	25.2	41.4	43.1	15.5	6.7	3.2	8.8	58.6	100
	United States	0/1/2	a	9.4	3.1	2.4	61.1	73.6	13.9	12.5	3.7	1.6	8.8	26.4	100
		3/4	a	18.7	2.5	1.8	19.3	40.6	40.0	19.4	7.7	3.3	11.7	59.4	100
		5/6	a	14.8	1.1	0.7	8.2	24.0	63.8	12.2	5.0	1.7	7.2	76.0	100
		Total	a	15.1	2.4	1.7	29.2	46.7	37.4	15.9	5.9	2.5	9.9	53.3	100
	OECD average (excluding Japan)	0/1/2		8.7	2.4	1.9	53.5	67.5	16.7	15.8	5.7	3.2	10.1	32.5	100
		3/4		12.6	2.0	1.4	25.7	40.9	42.9	16.2	7.0	3.7	9.2	59.1	100
		5/6		11.9	1.4	1.0	10.7	23.2	63.6	13.3	6.7	3.4	6.6	76.8	100
		Total		11.0	1.9	1.4	32.8	47.2	37.0	15.8	6.5	3.2	9.3	52.8	100
	EU21 average	0/1/2		7.4	2.2	1.6	57.6	70.1	14.7	15.3	6.7	4.4	8.6	29.9	100
		3/4		10.7	2.0	1.4	27.8	41.2	43.7	15.1	8.4	4.9	6.7	58.8	100
		5/6		11.8	1.7	1.3	12.7	26.1	61.5	12.3	7.2	4.5	5.1	73.9	100
		Total		9.6	1.9	1.3	35.8	48.8	36.4	14.8	7.6	4.5	7.2	51.2	100
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	0/1/2	a	12.1	3.4	m	27.4	42.9	38.8	18.3	4.0	m	14.3	57.1	100
		3/4	a	13.6	1.7	m	6.8	22.1	56.8	21.1	7.4	m	13.7	77.9	100
		5/6	a	9.8	1.0	m	5.4	16.2	66.0	17.8	11.1	m	6.8	83.8	100
		Total	a	12.5	2.6	m	18.2	33.4	47.2	19.3	5.8	m	13.6	66.6	100
	China		m	m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m	m

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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C5

Table C5.6. [1/3] Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including part-time (PT) workers (2011)

			In education							Not in education							
				Employed			Unemployed				Employed						
		Completed level of education	Students in work-study programmes[1] + Other employed	Full time	Part time (PT)	Voluntary PT	For any length	Not in the labour force	Sub-total	Employed	Full time	Part time (PT)	Involuntary PT	NEETs[2]	Sub-total	Total in education and not in education
			(1)	(2)	(3) = (4) + involuntary PT + unknowns	(4)	(5)	(6)	(7)	(8)	(9)	(10) = (11) + voluntary PT + unknowns	(11)	(12)	(13)	(14)
OECD	Australia	0/1/2	24.4	6.1	18.2	m	3.6	33.6	61.5	23.3	17.5	5.8	m	15.3	38.5	100
		3/4	28.8	9.6	19.2	m	2.2	12.7	43.7	46.0	35.9	10.1	m	10.2	56.3	100
		5/6	19.3	10.0	9.3	m	1.1	7.3	27.6	63.4	53.2	10.2	m	8.9	72.4	100
		Total	25.2	8.6	16.6	m	2.4	18.1	45.6	42.9	34.1	8.7	m	11.5	54.4	100
	Austria	0/1/2	26.3	23.1	3.2	3.1	0.8	47.4	74.5	13.2	10.4	2.8	0.9	12.3	25.5	100
		3/4	13.3	5.4	7.9	7.8	1.1	14.7	29.0	62.3	57.2	5.1	1.3	8.7	71.0	100
		5/6	20.8	12.7	8.1	7.0	c	10.6	34.0	60.2	54.4	5.8	c	5.8	66.0	100
		Total	18.6	12.4	6.2	6.0	1.1	26.1	45.8	44.5	40.1	4.3	1.2	9.8	54.2	100
	Belgium	0/1/2	3.2	0.5	2.0	1.9	0.7	61.6	65.5	16.2	12.3	3.8	2.4	18.3	34.5	100
		3/4	4.1	1.5	2.2	1.8	0.7	38.9	43.8	43.2	35.1	8.1	4.9	13.0	56.2	100
		5/6	7.1	4.8	2.4	1.7	c	13.8	21.5	70.6	61.1	9.4	4.1	8.0	78.5	100
		Total	4.4	1.9	2.2	1.8	0.7	41.9	47.0	39.1	32.3	6.8	3.8	13.9	53.0	100
	Canada	0/1/2	20.4	0.6	19.7	19.1	5.8	44.3	70.5	15.5	11.8	3.7	1.9	14.0	29.5	100
		3/4	18.4	2.3	16.1	15.4	2.1	20.5	41.0	44.1	35.9	8.2	4.7	14.9	59.0	100
		5/6	14.1	4.4	9.7	9.1	0.8	10.4	25.3	64.3	55.7	8.6	5.2	10.4	74.7	100
		Total	17.6	2.5	15.0	14.4	2.6	23.5	43.7	43.0	35.8	7.2	4.1	13.3	56.3	100
	Chile	0/1/2	3.5	2.4	1.1	0.6	1.8	51.2	56.5	18.7	16.2	2.5	1.5	24.8	43.5	100
		3/4	10.1	6.2	3.9	1.7	2.1	28.8	41.0	35.4	31.8	3.5	2.1	23.7	59.0	100
		5/6	1.1	0.7	0.4	0.1	0.0	0.9	2.1	79.2	69.4	9.9	6.6	18.7	97.9	100
		Total	6.8	4.3	2.5	1.1	1.8	35.2	43.8	32.5	28.9	3.7	2.2	23.7	56.2	100
	Czech Republic	0/1/2	19.0	c	0.3	c	c	64.5	83.7	5.8	5.4	0.3	c	10.5	16.3	100
		3/4	4.6	2.8	1.1	1.1	0.4	28.0	33.0	52.8	51.9	1.0	c	14.2	67.0	100
		5/6	9.6	6.2	3.4	3.3	c	20.9	31.2	57.2	55.6	1.6	c	11.6	68.8	100
		Total	9.6	2.5	1.1	1.1	0.4	38.1	48.0	39.3	38.4	0.9	c	12.7	52.0	100
	Denmark	0/1/2	38.1	7.8	30.3	m	6.5	31.7	76.3	13.4	10.3	3.2	m	10.3	23.7	100
		3/4	26.7	6.9	19.8	m	3.2	13.9	43.9	45.0	35.8	9.2	m	11.1	56.1	100
		5/6	29.7	8.1	21.6	m	1.9	10.1	41.7	50.1	42.1	8.1	m	8.2	58.3	100
		Total	32.1	7.2	24.9	m	4.6	22.4	59.1	29.9	23.6	6.3	m	11.0	40.9	100
	Estonia	0/1/2	3.0	c	1.1	c	c	63.0	67.7	18.0	16.9	1.1	c	14.4	32.3	100
		3/4	13.0	9.6	3.4	3.4	2.4	26.0	41.4	42.6	41.1	1.5	c	16.0	58.6	100
		5/6	19.8	13.7	6.1	5.8	c	9.7	30.5	55.0	52.4	2.6	c	14.5	69.5	100
		Total	10.9	7.8	3.1	3.1	1.9	35.4	48.2	36.6	35.1	1.6	c	15.2	51.8	100
	Finland	0/1/2	10.1	1.6	8.5	m	5.7	63.4	79.3	10.0	8.8	1.2	m	10.7	20.7	100
		3/4	20.7	7.1	13.6	m	3.7	21.6	46.0	41.0	35.2	5.8	m	13.0	54.0	100
		5/6	16.0	10.0	6.0	m	2.7	7.0	25.6	64.1	58.3	5.9	m	10.3	74.4	100
		Total	16.0	5.4	10.6	m	4.3	35.6	56.0	32.3	28.3	4.0	m	11.8	44.0	100
	France	0/1/2	4.3	3.6	0.6	m	0.2	60.3	64.8	15.8	12.4	3.4	m	19.4	35.2	100
		3/4	7.1	4.4	2.7	m	0.6	32.0	39.7	43.0	35.5	7.5	m	17.3	60.3	100
		5/6	6.1	4.1	2.0	m	0.3	17.1	23.5	66.1	59.1	7.0	m	10.4	76.5	100
		Total	5.9	4.0	1.8	m	0.4	38.4	44.6	39.0	33.0	6.0	m	16.4	55.4	100
	Germany	0/1/2	23.7	18.8	4.9	m	1.2	50.9	75.7	11.9	8.5	3.3	m	12.5	24.3	100
		3/4	16.8	9.2	7.7	m	0.6	19.4	36.9	52.4	45.1	7.3	m	10.8	63.1	100
		5/6	12.5	5.2	7.2	m	0.7	6.1	19.2	74.9	65.8	9.1	m	5.9	80.8	100
		Total	19.2	12.7	6.5	m	0.8	31.0	51.1	37.9	32.1	5.8	m	11.0	48.9	100
	Greece	0/1/2	c	c	0.3	c	c	59.2	60.0	20.7	18.1	2.6	c	19.3	40.0	100
		3/4	3.2	1.6	1.5	c	1.8	40.7	45.7	33.7	30.9	2.8	c	20.7	54.3	100
		5/6	2.8	c	0.4	c	c	5.5	10.1	59.6	54.3	5.4	c	30.3	89.9	100
		Total	2.2	1.3	0.9	c	1.2	41.6	45.0	33.2	30.1	3.1	0.7	21.8	55.0	100
	Hungary	0/1/2	c	c	c	m	c	72.0	72.6	8.4	7.3	c	m	19.0	27.4	100
		3/4	2.7	1.8	0.5	m	c	35.7	38.8	42.4	37.9	1.4	m	18.9	61.2	100
		5/6	5.6	4.7	c	m	c	8.9	15.2	69.1	64.5	c	m	15.7	84.8	100
		Total	2.2	1.6	0.4	m	0.3	45.8	48.4	33.1	29.9	1.1	m	18.5	51.6	100

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table C5.6. [2/3] Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including part-time (PT) workers (2011)

		Completed level of education	In education							Not in education						Total in education and not in education
			Students in work-study programmes[1] + Other employed	Employed			Unemployed	Not in the labour force	Sub-total	Employed	Employed			NEETs[2]	Sub-total	
				Full time	Part time (PT)	Voluntary PT	For any length				Full time	Part time (PT)	Involuntary PT			
			(1)	(2)	(3) = (4) + involuntary PT + unknowns	(4)	(5)	(6)	(7)	(8)	(9)	(10) = (11) + voluntary PT + unknowns	(11)	(12)	(13)	(14)
OECD	Iceland	0/1/2	29.4	4.0	25.5	m	5.1	36.7	71.3	21.5	16.9	4.7	m	7.2	28.7	100
		3/4	26.1	6.6	19.6	m	c	25.8	55.3	37.3	30.3	6.9	m	7.4	44.7	100
		5/6	14.8	c	c	m	c	c	21.9	65.2	55.4	c	m	12.9	78.1	100
		Total	26.6	5.1	21.5	m	4.2	29.3	60.1	32.0	26.0	6.0	m	7.9	39.9	100
	Ireland	0/1/2	3.1	0.5	2.6	m	0.6	62.4	66.1	10.6	7.1	3.5	m	23.4	33.9	100
		3/4	10.8	2.0	8.7	m	1.5	26.0	38.3	36.7	27.4	9.3	m	25.0	61.7	100
		5/6	7.1	3.9	3.2	m	1.0	9.5	17.7	68.5	59.9	8.6	m	13.8	82.3	100
		Total	7.1	2.0	5.1	m	1.1	33.5	41.7	36.3	29.0	7.3	m	22.0	58.3	100
	Israel	0/1/2	3.2	c	2.8	2.8	0.4	68.3	71.9	10.9	9.2	1.6	0.6	17.2	28.1	100
		3/4	13.5	4.3	8.7	8.5	1.1	16.2	30.8	33.8	27.7	5.6	2.0	35.4	69.2	100
		5/6	13.3	7.5	5.5	5.2	0.8	7.5	21.6	59.1	44.1	13.8	6.1	19.3	78.4	100
		Total	10.5	3.6	6.5	6.4	0.8	29.8	41.1	31.3	25.0	5.8	2.2	27.6	58.9	100
	Italy	0/1/2	0.5	0.2	0.3	0.2	0.2	56.0	56.7	19.7	16.4	3.3	2.6	23.6	43.3	100
		3/4	3.7	1.6	2.1	1.4	1.0	31.9	36.6	40.4	33.1	7.3	5.9	23.0	63.4	100
		5/6	7.3	3.7	3.5	2.2	1.6	26.9	35.8	42.4	35.8	6.6	5.5	21.8	64.2	100
		Total	2.6	1.2	1.4	1.0	0.7	42.2	45.5	31.3	25.9	5.5	4.4	23.2	54.5	100
	Japan[3]	0/1/2/3	15.5	m	15.5	m	0.7	37.7	53.9	30.4	17.9	12.5	m	15.7	46.1	100
		3/4	m	m	m	m	m	m	m	m	m	m	m	m	m	m
		5/6	m	m	m	m	m	m	0.0	84.2	62.7	21.5	m	15.8	100.0	100
		Total	9.1	m	9.1	m	0.3	52.9	62.3	27.6	18.2	9.4	m	10.1	37.7	100
	Korea	0/1/2	1.5	0.7	0.8	0.8	0.2	90.0	91.7	2.4	2.1	0.4	0.0	5.9	8.3	100
		3/4	9.2	3.8	5.4	5.4	1.0	28.6	38.8	34.1	30.5	3.7	0.2	27.1	61.2	100
		5/6	1.7	1.0	0.7	0.7	0.1	1.6	3.4	72.6	65.0	7.7	0.2	24.0	96.6	100
		Total	5.2	2.2	2.9	2.9	0.5	40.2	45.9	35.3	31.5	3.8	0.1	18.8	54.1	100
	Luxembourg	0/1/2	7.1	3.6	3.3	m	c	72.6	80.5	14.1	12.6	1.5	m	5.4	19.5	100
		3/4	6.6	3.5	3.1	m	c	34.2	42.1	49.9	44.8	5.1	m	8.0	57.9	100
		5/6	c	c	0.0	m	c	16.4	18.7	73.5	67.4	6.1	m	7.8	81.3	100
		Total	5.9	3.2	2.5	m	0.9	48.2	54.9	37.8	34.3	3.6	m	7.2	45.1	100
	Mexico	0/1/2	5.3	2.4	2.8	m	0.4	26.8	32.5	39.8	34.1	5.5	m	27.6	67.5	100
		3/4	11.1	6.5	4.5	m	1.1	30.8	42.9	38.2	33.8	4.1	m	18.9	57.1	100
		5/6	8.5	6.1	2.3	m	0.6	10.9	19.9	63.3	55.0	7.9	m	16.8	80.1	100
		Total	6.9	3.7	3.2	m	0.6	26.4	33.9	41.4	35.8	5.3	m	24.7	66.1	100
	Netherlands	0/1/2	37.2	6.2	30.4	30.4	4.4	30.3	72.0	19.5	14.7	4.7	m	8.6	28.0	100
		3/4	33.0	7.3	24.8	24.8	1.7	15.9	50.6	43.3	32.4	10.9	m	6.1	49.4	100
		5/6	22.2	9.8	12.4	12.4	0.4	8.3	30.8	64.7	53.4	11.3	m	4.5	69.2	100
		Total	32.4	7.3	24.5	24.5	2.5	20.0	54.9	38.2	29.7	8.5	m	6.9	45.1	100
	New Zealand	0/1/2	12.2	2.7	9.4	m	5.9	38.5	56.6	23.7	18.0	5.7	0.8	19.8	43.4	100
		3/4	22.5	6.2	16.3	m	3.4	23.9	49.9	39.0	32.5	6.5	0.7	11.1	50.1	100
		5/6	15.6	8.5	7.2	m	1.2	7.5	24.4	62.8	53.7	9.1	1.6	12.8	75.6	100
		Total	17.4	5.6	11.7	m	3.7	24.7	45.8	39.9	33.1	6.9	1.0	14.3	54.2	100
	Norway	0/1/2	16.4	c	16.2	m	2.6	42.8	61.8	28.4	22.6	4.6	m	9.8	38.2	100
		3/4	16.8	c	16.2	m	c	20.0	38.1	54.7	45.6	8.2	m	7.2	61.9	100
		5/6	9.9	c	9.7	m	c	11.3	22.1	71.3	61.0	9.7	m	6.6	77.9	100
		Total	15.3	c	15.0	m	1.8	29.0	46.1	45.4	37.6	6.8	m	8.5	53.9	100
	Poland	0/1/2	3.3	1.0	2.3	c	0.6	75.7	79.6	8.2	7.2	0.9	0.8	12.2	20.4	100
		3/4	8.9	7.2	1.7	0.3	2.4	24.6	35.9	43.4	40.8	2.6	2.0	20.7	64.1	100
		5/6	12.4	10.3	2.1	0.4	2.1	10.1	24.6	62.6	59.4	3.2	2.4	12.8	75.4	100
		Total	7.8	5.9	1.8	0.2	1.8	38.4	47.9	36.4	34.2	2.2	1.6	15.7	52.1	100
	Portugal	0/1/2	3.9	m	m	m	2.0	43.6	49.4	32.6	m	m	m	18.1	50.6	100
		3/4	6.2	m	m	m	2.1	39.6	47.9	40.7	m	m	m	11.4	52.1	100
		5/6	8.7	m	m	m	2.0	11.2	21.9	63.9	m	m	m	14.2	78.1	100
		Total	5.3	m	m	m	2.0	37.5	44.8	39.9	m	m	m	15.3	55.2	100

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table C5.6. [3/3] Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, including part-time (PT) workers (2011)

		Completed level of education	In education							Not in education						Total in education and not in education
			Students in work-study programmes[1] + Other employed	Employed			Unemployed	Not in the labour force	Sub-total	Employed	Employed			NEETs[2]	Sub-total	
				Full time	Part time (PT)	Voluntary PT	For any length				Full time	Part time (PT)	Involuntary PT			
			(1)	(2)	(3) = (4) + involuntary PT + unknowns	(4)	(5)	(6)	(7)	(8)	(9)	(10) = (11) + voluntary PT + unknowns	(11)	(12)	(13)	(14)
OECD	Slovak Republic	0/1/2	8.8	m	c	m	c	73.9	82.8	4.0	2.2	1.7	m	13.3	17.2	100
		3/4	2.5	1.9	c	m	0.5	25.1	28.1	48.4	46.8	1.6	m	23.5	71.9	100
		5/6	6.3	5.3	c	m	c	25.9	32.5	52.7	50.3	2.4	m	14.8	67.5	100
		Total	4.9	1.8	0.3	m	0.3	40.1	45.4	35.4	33.7	1.7	m	19.1	54.6	100
	Slovenia	0/1/2	8.5	1.8	6.6	m	1.2	75.4	85.0	6.5	6.4	c	m	8.5	15.0	100
		3/4	21.1	10.6	10.4	m	2.6	32.2	55.9	33.0	32.3	0.7	m	11.1	44.1	100
		5/6	16.1	13.3	2.8	m	1.3	7.8	25.3	60.7	58.1	2.6	m	14.1	74.7	100
		Total	16.9	8.5	8.4	m	2.1	41.2	60.2	29.1	28.3	0.8	m	10.7	39.8	100
	Spain	0/1/2	1.6	0.7	0.9	0.6	2.3	41.0	44.9	26.1	21.6	4.5	3.4	28.9	55.1	100
		3/4	6.7	1.8	4.9	4.4	4.3	39.2	50.3	31.1	25.4	5.6	4.4	18.7	49.7	100
		5/6	9.4	5.7	3.7	2.7	3.5	14.2	27.1	51.5	43.0	8.5	6.1	21.4	72.9	100
		Total	4.7	2.1	2.7	2.1	3.1	34.6	42.5	33.1	27.4	5.7	4.3	24.4	57.5	100
	Sweden	0/1/2	11.9	c	11.0	9.5	10.1	59.8	81.7	10.1	8.0	2.0	1.1	8.1	18.3	100
		3/4	9.9	2.4	7.4	6.1	4.9	19.1	34.0	54.2	45.4	8.7	4.7	11.8	66.0	100
		5/6	15.8	6.7	9.1	8.0	4.0	17.3	37.1	58.0	53.6	4.4	1.7	4.9	62.9	100
		Total	11.1	2.5	8.5	7.3	6.1	35.4	52.6	38.4	32.8	5.4	2.8	9.0	47.4	100
	Switzerland	0/1/2	41.2	36.4	4.8	4.7	1.5	33.9	76.5	13.4	10.4	3.0	c	10.1	23.5	100
		3/4	17.3	8.0	9.3	9.2	1.5	12.4	31.1	60.0	52.7	7.2	c	8.9	68.9	100
		5/6	20.3	9.2	11.0	11.0	c	6.5	27.4	66.4	60.6	5.9	m	6.2	72.6	100
		Total	26.7	18.9	7.8	7.8	1.3	19.5	47.6	43.4	38.0	5.4	c	9.0	52.4	100
	Turkey	0/1/2	3.9	2.7	1.3	m	0.9	28.7	33.5	30.0	26.0	4.0	m	36.5	66.5	100
		3/4	7.4	6.3	1.1	m	2.2	23.6	33.3	33.7	32.1	1.6	m	33.0	66.7	100
		5/6	10.6	9.9	0.8	m	3.5	4.5	18.6	54.1	50.9	3.2	m	27.3	81.4	100
		Total	5.5	4.3	1.2	m	1.5	24.8	31.8	33.5	30.2	3.3	m	34.6	68.2	100
	United Kingdom	0/1/2	5.5	1.8	2.1	1.8	1.4	45.7	52.6	23.5	17.1	5.6	2.2	24.0	47.4	100
		3/4	17.1	4.6	11.3	10.9	3.9	25.6	46.5	39.1	29.5	8.7	3.7	14.4	53.5	100
		5/6	14.5	9.0	4.9	4.6	1.0	9.6	25.2	66.5	55.7	9.3	4.1	8.4	74.8	100
		Total	13.7	5.0	7.5	7.2	2.6	25.2	41.4	43.1	33.8	8.2	3.5	15.5	58.6	100
	United States	0/1/2	9.4	0.6	8.8	8.2	3.1	61.1	73.6	13.9	10.3	3.6	1.8	12.5	26.4	100
		3/4	18.7	5.7	13.0	12.0	2.5	19.3	40.6	40.0	30.7	9.3	4.8	19.4	59.4	100
		5/6	14.8	8.1	6.7	5.9	1.1	8.2	24.0	63.8	56.5	7.3	3.1	12.2	76.0	100
		Total	15.1	4.7	10.4	9.6	2.4	29.2	46.7	37.4	30.2	7.2	3.5	15.9	53.3	100
	OECD average (excluding Japan)	0/1/2	12.6	5.4	7.4	6.5	2.6	53.5	67.5	16.7	13.1	3.2	1.5	15.8	32.5	100
		3/4	13.3	5.1	8.7	7.1	2.0	25.7	40.9	42.9	37.0	5.8	3.2	16.2	59.1	100
		5/6	12.3	7.2	5.6	5.0	1.4	10.7	23.2	63.6	56.0	7.5	3.9	13.3	76.8	100
		Total	12.5	5.2	7.3	6.0	1.9	32.8	47.2	37.0	31.8	5.0	2.5	15.8	52.8	100
	EU21 average	0/1/2	11.5	5.1	6.1	6.8	2.5	57.6	70.1	14.7	11.2	2.8	1.9	15.3	29.9	100
		3/4	11.4	4.7	7.1	6.2	2.1	27.8	41.2	43.7	38.2	5.5	3.8	15.1	58.8	100
		5/6	12.5	7.6	5.5	4.8	1.7	12.7	26.1	61.5	55.2	6.2	4.0	12.3	73.9	100
		Total	11.1	4.8	6.0	5.4	1.9	35.8	48.8	36.4	31.6	4.4	2.8	14.8	51.2	100
Other G20	Argentina		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	0/1/2	12.1	7.4	4.8	m	3.4	27.4	42.9	38.8	34.4	4.5	m	18.3	57.1	100
		3/4	13.6	11.3	2.3	m	1.7	6.8	22.1	56.8	52.0	4.8	m	21.1	77.9	100
		5/6	9.8	7.8	2.0	m	1.0	5.4	16.2	66.0	59.5	6.4	m	17.8	83.8	100
		Total	12.5	8.9	3.7	m	2.6	18.2	33.4	47.2	42.6	4.7	m	19.3	66.6	100
	China		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Students in work-study programmes are considered to be both in education and employed, irrespective of their labour market status according to the ILO definition.
2. 15-29 year-olds neither in employment nor in education or training.
3. Data refer to 15-24 year-olds.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851231

C5

Table C5.7. [1/2] Trends in the percentage of 15-29 year-old part-time (PT) and full-time (FT) workers in education and not in education (2006-11)[1]

		2006					2008				
		Employed PT as % of 15-29 year-olds		Employed FT as % of 15-29 year-olds			Employed PT as % of 15-29 year-olds		Employed FT as % of 15-29 year-olds		
		In education	Not in education	In education	Not in education	PT as % of employed	In education	Not in education	In education	Not in education	PT as % of employed
		(1)	(2)	(3)	(4)	(5)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	16.2	8.0	9.3	35.6	35.0	16.4	8.2	9.1	37.0	34.8
	Austria	4.0	3.9	11.3	41.7	12.9	5.3	4.2	11.1	42.8	15.0
	Belgium	1.3	6.8	1.6	36.1	17.6	1.9	6.5	1.8	35.5	18.3
	Canada	15.7	6.4	2.9	37.5	35.4	16.4	6.1	3.0	38.4	35.2
	Chile	m	m	m	m	m	m	m	m	m	m
	Czech Republic	0.6	0.6	1.7	42.5	2.6	1.0	0.6	2.4	41.9	3.4
	Denmark	24.2	5.9	8.1	29.8	44.1	23.9	4.6	9.3	34.1	39.6
	Estonia	3.2	1.3	5.0	36.6	9.8	3.1	1.0	7.0	37.7	8.4
	Finland	10.4	4.3	5.4	29.7	29.5	11.6	3.6	7.1	30.4	28.7
	France	2.7	5.2	3.3	33.5	17.6	2.8	5.6	3.9	34.6	18.0
	Germany	5.4	5.7	12.9	28.4	21.2	6.3	5.8	13.9	30.3	21.4
	Greece	0.9	2.9	1.4	38.7	8.7	1.0	2.7	1.9	37.5	8.4
	Hungary	0.3	0.6	3.8	32.5	2.1	0.3	0.7	2.1	33.5	2.7
	Iceland	21.2	5.4	6.2	32.5	40.6	22.3	4.3	7.3	33.9	39.2
	Ireland	m	m	m	m	m	m	m	m	m	m
	Israel	7.7	7.8	3.5	21.3	38.5	6.9	7.6	3.3	22.8	35.7
	Italy	1.8	4.5	1.6	32.7	15.6	2.2	4.5	1.6	31.0	17.1
	Japan[2]	7.0	11.3	0.2	22.9	44.2	8.9	9.6	0.2	24.5	42.8
	Korea	m	m	m	m	m	2.2	2.4	2.7	34.2	11.0
	Luxembourg	0.6	2.9	1.2	38.9	8.2	0.8	3.1	1.8	36.5	9.3
	Mexico	3.5	5.0	3.9	37.9	16.8	3.8	5.5	4.4	36.7	18.3
	Netherlands	22.8	6.9	7.9	32.9	41.9	26.4	7.0	8.8	33.6	43.9
	New Zealand	13.3	5.0	6.7	38.1	29.0	14.2	6.4	6.4	35.8	32.9
	Norway	15.4	7.3	0.4	38.7	36.3	17.0	6.4	0.3	41.9	35.1
	Poland	2.2	2.8	5.8	26.9	13.3	2.2	2.1	7.6	31.7	9.8
	Portugal	m	m	m	m	m	m	m	m	m	m
	Slovak Republic	0.3	0.8	1.7	38.3	2.7	0.5	0.7	2.3	39.9	2.7
	Slovenia	6.4	1.9	9.1	31.7	16.9	8.5	1.8	9.2	32.6	19.8
	Spain	3.5	5.3	2.3	41.7	16.5	3.2	5.0	2.2	41.9	15.7
	Sweden	7.8	5.3	2.4	32.6	25.4	8.8	5.1	2.7	34.8	27.1
	Switzerland	6.7	6.4	18.7	38.9	18.4	7.4	6.1	19.0	38.3	19.1
	Turkey	0.4	2.0	2.8	31.2	6.5	0.4	2.3	2.9	32.3	7.1
	United Kingdom	9.8	7.4	6.0	36.8	26.8	9.0	7.7	5.5	39.4	27.1
	United States	m	m	m	m	m	m	m	m	m	m
	OEC D average (excluding Japan)	7.4	4.6	5.2	34.8	21.1	7.8	4.4	5.5	35.5	20.9
	OEC D average (excluding Chile, Ireland, Japan, Korea and the United States)	7.4	4.6	5.2	34.8	21.1	8.0	4.5	5.6	35.6	21.2
	EU21 average	5.7	3.9	4.9	34.8	16.7	6.2	3.8	5.4	35.8	17.7
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m

1. Years 2007 and 2009 are available for consultation on line (see *Statlink* below).
2. Data refer to 15-24 year-olds.
Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932851250

C5

Table C5.7. [2/2] Trends in the percentage of 15-29 year-old part-time (PT) and full-time (FT) workers in education and not in education (2006-11)[1]

		2010					2011					
		Employed PT as % of 15-29 year-olds		Employed FT as % of 15-29 year-olds		PT as % of employed	Employed PT as % of 15-29 year-olds		Employed FT as % of 15-29 year-olds		PT as % of employed	Involuntary PT / Total PT
		In education	Not in education	In education	Not in education		In education	Not in education	In education	Not in education		
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
OECD	Australia	15.9	8.6	8.6	34.0	36.5	16.6	8.7	8.6	34.1	37.2	m
	Austria	5.9	4.3	11.7	39.8	16.5	6.2	4.3	12.4	40.1	16.7	12.9
	Belgium	1.3	6.3	1.8	32.7	18.1	2.2	6.8	1.9	32.3	20.8	46.0
	Canada	15.0	7.0	2.8	35.5	36.5	15.0	7.2	2.5	35.8	36.7	21.3
	Chile	m	m	m	m	m	2.5	3.7	4.3	28.9	15.7	58.8
	Czech Republic	1.3	0.7	2.6	37.9	4.7	1.1	0.9	2.5	38.4	4.7	8.3
	Denmark	23.1	4.8	7.6	27.4	44.2	24.9	6.3	7.2	23.6	50.2	m
	Estonia	3.2	1.2	5.7	31.0	10.6	3.1	1.6	7.8	35.1	9.9	9.9
	Finland	10.1	3.7	5.5	27.6	29.5	10.6	4.0	5.4	28.3	30.3	m
	France	2.0	5.9	4.2	33.5	17.3	1.8	6.0	4.0	33.0	17.4	m
	Germany	5.4	5.7	13.2	31.0	20.1	6.5	5.8	12.7	32.1	21.6	m
	Greece	1.0	3.1	1.9	34.7	10.2	0.9	3.1	1.3	30.1	11.3	33.2
	Hungary	0.3	0.8	1.5	30.0	3.4	0.4	1.1	1.6	29.9	4.2	m
	Iceland	21.7	7.4	4.8	24.2	50.0	21.5	6.0	5.1	26.0	47.0	m
	Ireland	5.0	6.9	2.7	32.2	25.4	5.1	7.3	2.0	29.0	28.7	m
	Israel	6.9	7.2	3.6	21.3	36.0	6.5	5.8	3.6	25.0	29.4	19.5
	Italy	1.5	5.2	1.4	26.6	19.4	1.4	5.5	1.2	25.9	20.3	70.9
	Japan[2]	7.7	8.8	0.2	19.6	45.5	9.1	9.4	0.0	18.2	50.3	m
	Korea	1.8	2.3	1.5	30.7	10.3	2.9	3.8	2.2	31.5	16.6	2.0
	Luxembourg	1.6	3.5	3.3	34.5	11.9	2.5	3.6	3.2	34.3	13.9	m
	Mexico	3.6	5.7	3.6	35.6	19.0	3.2	5.3	3.7	35.8	17.6	m
	Netherlands	24.6	7.6	7.9	30.3	45.5	24.5	8.5	7.3	29.7	46.8	m
	New Zealand	12.2	6.8	5.1	31.9	33.9	11.7	6.9	5.6	33.1	32.5	6.0
	Norway	15.2	6.4	0.3	38.0	35.5	15.0	6.8	0.3	37.6	35.9	m
	Poland	2.1	2.1	6.9	33.3	9.4	1.8	2.2	5.9	34.2	9.1	81.2
	Portugal	m	m	m	m	m	m	m	m	m	m	m
	Slovak Republic	0.3	1.2	2.1	34.0	4.1	0.3	1.7	1.8	33.7	5.5	m
	Slovenia	9.5	2.2	9.6	28.5	23.5	8.4	0.8	8.5	28.3	19.9	m
	Spain	2.8	5.4	2.0	30.6	20.1	2.7	5.7	2.1	27.4	22.1	57.2
	Sweden	8.2	5.3	2.6	29.6	29.4	8.5	5.4	2.5	32.8	28.2	29.4
	Switzerland	8.0	5.3	19.4	35.8	19.3	7.8	5.4	18.9	38.0	18.9	2.5
	Turkey	1.0	3.2	4.0	28.8	11.5	1.2	3.3	4.3	30.2	11.5	m
	United Kingdom	8.0	7.0	4.8	33.7	26.9	7.5	8.2	4.9	33.8	27.8	23.9
	United States	m	m	m	m	m	10.4	7.2	4.7	30.2	33.5	23.0
	OECD average (excluding Japan)	7.3	4.8	5.1	31.8	22.6	7.3	5.0	5.0	31.8	23.2	29.8
	OECD average (excluding Chile, Ireland, Japan, Korea and the United States)	7.6	4.8	5.3	31.8	23.0	7.6	4.9	5.2	32.1	23.1	30.2
	EU21 average	5.9	4.1	4.9	31.9	19.5	6.0	4.4	4.8	31.6	20.5	37.3
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m

1. Years 2007 and 2009 are available for consultation on line (see *Statlink* below).
2. Data refer to 15-24 year-olds.
Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932851250

Chapter

D

The Learning Environment and Organisation of Schools



Indicator D1 How much time do students spend in the classroom?
StatLink http://dx.doi.org/10.1787/888932851269

Indicator D2 What is the student-teacher ratio and how big are classes?
StatLink http://dx.doi.org/10.1787/888932851573

Indicator D3 How much are teachers paid?
StatLink http://dx.doi.org/10.1787/888932851744

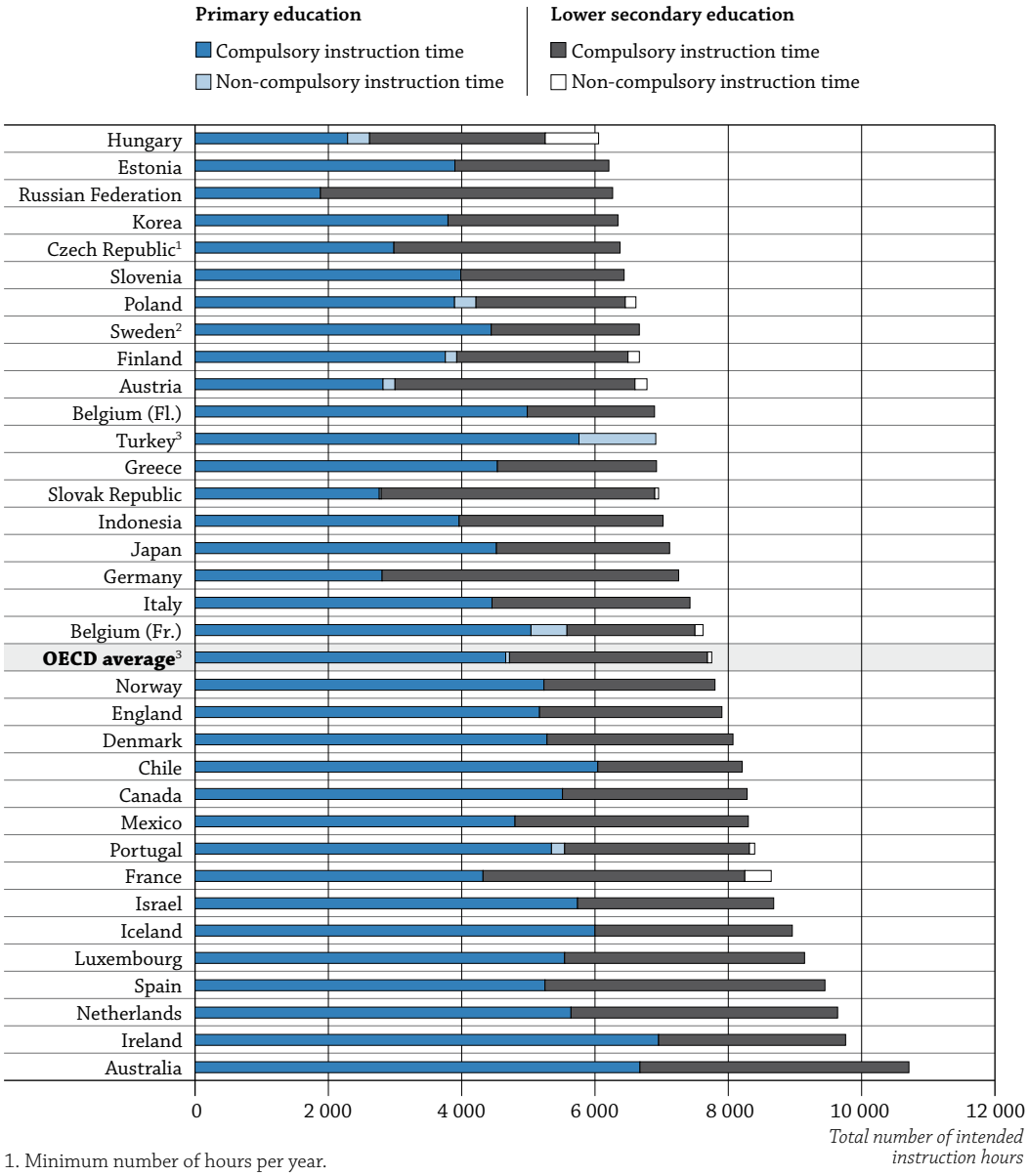
Indicator D4 How much time do teachers spend teaching?
StatLink http://dx.doi.org/10.1787/888932851934

WEB **Indicator D5** Who are the teachers?
StatLink http://dx.doi.org/10.1787/888932851991

HOW MUCH TIME DO STUDENTS SPEND IN THE CLASSROOM?

- Students in OECD countries are expected to receive an average of 7 751 hours of instruction during their primary and lower secondary education, and most of that intended instruction time is compulsory.
- On average across OECD countries, instruction in reading, writing and literature, mathematics and science represents 51% of the compulsory instruction time for primary school students and 41% of the compulsory instruction time for lower secondary school students.

Chart D1.1. Number of intended instruction hours in public institutions (2011)



1. Minimum number of hours per year.
2. Estimated minimum number of hours per year because breakdown by age not available.
3. Turkey is not included in the average.

Countries are ranked in ascending order of the total number of intended instruction hours.

Source: OECD. Table D1.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Context

Providing instruction in formal classroom settings accounts for a large portion of public investment in education. Countries make various choices concerning the overall amount of time devoted to instruction and which subjects are compulsory. These choices reflect national and/or regional priorities and preferences concerning what material students should be taught and at what age. Countries usually have statutory or regulatory requirements regarding hours of instruction. These are most often stipulated as the minimum number of hours of instruction a school must offer, and are based on the understanding that sufficient teaching time is required for good learning outcomes. Matching resources with students' needs and making optimal use of time are central to education policy. Teachers' salaries, institutional maintenance and provision of other educational resources constitute the main costs of education. The length of time during which these resources are made available to students (as partly shown in this indicator) is an important factor in determining how funds for education are allocated (see Indicator B7, which shows the factors influencing the salary cost of teachers per student).

Other findings

- In OECD countries, **compulsory instruction time for primary students averages 791 hours per year and intended instruction time averages 802 hours per year**. Lower secondary students receive an average of 116 more hours of compulsory education per year, and 122 more hours of intended instruction per year than primary students.
- **The proportion of the compulsory curriculum that is devoted to reading, writing and literature ranges from 15% in Indonesia to 38% in Hungary for primary students; for lower secondary students, it ranges from 11% in Japan and Portugal to 24% in Ireland.**
- **Primary students in all reporting OECD countries spend the largest share of time studying reading, writing and literature; in most of these countries the second largest share of time is spent studying mathematics.** In around one-third of the countries with available data, lower secondary students also spend the largest share of time studying reading, writing and literature; but in 9 countries, students spend the largest proportion of the compulsory core curriculum studying modern foreign languages. In Luxembourg and Denmark, lower secondary students spend more than 20% of compulsory instruction time studying modern foreign languages.
- **In OECD countries, an average of 6% and 7% of compulsory instruction time for primary and lower secondary students, respectively, is devoted to the flexible part of the curriculum.**
- **While the Czech Republic and the Netherlands allow complete flexibility within the compulsory curriculum at the primary and lower secondary levels, in Greece, Hungary, Luxembourg and Mexico, the flexible part of the curriculum is negligible at both levels of education.**

Analysis

Total intended instruction time

Total intended instruction time is an estimate of the number of hours during which students are taught both compulsory and non-compulsory parts of the curriculum as per public regulations. Students in OECD countries are expected to receive an average of 4 717 hours of instruction during primary school and an average of 3 034 hours during lower secondary education. Most of this instruction time is compulsory (Table D1.1).

However, the amount of instruction time for students at the primary and lower secondary levels of education varies, depending on the age of the students. While students in two-thirds of OECD countries start primary education at the age of 6, students in one-fifth of OECD countries do not start until age 7. Only in Australia, England, Ireland, New Zealand and Scotland does primary education start at age 5. In Ireland, students aged 4 are also allowed to start primary education and approximately 40% do so.

There is also substantial variation in the duration of primary education. On average, primary education lasts six years, but ranges from four years in Austria, Germany, Hungary, the Russian Federation and the Slovak Republic, to seven years in Australia, Denmark, Iceland, Norway and Scotland, to eight years in Ireland and Turkey. Lower secondary education averages three years but ranges from two years in Belgium (Flemish and French Communities) and Chile to five years in the Russian Federation and the Slovak Republic (Table D1.1).

While the average total intended instruction time for primary and lower secondary students in OECD countries is 7 751 hours, formal instruction-time requirements range from 6 054 hours in Hungary to 10 710 hours in Australia (Table D1.1). During these hours, schools are obliged to offer instruction in compulsory and, if applicable, non-compulsory subjects.

Annual instruction time should be examined together with the length of compulsory education. In some countries the duration of compulsory education is shorter and students bear a heavier workload; in other countries, the workload is distributed evenly over more years, which ultimately means a larger number of total instruction hours for all. Table D1.3, available on line, shows the age range at which more than 90% of the population is in education (see Indicator C1). Chart D1.1 shows the total amount of intended instruction time students should receive in primary and lower secondary education combined. Intended instruction time does not capture the quality of learning opportunities provided or the level or quality of the human and material resources involved (see Indicator D2, which shows the number of teachers relative to the student population).

In some countries, intended instruction time varies considerably among regions or types of schools. Although in many countries school authorities decide how instruction is organised, central and state authorities make decisions about instruction time. Intended instruction time can also differ from actual instruction time, as it only captures the time spent by students in formal classroom settings. This is only a part of the total time students spend receiving instruction. Instruction also occurs outside the classroom and/or school. In some countries, secondary school students are encouraged to take after-school classes in subjects already taught in school to help them improve their performance. Students can participate in after-school lessons in the form of remedial "catch-up" classes or enrichment courses, with individual tutors or in group lessons provided by school teachers, or in other independent courses. These lessons can be financed through public funds or by students and their families (see Box D1.1 in OECD, 2011).

Compulsory instruction time

Total compulsory instruction time is the estimated number of hours during which students are taught both the compulsory core curriculum and flexible parts of the compulsory curriculum. In OECD countries, students receive an average of 7 631 hours of compulsory instruction during their primary and lower secondary schooling combined (Table D1.1).

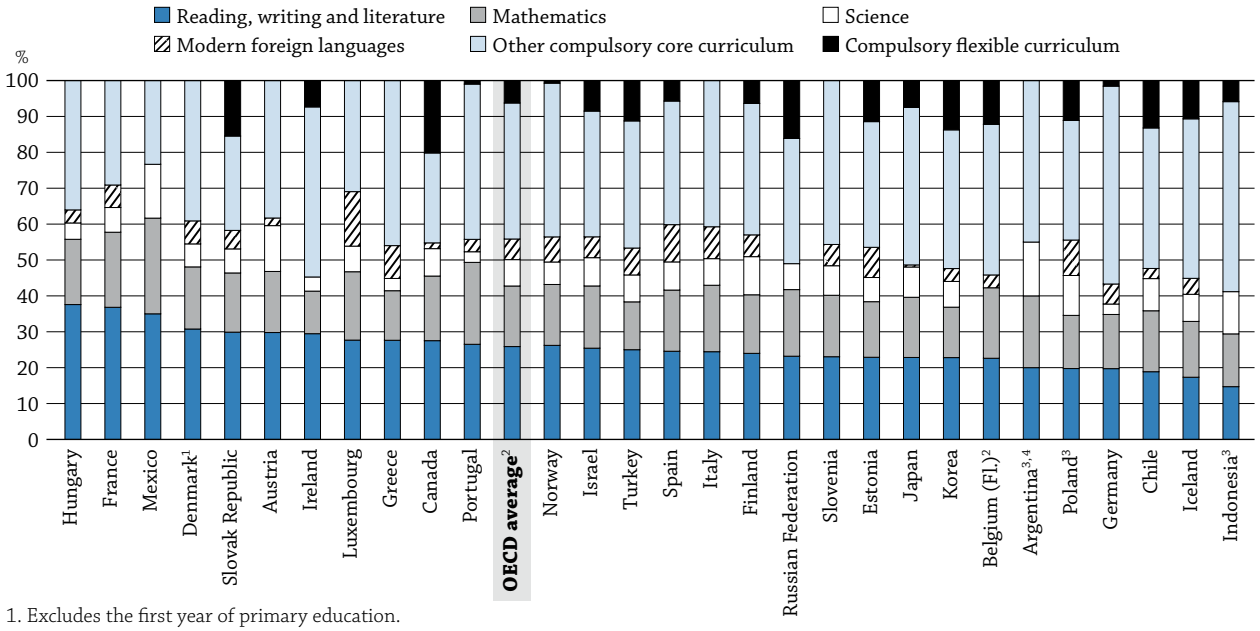
Intended instruction time is fully compulsory for primary and lower secondary students in three-quarters of countries with available data. However in Austria, Belgium (French Community), Finland, Hungary and Poland, the intended instruction time is at least 5% longer than the compulsory instruction time.

The average annual total compulsory instruction time in classroom settings in OECD countries is 791 hours at the primary level and 907 hours at the lower secondary level.

Instruction time per subject

Primary students spend an average of 54% of the compulsory curriculum on three subjects: reading, writing and literature (26%), mathematics (17%) and the arts (11%). Together with physical education (9%), science (7%) and social studies (7%), these six study areas form the major part of the curriculum for this age group in all OECD and other G20 countries with available data. Modern foreign languages, religion, practical and vocational skills, technology and other subjects make up the remainder (17%) of the compulsory core curriculum at the primary level (Table D1.2a and Chart D1.2a).

Chart D1.2a. Instruction time per subject in primary education (2011)
As a percentage of total compulsory instruction time



1. Excludes the first year of primary education.
2. Belgium (Fl.) is not included in the average.
3. Includes the last three years of primary education only.
4. Year of reference 2010.

Countries are ranked in descending order of the proportion of intended instruction hours devoted to reading, writing and literature.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table D1.2a.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847773

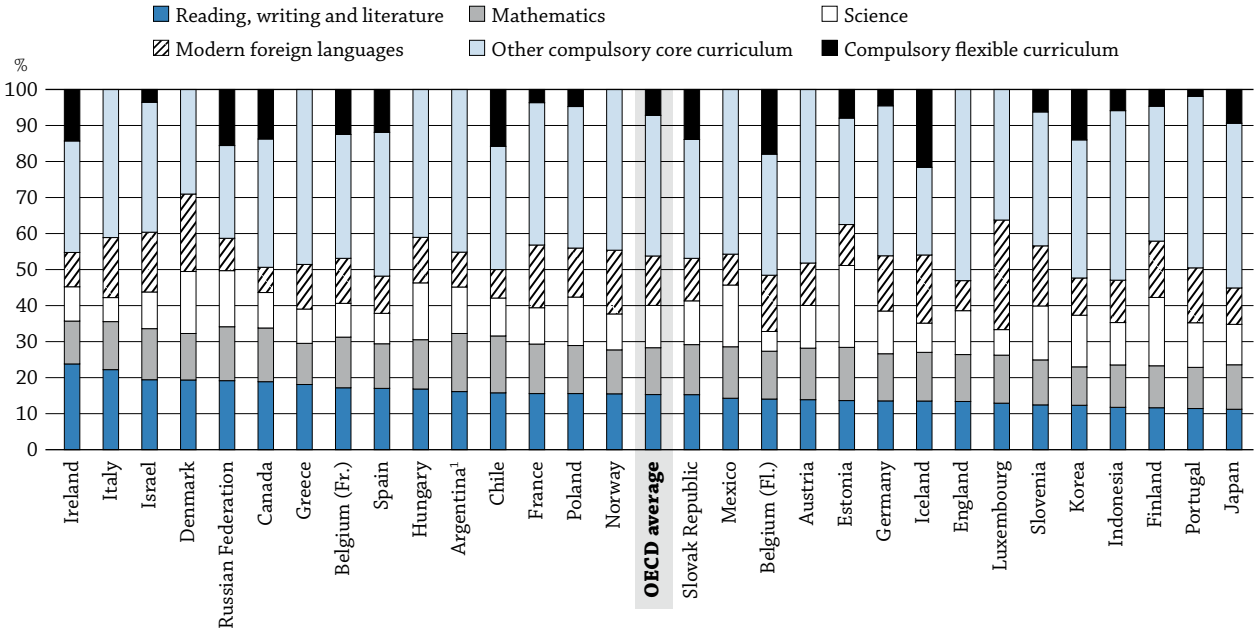
On average, the largest portion of the primary school curriculum is devoted to reading, writing and literature, but the size of that portion differs widely. For example, in Iceland and Indonesia reading, writing and literature accounts for 17% or less of compulsory instruction time while in France, Hungary and Mexico, it accounts for 35% or more of compulsory instruction time. The variations between countries in the time spent learning mathematics and arts are even larger. In Greece, Ireland, Korea and Turkey, mathematics accounts for 14% or less of instruction time; in Argentina, Belgium (Flemish Community), France, Mexico and Portugal, it accounts for 20% or more of instruction time. In Israel, Mexico and Poland, arts education accounts for 5% of instruction time, while in Austria, Denmark, Estonia, Finland, Germany, Italy and Norway, it accounts for 15% or more of compulsory instruction time.

At the lower secondary level, an average of 43% of the compulsory curriculum is composed of three subjects: reading, writing and literature (16%), modern foreign languages (14%) and mathematics (13%). On average, an additional 12% of the compulsory curriculum is devoted to social studies and 12% to science. Together

with the arts (8%) and physical education (8%), these seven study areas form the major part of the curriculum for this age group in all OECD and other G20 countries with available data. Technology, religion, practical and vocational skills, and other subjects make up the remainder (12%) of the compulsory core curriculum for students at this level of education (Table D1.2b and Chart D1.2b).

This is a significant shift in the allocation of time from primary schooling. Instruction in reading, writing and literature drops from 26% of the compulsory curriculum to 16%, yet accounts for the largest share of compulsory instruction time in around one-third of countries. Instruction in mathematics drops from 17% to 13% of compulsory instruction time. Conversely, instruction in both science and social studies climbs from 7% of the compulsory curriculum to 12%, while instruction in modern foreign languages climbs from 6% to 14%. Instruction in modern foreign languages accounts for the largest share of the compulsory core curriculum at the lower secondary level in Belgium (Flemish Community), Denmark, France, Germany, Iceland, Luxembourg, Norway, Portugal (together with other subjects) and Slovenia (Tables D1.2a and b, and Charts D1.2a and b).

Chart D1.2b. Instruction time per subject in lower secondary education (2011)
As a percentage of total compulsory instruction time



1. Year of reference 2010.
Countries are ranked in descending order of the proportion of intended instruction hours devoted to reading, writing and literature.
Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table D1.2b.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932847792

At the lower secondary level, there is substantial variation in how countries allocate time among the different subjects within the compulsory curriculum. For example, reading, writing and literature accounts for 11% of compulsory instruction time in Japan and Portugal, while it accounts for more than 20% of compulsory instruction time in Ireland and Italy. In Argentina, Canada, Chile, England, Ireland, Japan, Korea, Mexico, the Russian Federation and Spain, instruction in modern foreign languages accounts for 10% or less of instruction time; in Belgium (Flemish Community), Finland, France, Germany, Iceland, Israel, Italy, Norway, Portugal and Slovenia, it accounts for between 15% and 19% of compulsory instruction time; and in Denmark and Luxembourg, instruction in modern foreign languages exceeds 20% of compulsory instruction time (Table D1.2b). In Denmark, lower secondary students can opt to spend that time studying another subject; but they will no longer have access to general upper secondary education if they do so.

As seen at the primary and lower secondary levels, there are significant differences in how time is allocated to school subjects as students grow older. On average across OECD countries, 31% of instruction time for 7-year-olds is devoted to reading, writing and literature; for 11-year-olds, 19% of instruction time is devoted to these subjects, while 14% of instruction time for 15-year-olds is devoted to those subjects. By contrast, whereas an average of 2% of instruction time for 7-year-olds is devoted to modern foreign languages, 11% of instruction time for 11-year-olds is spent studying modern foreign languages, and 14% of instruction time for 15-year-olds is devoted to this subject. The share of instruction time dedicated to science increased from 7% (for 7-year-olds) to 9% (for 11-year-olds) to 12% (for 15-year-olds), while instruction time in social studies increased from 6% (for 7-year-olds) to 10% (for 11-year-olds) to 12% (for 15-year-olds). The portion of instruction time dedicated to arts slips from 12% for 7-year-olds to 11% for 11-year-olds, to 4% for 15-year-olds, while time dedicated to physical education remains constant at 9% for both 7 and 11 year-old students, and dropped to 7% for 15-year-old students (Tables D1.4b, f and j, available on line).

Compulsory flexible curriculum

On average across OECD countries, the flexible part of the curriculum accounts for 6% of compulsory instruction time for primary students and 7% of compulsory instruction time for lower secondary students. Within the compulsory part of the curriculum, schools, teachers and/or students have varying degrees of freedom to choose the subjects they want to teach or study. The Czech Republic and the Netherlands allow complete flexibility (100%) within the compulsory curriculum at both the primary and lower secondary levels. In the Czech Republic, the total minimum number of lessons by subject is specified for primary and lower secondary education, but each school decides how to divide these hours across each particular grade. In the Netherlands, attainment targets per subject are specified but schools are free to decide how much time is spent on the various subjects and areas of the curriculum. Australia is next in flexibility, designating 58% of compulsory time at the primary level and 46% of compulsory time at the lower secondary level for the flexible part of the curriculum.

At the primary level, Canada allocates 20% of compulsory time for the flexible part of the curriculum, while the Russian Federation and the Slovak Republic designate 16% and 15% of compulsory time, respectively. Some countries allow complete flexibility at certain grades: in Poland and Indonesia, the first three years of primary education is flexible, while in Denmark, only the first year of primary education is fully flexible.

At the lower secondary level, Iceland allocates 22% of compulsory time for the flexible part of the curriculum, while Belgium (Flemish Community) allocates 18%, and both Chile and the Russian Federation allocate 16% of compulsory time for the flexible part of the curriculum. By contrast, in Greece, Hungary, Luxembourg and Mexico, the flexible part of the curriculum is negligible or nil in both primary and lower secondary education (Tables D1.2a and b).

There are differences in time allocation within countries too. In Canada, for example, the curriculum and instruction time, as well as the number of hours of flexible curriculum, and how those hours may be allocated, are decided by the province or territory. In England, the governing body of each school decides the length of both the school day and individual lessons. In Finland, national regulations determine minimum allocations of time per subject, leaving local authorities the freedom to design the remainder of school schedules. In the Slovak Republic, schools design their own education programmes based on a national framework that includes a range of compulsory and optional lessons (see Box D1.1 in OECD, 2012).

Non-compulsory instruction time

Among OECD countries, the non-compulsory part of the curriculum accounts for an average of 2% of the total compulsory instruction time at the primary level, and 3% at the lower secondary level. Nevertheless, a considerable amount of additional non-compulsory instruction time is provided in some countries. At the primary level, additional non-compulsory time accounts for 20% of the total compulsory instruction time in Turkey, 14% in Hungary and 11% in Belgium (French Community). At the lower secondary level, non-compulsory instruction time accounts for 30% of the total compulsory instruction time in Hungary, 20% in Argentina and 10% in France (Tables D1.2a and b).

Definitions

The **compulsory curriculum** refers to the amount and allocation of instruction time that almost every public school must provide and almost all public-sector students must attend. The measurement of the time devoted to specific subjects focuses on the minimum common core rather than on the average time spent, since the data sources (policy documents) do not allow for more precise measurement. The total compulsory curriculum comprises the compulsory core curriculum and the compulsory flexible curriculum.

The **compulsory flexible curriculum** refers to the part of the compulsory curriculum where there is flexibility in time spent on a subject and/or a choice can be made among subjects.

Instruction time for primary and lower secondary students and for 5-15 year-olds refers to the formal number of 60-minute hours per school year organised by the school for class instruction. For countries with no formal policy on instruction time, the number of hours is estimated from survey data. Hours lost when schools are closed for festivities and celebrations, such as national holidays, are excluded. Intended instruction time does not include non-compulsory time outside the school day, homework, individual tutoring, or private study done before or after school.

Instruction time for the least demanding programme for 15-year-olds refers to the programme for students who are least likely to continue studying beyond the mandatory school age or beyond lower secondary education. Such a programme for 15-year-olds may or may not exist, depending on a country's streaming and selection policies. In many countries students are offered the same amount of instruction time in all or most programmes, but there is flexibility in the choice of subjects. Often, such choices have to be made early in the student's school career if programmes are long and differ substantially.

Intended instruction time refers to the number of hours per year during which students receive instruction in the compulsory and non-compulsory parts of the curriculum.

The **non-compulsory part of the curriculum** refers to the average time of instruction to which students are entitled beyond the compulsory hours of instruction. Subjects often vary from school to school or from region to region and may take the form of elective subjects.

Typical instruction time for 15-year-olds refers to the programme in which most students at this age are enrolled. The programme may take place in lower or upper secondary education and, in most countries, consists of a general programme. If the system channels students into different programmes at this age, the average instruction time may have been estimated for the largest mainstream programmes and weighted by the proportion of students in the grade in which most 15-year-olds are enrolled. When vocational programmes are also taken into account, only the school-based part of the programme is included in the calculations.

Methodology

This indicator captures intended instruction time, as established in public regulations, as a measure of learning in formal classroom settings. It does not show the actual number of hours of instruction that students receive and does not cover learning outside of the formal classroom setting. Differences may exist across countries between the regulatory minimum hours of instruction and the actual hours of instruction received by students. A study conducted by Regioplan Beleidsonderzoek in the Netherlands showed that, given such factors as school timetables, lesson cancellations and teacher absenteeism, schools may not consistently attain the regulatory minimum instruction time (see Box D1.1 in OECD, 2007).

The indicator also illustrates how minimum instruction hours are allocated across different curricular areas. It shows the intended net hours of instruction for those grades in which the majority of students are between 5 (if applying to primary education) and 15 years old. Although the data are difficult to compare among countries because of different curricular policies, they nevertheless provide an indication of how much formal instruction time is considered necessary for students to achieve the desired educational goals.

Data on instruction time are from the 2012 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2010-11.

Notes on definitions and methodologies for each country related to this indicator are provided in Annex 3, available at *www.oecd.org/edu/eag.htm*.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

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Indicator D1 Tables

Table D1.1	Compulsory and intended instruction time in public institutions (2011)	StatLink http://dx.doi.org/10.1787/888932851288
Table D1.2a	Instruction time per subject in primary education (2011)	StatLink http://dx.doi.org/10.1787/888932851307
Table D1.2b	Instruction time per subject in lower secondary education (2011)	StatLink http://dx.doi.org/10.1787/888932851326
WEB Table D1.3	Compulsory and intended instruction time, by age (2011)	StatLink http://dx.doi.org/10.1787/888932851345
WEB Table D1.4a	Instruction time per subject for 6-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851364
WEB Table D1.4b	Instruction time per subject for 7-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851383
WEB Table D1.4c	Instruction time per subject for 8-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851402
WEB Table D1.4d	Instruction time per subject for 9-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851421
WEB Table D1.4e	Instruction time per subject for 10-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851440
WEB Table D1.4f	Instruction time per subject for 11-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851459
WEB Table D1.4g	Instruction time per subject for 12-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851478
WEB Table D1.4h	Instruction time per subject for 13-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851497
WEB Table D1.4i	Instruction time per subject for 14-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851516
WEB Table D1.4j	Instruction time per subject for 15-year-olds (2011)	StatLink http://dx.doi.org/10.1787/888932851535
WEB Table D1.4k	Instruction time per subject for 15-year-olds in the least-demanding programme (2011)	StatLink http://dx.doi.org/10.1787/888932851554

D1

Table D1.1. Compulsory and intended instruction time in public institutions (2011)

By level of education

		Primary education				Lower secondary education			
		Theoretical starting age	Theoretical duration in years	Average number of hours per year of total compulsory instruction time	Average number of hours per year of total intended instruction time	Theoretical starting age	Theoretical duration in years	Average number of hours per year of total compulsory instruction time	Average number of hours per year of total intended instruction time
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia	5	7	953	953	12	4	1 009	1 009
	Austria	7	4	705	750	11	4	900	945
	Belgium (Fl.)	6	6	831	831	12	2	955	955
	Belgium (Fr.)	6	6	840	930	12	2	960	1 020
	Canada	6	6	919	919	12	3	923	923
	Chile	6	6	1 007	1 007	12	2	1 083	1 083
	Czech Republic[1]	6	5	597	597	11	4	848	848
	Denmark	6	7	754	754	13	3	930	930
	England	5	6	861	861	11	3	912	912
	Estonia	7	6	650	650	13	3	770	770
	Finland	7	6	626	654	13	3	856	913
	France	6	5	864	864	11	4	982	1 081
	Germany	7	4	702	702	11	5	890	890
	Greece	6	6	756	756	12	3	796	796
	Hungary	7	4	572	655	11	4	659	859
	Iceland	6	7	857	857	13	3	987	987
	Ireland	5	8	869	869	13	3	935	935
	Israel	6	6	956	956	12	3	981	981
	Italy	6	5	891	891	11	3	990	990
	Japan	6	6	754	754	12	3	866	866
	Korea	6	6	632	632	12	3	850	850
	Luxembourg	6	6	924	924	11	4	900	900
	Mexico	6	6	800	800	12	3	1 167	1 167
	Netherlands	6	6	940	940	12	4	1 000	1 000
	New Zealand	5	6	m	m	11	4	m	m
	Norway	6	7	748	748	13	3	855	855
	Poland	7	6	649	703	13	3	746	800
	Portugal	6	6	891	924	12	3	924	950
	Scotland	5	7	a	a	12	4	a	a
	Slovak Republic	6	4	691	698	10	5	821	832
	Slovenia	6	6	664	664	12	3	817	817
	Spain	6	6	875	875	12	4	1 050	1 050
	Sweden[2]	7	6	741	741	13	3	741	741
	Switzerland	m	m	m	m	m	m	m	m
	Turkey[3]	6	8	720	864	a	a	a	a
	United States	6	6	m	m	12	3	m	m
	OECD average[3]	6	6	791	802	12	3	907	924
	EU21 average	6	6	768	783	12	3	881	906
Other G20	Argentina[4]	6	6	m	m	12	3	744	896
	Brazil	6	5	m	m	11	4	m	m
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia	7	6	660	660	13	3	1 020	1 020
	Russian Federation	7	4	470	470	11	5	877	877
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m

1. Minimum number of hours per year.
2. Estimated minimum number of hours per year because breakdown by age not available.
3. Turkey is not included in the average.
4. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851288

Table D1.2a. Instruction time per subject in primary education (2011)

As a percentage of total compulsory instruction time

		Compulsory core curriculum												Compulsory flexible curriculum	Total compulsory curriculum	Non-compulsory curriculum
		Reading, writing and literature	Mathematics	Science	Social studies	Modern foreign languages	Technology	Arts	Physical education	Religion	Practical and vocational skills	Other	Total compulsory core curriculum			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia[1]	m	m	m	m	m	m	m	m	m	m	m	**42**	58	**100**	n
	Austria[2]	30	17	13	n	2	n	15	11	9	x(12)	4	**100**	x(12)	**100**	6
	Belgium (Fl.)[1]	23	20	x(11)	x(11)	4	n	10	7	7	n	18	**88**	12	**100**	n
	Belgium (Fr.)[1]	x(11)	x(11)	x(11)	x(11)	2	x(11)	x(11)	7	7	n	83	**100**	n	**100**	11
	Canada	27	18	8	7	2	n	7	10	n	n	1	**80**	20	**100**	n
	Chile	19	17	9	9	3	7	9	8	6	n	1	**87**	13	**100**	m
	Czech Republic[1]	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	n	n	n	**x(13)**	100	**100**	m
	Denmark[3]	31	17	6	4	6	n	17	9	5	n	3	**100**	n	**100**	n
	England	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Estonia	23	15	7	6	8	3	15	11	n	n	n	**89**	11	**100**	n
	Finland	24	16	11	2	6	n	20	9	6	n	n	**94**	6	**100**	5
	France	37	21	7	7	6	n	9	13	x(4)	n	n	**100**	n	**100**	n
	Germany	20	15	3	3	6	2	15	12	7	n	16	**98**	2	**100**	n
	Greece	28	14	3	16	9	n	9	7	5	n	9	**100**	n	**100**	n
	Hungary	38	18	5	2	4	n	13	13	n	5	3	**100**	n	**100**	14
	Iceland	17	16	8	10	4	3	12	9	x(4)	8	2	**89**	11	**100**	n
	Ireland	29	12	4	8	x(13)	n	12	4	11	n	13	**93**	7	**100**	n
	Israel	25	17	8	9	6	1	5	6	11	n	3	**91**	9	**100**	n
	Italy	24	19	7	11	9	n	15	7	7	n	n	**100**	x(12)	**100**	n
	Japan	23	17	8	7	1	n	12	9	n	n	15	**92**	8	**100**	m
	Korea[4]	23	14	7	7	4	1	10	7	n	1	12	**86**	14	**100**	n
	Luxembourg[5]	28	19	7	2	15	n	11	10	7	n	1	**100**	n	**100**	n
	Mexico[6]	35	27	15	13	n	n	5	5	n	n	n	**100**	n	**100**	n
	Netherlands[1]	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	**x(13)**	100	**100**	n
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Norway	26	17	6	7	7	n	15	11	8	n	2	**99**	1	**100**	n
	Poland[7]	20	15	11	5	10	5	5	15	n	n	4	**89**	11	**100**	7
	Portugal[8]	27	23	3	15	3	x(11)	6	3	n	x(11)	19	**99**	1	**100**	4
	Scotland	a	a	a	a	a	a	a	a	a	a	a	**a**	a	**a**	a
	Slovak Republic	30	16	7	2	5	2	9	8	4	1	n	**85**	15	**100**	1
	Slovenia	23	17	8	8	6	1	14	12	n	2	9	**100**	n	**100**	n
	Spain	25	17	8	8	10	n	9	9	x(13)	n	9	**94**	6	**100**	n
	Sweden	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Turkey	25	13	8	11	8	3	9	7	4	n	2	**89**	11	**100**	20
	United States	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	OECD average[1]	26	17	7	7	6	1	11	9	4	1	5	**94**	6	**100**	2
	EU21 average[1]	27	17	7	6	7	1	12	9	4	1	6	**96**	4	**100**	2
Other G20	Argentina[7, 9]	20	20	15	15	n	n	10	10	n	n	10	**100**	n	**100**	n
	Brazil	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	China	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	India	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Indonesia[7]	15	15	12	9	n	n	12	12	9	6	6	**94**	6	**100**	n
	Russian Federation	23	19	7	9	n	7	9	9	n	n	n	**84**	16	**100**	n
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m

1. Australia, Belgium (Fl.), Belgium (Fr.), the Czech Republic and the Netherlands are not included in the averages.
2. For the first two years of primary education, "Modern foreign languages" is included in "Total compulsory core curriculum".
3. Excludes the first year of primary education.
4. For the first two years of primary education, "Science", "Social studies", "Technology", "Arts", "Physical education" and "Practical and vocational skills" are included in "Other".
5. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxembourgish.
6. For the first two years of primary education, "Social studies" is included in "Science".
7. Includes the last three years of primary education only.
8. For the first four years of primary education, "Science" is included in "Social studies", "Arts" is included in "Others", and "Compulsory flexible curriculum" is missing.
9. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851307

D1

Table D1.2b. Instruction time per subject in lower secondary education (2011)

As a percentage of total compulsory instruction time

		Compulsory core curriculum														
		Reading, writing and literature	Mathematics	Science	Social studies	Modern foreign languages	Technology	Arts	Physical education	Religion	Practical and vocational skills	Other	Total compulsory core curriculum	Compulsory flexible curriculum	Total compulsory curriculum	Non-compulsory curriculum
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia[1]	m	m	m	m	m	m	m	m	m	m	m	**54**	46	**100**	n
	Austria	14	14	12	11	12	n	17	11	7	2	1	**100**	x(12)	**100**	5
	Belgium (Fl.)	14	13	5	9	16	6	5	6	6	n	n	**82**	18	**100**	n
	Belgium (Fr.)	17	14	9	13	13	3	3	9	6	n	n	**88**	13	**100**	6
	Canada	19	15	10	13	7	3	8	10	n	n	3	**86**	14	**100**	n
	Chile	16	16	11	11	8	3	8	5	5	n	3	**84**	16	**100**	m
	Czech Republic[1]	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	n	x(13)	n	**x(13)**	100	**100**	m
	Denmark	19	13	17	10	22	n	8	6	2	n	3	**100**	n	**100**	n
	England	13	13	12	14	8	13	10	9	3	n	3	**100**	x(12)	**100**	x(14)
	Estonia	14	15	23	10	11	6	7	7	n	n	n	**92**	8	**100**	n
	Finland	12	12	19	8	16	n	13	7	4	6	n	**95**	5	**100**	7
	France	16	14	10	11	17	6	7	12	x(4)	n	3	**96**	4	**100**	10
	Germany	14	13	12	12	15	3	9	9	5	2	1	**95**	5	**100**	n
	Greece	18	11	10	12	12	5	6	8	6	3	10	**100**	n	**100**	n
	Hungary	17	14	16	12	13	3	11	9	n	4	3	**100**	n	**100**	30
	Iceland	14	14	8	6	19	1	4	8	x(4)	3	3	**78**	22	**100**	n
	Ireland	24	12	10	19	10	x(13)	x(13)	5	7	x(13)	n	**86**	14	**100**	n
	Israel	19	14	10	16	17	4	n	6	9	n	1	**96**	4	**100**	n
	Italy	22	13	7	11	17	7	13	7	3	n	n	**100**	n	**100**	n
	Japan	11	12	11	9	10	3	7	9	n	n	17	**91**	9	**100**	m
	Korea[2]	12	11	14	12	10	3	8	8	n	3	5	**86**	14	**100**	n
	Luxembourg[3]	13	13	7	11	30	n	8	8	5	n	5	**100**	n	**100**	n
	Mexico	14	14	17	23	9	n	6	6	n	9	3	**100**	n	**100**	n
	Netherlands[1]	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	x(13)	**x(13)**	100	**100**	n
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Norway	16	12	10	10	18	n	9	9	6	4	6	**100**	n	**100**	n
	Poland	16	13	13	14	14	4	4	13	n	n	4	**95**	5	**100**	7
	Portugal[4]	11	11	12	13	15	4	7	9	n	n	15	**98**	2	**100**	3
	Scotland	a	a	a	a	a	a	a	a	a	a	a	**a**	a	**a**	a
	Slovak Republic	15	14	12	13	12	1	7	7	3	2	n	**86**	14	**100**	1
	Slovenia	12	12	15	14	17	2	6	6	n	n	8	**94**	6	**100**	n
	Spain[5]	17	12	8	10	10	4	7	7	x(13)	n	12	**88**	12	**100**	n
	Sweden	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Turkey	a	a	a	a	a	a	a	a	a	a	a	**a**	a	**a**	a
	United States	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	OECD average[1]	16	13	12	12	14	3	8	8	3	1	4	**93**	7	**100**	3
	EU21 average[1]	16	13	12	12	15	4	8	8	3	1	4	**95**	6	**100**	4
Other G20	Argentina[6]	16	16	13	19	10	6	10	10	n	n	n	**100**	x(12)	**100**	20
	Brazil	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	China	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	India	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	Indonesia	12	12	12	12	12	6	6	6	6	6	6	**94**	6	**100**	n
	Russian Federation	19	15	16	8	9	6	5	6	n	1	n	**84**	16	**100**	n
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	**m**	m	**m**	m

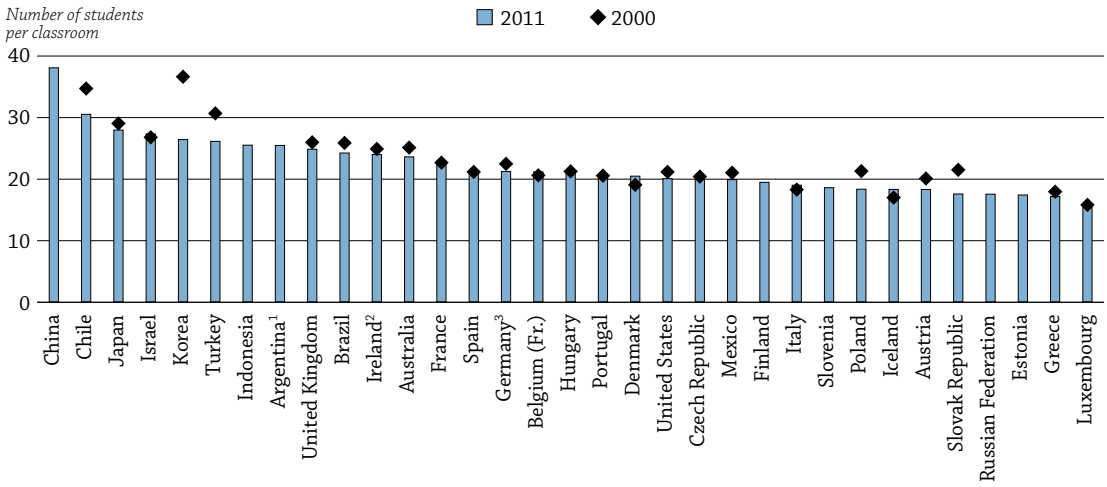
1. Australia, the Czech Republic and the Netherlands are not included in the averages.
2. For the first year of lower secondary education, "Technology" is included in "Science" and "Practical and vocational skills" is included in "Other".
3. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxembourgish.
4. For the last year of lower secondary education, "Technology" is included in "Arts".
5. For the last year of lower secondary education, "Science", "Technology" and "Arts" are included in "Compulsory flexible curriculum".
6. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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WHAT IS THE STUDENT-TEACHER RATIO AND HOW BIG ARE CLASSES?

- The average primary school class in OECD countries has more than 21 students, but classes are usually larger in G20 countries that are not OECD members.
- Primary school classes have tended to become smaller between 2000 and 2011, especially in countries that had relatively large classes, such as Korea and Turkey.
- On average across OECD countries, the number of students per class grows by two or more students between primary and lower secondary education.

Chart D2.1. Average class size in primary education (2000, 2011)



1. Year of reference 2010 instead of 2011.
2. Public institutions only.
3. Years of reference 2001 instead of 2000.

Countries are ranked in descending order of average class size in primary education in 2011.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). 2011 data: Table D2.1. 2000 data: Table D2.4, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Context

Class size and student-teacher ratios are much-discussed aspects of education and, along with students' total instruction time (see Indicator D1), teachers' average working time (see Indicator D4), and the division of teachers' time between teaching and other duties, are among the determinants of the size of countries' teaching force. Together with teachers' salaries (see Indicator D3) and the age distribution of teachers (see Indicator D5, available on line), class size and student-teacher ratios also have a considerable impact on the level of current expenditure on education (see Indicator B6, available on line, and Indicator B7).

Smaller classes are often seen as beneficial because they allow teachers to focus more on the needs of individual students and reduce the amount of class time needed to deal with disruptions. Yet, while there is some evidence that smaller classes may benefit specific groups of students, such as those from disadvantaged backgrounds (Finn, 1998; Krueger, 2002; Piketty, T. and M. Valdenaire, 2006), overall, evidence of the effect of differences in class size on student performance is weak. TALIS does not provide further evidence of a direct and strong relationship between class size and time devoted to teaching and learning (Box D2.1). There is more evidence that suggests a positive relationship between smaller classes and aspects of teachers' working conditions and outcomes, such as allowing for greater flexibility for innovation in the classroom, improved teacher morale and job satisfaction (Hattie, 2009; OECD, 2009).

The ratio of students to teaching staff indicates how resources for education are allocated. Smaller student-teacher ratios often have to be weighed against higher salaries for teachers, investing in their professional development, greater investment in teaching technology, or more widespread use of assistant teachers and other paraprofessionals whose salaries are often considerably lower than those of qualified teachers. As larger numbers of children with special needs are integrated into mainstream classes, more use of specialised personnel and support services may limit the resources available for reducing student-teacher ratios.

Other findings

- **In 27 of the 30 countries with available data, the student-teacher ratio decreases between the primary and lower secondary levels, despite a general increase in class size between these levels**. This decrease in the student-teacher ratio reflects differences in annual instruction time for students, which tends to increase with the level of education.
- On average across OECD countries, **the student-teacher ratio in secondary education is slightly more favourable in private than in public institutions**. This is most striking in Mexico where, at the secondary level, there are nearly 17 more students per teacher in public than in private institutions. On average across OECD countries, there is at most one student more per class in public than in private institutions at the primary and lower secondary levels.
- Class size varies significantly within countries. **The difference between the smallest and largest classes is as large as 30 students in Brazil, Iceland, Malaysia, Mexico and Turkey**. This may result partly from differences in the size of the community to which the school belongs or from differences between public and private schools (Box D2.1).

Trends

From 2000 to 2011, the average class size in countries with available data for both years decreased by one student at both the primary and lower secondary levels, and the range of class size among OECD countries narrowed. At the lower secondary level, for example, class size ranged from 17.4 students (Iceland) to 38.5 (Korea) in 2000 and from 16.7 students (Estonia) to 34.0 (Korea) in 2011. However, class size has grown in some countries that had relatively small classes in 2000, most notably Denmark and Iceland.

D2

Analysis

Average class size in primary and lower secondary education

The average primary class in OECD countries had more than 21 pupils in 2011. When considering all countries with available data, that number varies widely and ranges from fewer than 16 pupils in Luxembourg to more than 30 in Chile and China. There are fewer than 20 pupils per primary classroom in nearly half of the countries with available data: Austria, the Czech Republic, Estonia, Finland, Greece, Iceland, Italy, Luxembourg, Mexico, Poland, the Russian Federation, the Slovak Republic and Slovenia.

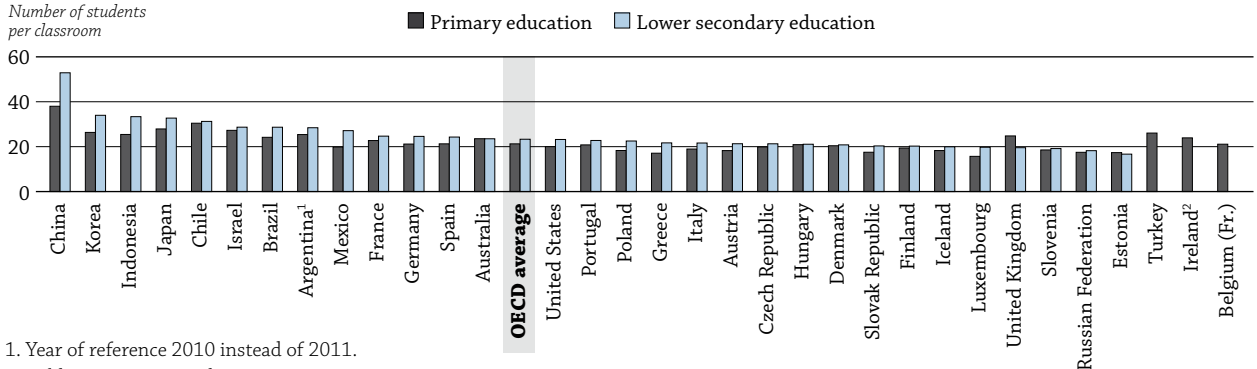
At the lower secondary level, in general programmes, the average class in OECD countries has more than 23 students. Among all countries with available data on this level of education, that number varies from fewer than 20 students in Estonia, Iceland, Luxembourg, the Russian Federation, Slovenia, and the United Kingdom to 34 students per class in Korea and almost 53 students in China (Table D2.1).

The number of students per class tends to increase between primary and lower secondary education. In Brazil, China, Greece, Indonesia, Japan, Korea, Luxembourg, Mexico and Poland, the increase in average class size exceeds four students. Meanwhile, the United Kingdom and, to a lesser extent, Estonia show a drop in the number of students per class between these two levels of education (Chart D2.2).

The size of the average primary school class decreased slightly between 2000 and 2011 in countries with available data in both years (21.4 students per class in 2011 as compared to 22.6 in 2000). Class size is more likely to have declined in countries in which enrolment numbers also declined. However, this is also partly the result of reforms on class size that some countries implemented during the period (see Indicator B7 in *Education at a Glance 2012*). Among countries with comparable data, class size decreased markedly – by more than four students – in countries that had larger classes in 2000, such as Korea and Turkey. Class size increased or was unchanged in countries that had the smallest classes in 2000, such as Denmark, Iceland, Italy and Luxembourg (Chart D2.1). In lower secondary school, the gap between the smallest and largest classes narrowed between 2000 and 2011: among OECD countries with comparable data for both years, class size varied from 17.4 students (Iceland) to 38.5 (Korea) in 2000 and from 16.7 students (Estonia) to 34.0 (Korea) in 2011 (Table D2.1 and Table D2.4, available on line).

The indicator on class size is limited to primary and lower secondary education because class size is difficult to define and compare at higher levels, where students often attend several different classes, depending on the subject area. At the lower secondary level, TALIS data provide more insight on the variation of class size within countries (Box D2.1).

Chart D2.2. Average class size in educational institutions, by level of education (2011)



1. Year of reference 2010 instead of 2011.
2. Public institutions only.

Countries are ranked in descending order of average class size in lower secondary education.

Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table D2.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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D2

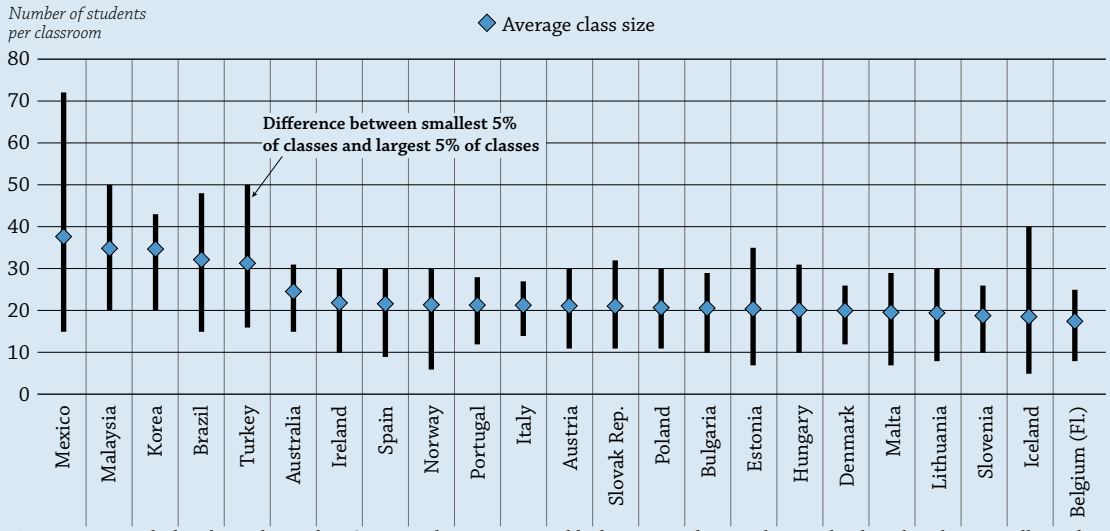
Box D2.1. How class size in lower secondary schools varies within countries (TALIS 2008)

The Teaching and Learning International Survey (TALIS) analysed the conditions needed for effective teaching and learning in lower secondary schools. As part of the contextual information collected, teachers were asked to give the actual number of students in a class that they typically teach in one of their main subjects on a specific day and time of the week.

On average across the 19 OECD and partner countries participating in TALIS and taken into account in *Education at a Glance* (out of the total 23 countries participating in TALIS), there are 23.5 students per classroom, comparable to the OECD average class size reported in this indicator for general lower secondary programmes, despite differences in the methodologies used. The difference between both data sources in average class size for each country is less than 2 students in most of these countries, except Spain and Brazil (difference of nearly 3 students) and Mexico (difference of more than nine students). Moreover, TALIS enriches the analysis of class size by providing some insight on the variation of class size within each participating country.

There are large differences in lower secondary class sizes among TALIS participants. Average class size varies from fewer than 20 students in Belgium (Flemish Community), Iceland, Lithuania, Malta and Slovenia to nearly twice this number in Mexico (37.7).

Chart a. Average class size, lower secondary (2008)
Reported by teachers for main subject taught



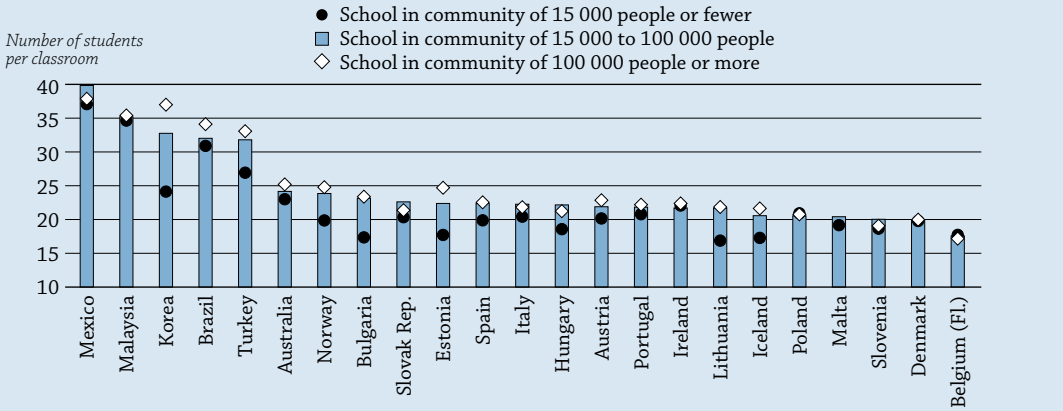
Countries are ranked in descending order of average class size reported by lower secondary teachers in the class that they typically teach in one of their main subjects of teaching.
Source: OECD, *TALIS 2008 Database*. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932855031

The distribution of class size within each country also varies greatly (Chart a). In Denmark and Italy, the difference between the smallest 5% and largest 5% of classes is fewer than 15 students, but is at least 30 students in Brazil, Iceland, Malaysia, Mexico and Turkey. Brazil, Mexico and Turkey are among the countries with both the largest average class size and the largest differences in class size between schools. Nevertheless, the variation between the smallest and largest classes in each country is not necessarily linked to average class size. In Iceland, for example, despite the small average class size, the difference between the largest 5% and the smallest 5% of classes is 35 students, the second-largest difference among these countries. By contrast, in Australia, despite relatively large classes (23.5 students), the difference between the smallest 5% and largest 5% of classes is among the smallest (16 students).

...

The differences in class size in each of these countries can also be analysed according to the size of the community to which the school belongs (see chart below). In most countries, class size varies depending on the number of the inhabitants in the communities in which the school is located. In half of the countries with available data, class size increases with the size of the community. The difference in class size between communities is particularly large in some countries whose classes are, on average large. For example, in Korea and Turkey, the average classes in communities of more than 100 000 inhabitants have at least 6 more students per class than average classes in communities of fewer than 15 000 inhabitants. By contrast, the difference in class size between large and small communities is fewer than one student in Belgium (Flemish Community), Denmark, Ireland, Poland and Slovenia.

Chart b. Average class size, lower secondary, by community size (2008)
Reported by teachers for main subject taught



Countries are ranked in descending order of average class size reported by lower secondary teachers in the class that they typically teach in one of their main subjects of teaching.
Source: OECD, *TALIS 2008 Database*. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888932855050

The subject of class size has gained interest from parents and policy makers due to its perceived potential impact on the performance of students (Ehrenberg, R. et al., 2001). However, evidence of the effects of differences in class size on student performance is rather weak. Results from TALIS shed some light on this issue. Teachers were asked about how their class time is distributed between administrative tasks, keeping order in the classroom, and actual teaching and learning. An indication of the effect of class size on student learning may be seen through a negative relationship between class size and the proportion of class time reported to be devoted to actual teaching and learning, and a positive relationship between class size and the proportion of class time reported to be devoted to keeping order in the classroom. In most TALIS countries, there is a significant positive correlation between class size and the time spent on keeping order in the classroom on the one hand, and a negative correlation between class size and actual teaching and learning time on the other hand. However, these correlations are weak and reveal a rather tenuous relationship between these factors. Moreover, in some countries, the correlations are inverted. In Belgium (Flemish Community), Hungary, Ireland, Malta, Poland and Portugal, the larger the class size, the less time teachers spend keeping order in the classroom and the more time they spend on actual teaching and learning. Thus, results from TALIS do not provide evidence of a direct and strong relationship between class size and time devoted to teaching and learning. Rather, this relationship is likely affected by other factors, such as the support given to teachers to address disciplinary issues in the classroom. For example, TALIS shows that new teachers (teachers with two years or less of teaching experience) are more likely than their more experienced peers to spend more time keeping order in their classroom. They are also more likely to report unmet professional development needs in the areas of classroom management and student discipline and behaviour problems (Jensen et al., 2012). Providing such development opportunities for new teachers may give them the support they need to use their classroom time more efficiently for actual teaching and learning.

Student-teacher ratios

The ratio of students to teaching staff compares the number of students (full-time equivalent) to the number of teachers (full-time equivalent) at a given level of education and in similar types of institutions. However, this ratio does not take into account the amount of instruction time for students compared to the length of a teacher's working day, nor how much time teachers spend teaching. Therefore, it cannot be interpreted in terms of class size (Box D2.2).

At the primary level, there are fewer than 16 students for every teacher, on average across OECD countries. The student-teacher ratio ranges from more than 28 students per teacher in Mexico and more than 23 students per teacher in Chile to fewer than 11 in Hungary, Iceland, Luxembourg and Norway (Chart D2.3).

Student-teacher ratios also vary, and to a larger extent, at the secondary school level, ranging from 30 students per full-time equivalent teacher in Mexico to fewer than 11 in Austria, Belgium, Luxembourg, Norway, Poland, Portugal, Saudi Arabia and Spain. On average across OECD countries, there are about 14 students per teacher at the secondary level (Table D2.2).

Box D2.2. Relationship between class size and student-teacher ratio

The number of students per class is calculated using a number of different elements: the ratio of students to teaching staff, the number of classes or students for which a teacher is responsible, the amount of instruction time compared to the length of teachers' working days, the proportion of time teachers spend teaching, how students are grouped within classes, and team-teaching arrangements.

For example, in a school of 48 full-time students and 8 full-time teachers, the student-teacher ratio is 6 to 1. If teachers' work week is estimated to be 35 hours, including 10 hours teaching, and if instruction time for each student is 40 hours per week, then regardless of how students are grouped in the school, average class size can be estimated as follows:

Estimated class size = 6 students per teacher * (40 hours of instruction time per student/10 hours of teaching per teacher) = 24 students.

Using a different approach, the class size presented in Table D2.1 is defined as the number of students who are following a common course of study, based on the highest number of common courses (usually compulsory studies), and excluding teaching in subgroups. Thus, the estimated class size will be close to the average class size in Table D2.1 where teaching in subgroups is less frequent, such as in primary and lower secondary education.

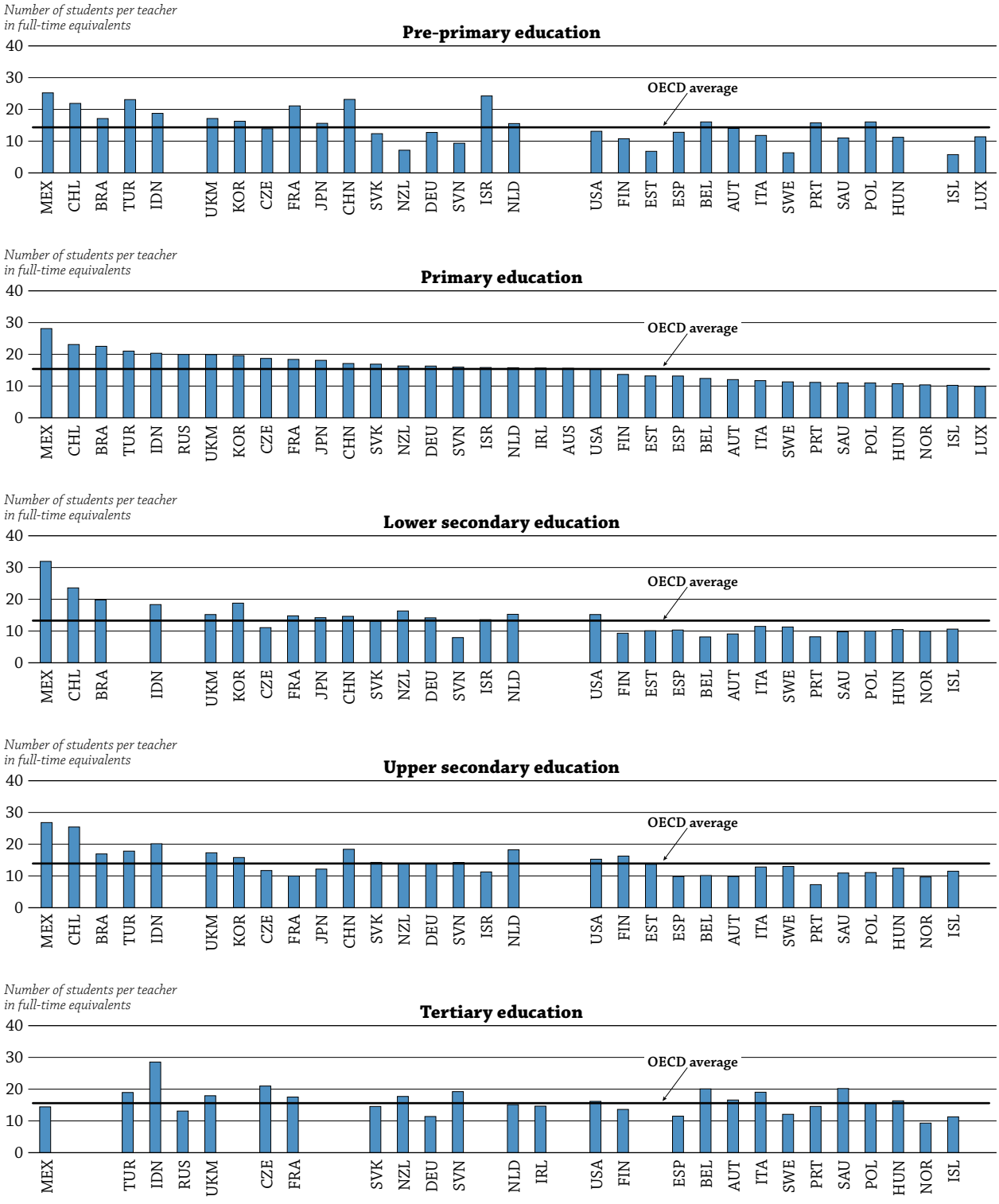
Because of these definitions, similar student-teacher ratios between countries can result in different class sizes. For example, at the primary level, the Czech Republic and Japan have similar ratios of student to teaching staff (18.7 in the Czech Republic and 18.1 in Japan – Table D2.2), but the average class size differs substantially (19.9 in the Czech Republic and 27.9 in Japan – Table D2.1).

As the differences in student-teacher ratios indicate, there are fewer full-time equivalent students per full-time equivalent teacher at the secondary level than at the primary level of education. In most countries, the student-teacher ratio decreases between primary and lower secondary school, despite an increase in class size. This is true in all but three OECD countries: Chile, Iceland and Mexico.

This reduction in the student-teacher ratio reflects differences in annual instruction time, which tends to increase with the level of education (see Indicator D1). It may also result from delays in matching the teaching force to demographic changes, or from differences in teaching hours for teachers at different levels of education (the number of teaching hours tends to decrease with the level of education, as teacher specialisation increases). The general trend is consistent among countries, but evidence is mixed as to whether smaller student-teacher ratios are more desirable, from an education perspective, at higher levels of education.

D2

Chart D2.3. Ratio of students to teaching staff in educational institutions, by level of education (2011)



Countries are ranked in descending order of students to teaching staff ratios in primary education.

Source: OECD. China, Indonesia and Saudi Arabia: UNESCO Institute for Statistics (World Education Indicators Programme). Table D2.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for list of country codes for country names used in this chart.

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For the pre-primary level (see also Indicator C2), Table D2.2 shows the ratio of student to teaching staff and also the ratio of students to contact staff (teachers and teachers' aides). Some countries make extensive use of teachers' aides at the pre-primary level. Twelve countries reported smaller ratios of students to contact staff (Column 1 of Table D2.2) than of students to teaching staff. However, few countries have large numbers of teachers' aides. As a result, the ratios of students to contact staff are substantially lower than the ratios of students to teaching staff (at least two fewer pupils) in Austria, Brazil, China, Chile, France, Germany, Israel, the United Kingdom and the United States. The difference is particularly large in Chile and Israel, where there are at least 10 fewer pupils per contact staff than per teaching staff.

At the tertiary level, the student-teacher ratio ranges from 20 or more students per teacher in Belgium, the Czech Republic, Indonesia, Saudi Arabia and South Africa to fewer than 10 in Norway (Table D2.2). However, comparisons at this level should be made with caution since it is difficult to calculate full-time equivalent students and teachers on a comparable basis. In 6 of the 13 countries with comparable data at the tertiary level, the ratio of students to teaching staff is lower in more vocationally oriented programmes (tertiary-type B) than in academic (tertiary-type A) and advanced research programmes. Turkey is the only country with a significantly higher student-teacher ratio in vocational programmes at the tertiary level (53 to 1) than in academic (tertiary-type A) and advanced research programmes (15 to 1) (Table D2.2).

Class size in public and private institutions

Class size is one factor that parents may consider when deciding on a school for their children; and the difference in average class size between public and private schools (and between different type of private institutions) could influence enrolment.

Among OECD and G20 countries for which data are available, average class size generally does not differ between public and private institutions by more than one student per class in both primary and lower secondary education (Chart D2.4 and Table D2.1). However, there are marked differences among countries. For example, in Brazil, the Czech Republic, Israel, Poland, the Russian Federation, Turkey and the United Kingdom, the average primary school class size in public institutions is larger by four or more students per class than the average class size in a private school. However, with the exception of Brazil and Israel, the private sector is relatively small in all of these countries, representing at most 5% of students at the primary level (see Table C1.4). In contrast, in China, Luxembourg and Spain (where more than 30% of pupils are enrolled in private institutions), the average class size in private institutions is larger than that in public institutions by four or more students.

The comparison of class size between public and private institutions shows a mixed picture at the lower secondary level, where private institutions are more prevalent. The average class size in lower secondary schools is larger in private institutions than in public institutions in 13 countries, although the differences tend to be smaller than in primary education.

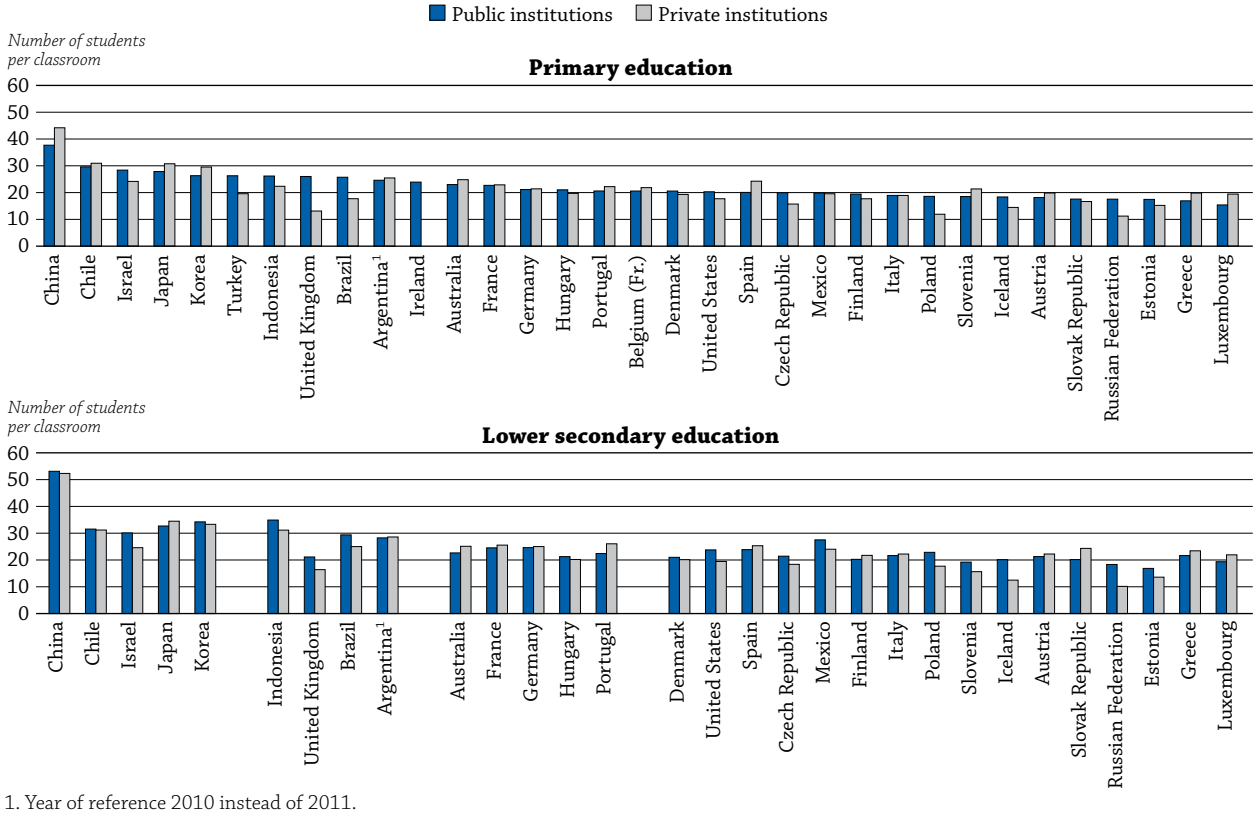
In countries where private institutions are more prevalent at the primary and lower secondary levels (i.e. countries where more than 10% of students at these levels are enrolled in private institutions), such as Argentina, Australia, Belgium (French Community), Brazil, Chile, Denmark, France, Indonesia, Portugal and Spain, there may be large differences in class size between public and private institutions. However, in Spain, one of the two countries where differences are large (a difference of four students or more at both levels in Brazil, and at the primary level only in Spain), private institutions tend to have more students per class than public schools (see Tables C1.4 and D2.1). This suggests that in countries in which a substantial proportion of students and families choose private schools, class size is not a determining factor in their decision.

Comparing the number of student to teaching staff shows a similar picture. On average across countries for which data are available, ratios of students to teaching staff are slightly lower in private institutions than in public institutions at the lower secondary and upper secondary levels (Table D2.3). The largest differences between public and private institutions are in Brazil and Mexico where, at the lower secondary level, there are at least eight more students per teacher in public institutions than in private institutions. At the upper

secondary level in Mexico, the difference in student-teacher ratios between public and private institutions (a difference of more than 17 students per teacher) is even larger than that at the lower secondary level (15 students per teacher).

However, in some countries, the student-teacher ratio is lower in public institutions than in private institutions. This is most pronounced at the lower secondary level in Spain, which has some 15 students per teacher in private institutions, compared to fewer than 9 students per teacher in public institutions.

Chart D2.4. Average class size in public and private institutions, by level of education (2011)



1. Year of reference 2010 instead of 2011.

Countries are ranked in descending order of average class size in public institutions in primary education.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table D2.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932851725

Definitions

Instructional personnel (teaching staff) includes two categories:

- **Teachers' aides and teaching/research assistants** include non-professional personnel or students who support teachers in providing instruction to students.
- **Teaching staff** refers to professional personnel directly involved in teaching students. The classification includes classroom teachers, special-education teachers and other teachers who work with a whole class of students in a classroom, in small groups in a resource room, or in one-to-one teaching situations inside or outside a regular class. Teaching staff also includes department chairpersons whose duties include some teaching, but excludes non-professional personnel who support teachers in providing instruction to students, such as teachers' aides and other paraprofessional personnel.

Methodology

Data refer to the academic year 2010-11 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details see Annex 3 at *www.oecd.org/edu/eag.htm*).

Calculations cover expenditure by public institutions or, where available, by both public and private institutions.

Class size is calculated by dividing the number of students enrolled by the number of classes. In order to ensure comparability among countries, special-needs programmes are excluded. Data include only regular programmes at primary and lower secondary levels of education, and exclude teaching in sub-groups outside the regular classroom setting.

The ratio of students to teaching staff is obtained by dividing the number of full-time equivalent students at a given level of education by the number of full-time equivalent teachers at that level and in similar types of institutions.

Notes on definitions and methodologies regarding this indicator for each country are presented in Annex 3 at *www.oecd.org/edu/eag.htm*.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator D2 Tables

Table D2.1	**Average class size, by type of institution and level of education (2011)**	StatLink http://dx.doi.org/10.1787/888932851592
Table D2.2	**Ratio of students to teaching staff in educational institutions (2011)**	StatLink http://dx.doi.org/10.1787/888932851611
Table D2.3	**Ratio of students to teaching staff by type of institution (2011)**	StatLink http://dx.doi.org/10.1787/888932851630
WEB Table D2.4	**Average class size, by type of institution and level of education (2000)**	StatLink http://dx.doi.org/10.1787/888932851649

D2

Table D2.1. Average class size, by type of institution and level of education (2011)

Calculations based on number of students and number of classes

		Primary education					Lower secondary education (general programmes)				
			Private institutions					Private institutions			
		Public institutions	Total private institutions	Government-dependent private institutions	Independent private institutions	Total Public and private institutions	Public institutions	Total private institutions	Government-dependent private institutions	Independent private institutions	Total Public and private institutions
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	23.0	24.8	24.8	a	**23.5**	22.6	25.0	25.0	a	**23.5**
	Austria	18.2	19.8	x(2)	x(2)	**18.2**	21.2	22.2	x(7)	x(7)	**21.3**
	Belgium	m	m	m	a	**m**	m	m	m	a	**m**
	Belgium (Fr.)	20.6	21.8	21.8	m	**21.1**	m	m	m	m	**m**
	Canada	m	m	m	m	**m**	m	m	m	m	**m**
	Chile	29.6	31.0	32.4	23.8	**30.4**	31.5	31.1	32.4	24.7	**31.3**
	Czech Republic	19.9	15.7	15.7	a	**19.9**	21.4	18.3	18.3	a	**21.3**
	Denmark	20.6	19.3	19.3	a	**20.4**	20.9	20.1	20.1	a	**20.8**
	Estonia	17.5	15.2	a	15.2	**17.4**	16.8	13.6	a	13.6	**16.7**
	Finland	19.4	17.7	17.7	a	**19.4**	20.2	21.7	21.7	a	**20.3**
	France	22.7	22.9	x(2)	x(2)	**22.7**	24.5	25.5	25.7	14.0	**24.7**
	Germany	21.2	21.4	21.4	x(3)	**21.2**	24.5	24.9	24.9	x(8)	**24.6**
	Greece	16.9	19.8	a	19.8	**17.1**	21.6	23.4	a	23.4	**21.7**
	Hungary	21.0	19.7	19.7	a	**20.9**	21.2	20.1	20.1	a	**21.1**
	Iceland	18.4	14.5	14.5	a	**18.3**	20.1	12.5	12.5	a	**19.9**
	Ireland	23.9	m	a	m	**m**	m	m	m	m	**m**
	Israel	28.4	24.2	24.0	a	**27.3**	30.0	24.5	23.4	a	**28.7**
	Italy	18.9	18.9	a	18.9	**18.9**	21.6	22.2	a	22.2	**21.6**
	Japan	27.9	30.8	a	30.8	**27.9**	32.6	34.4	a	34.4	**32.7**
	Korea	26.3	29.5	a	29.5	**26.3**	34.1	33.2	33.2	a	**34.0**
	Luxembourg	15.4	19.4	18.1	19.5	**15.7**	19.3	21.9	19.6	25.6	**19.7**
	Mexico	19.9	19.6	a	19.6	**19.8**	27.4	24.0	a	24.0	**27.1**
	Netherlands	m	m	m	m	**m**	m	m	m	m	**m**
	New Zealand	m	m	m	m	**m**	m	m	m	m	**m**
	Norway	a	a	a	a	**a**	a	a	a	a	**a**
	Poland	18.6	11.9	11.1	12.2	**18.3**	22.8	17.6	23.8	15.8	**22.5**
	Portugal	20.6	22.2	24.2	21.5	**20.8**	22.4	26.0	25.7	26.4	**22.8**
	Slovak Republic	17.6	16.7	16.7	n	**17.5**	20.1	24.3	24.3	n	**20.3**
	Slovenia	18.5	21.4	21.4	n	**18.5**	19.2	15.6	15.6	n	**19.2**
	Spain	20.1	24.3	24.6	22.2	**21.3**	23.8	25.3	25.7	21.8	**24.3**
	Sweden	m	m	m	m	**m**	m	m	m	m	**m**
	Switzerland	m	m	m	m	**m**	m	m	m	m	**m**
	Turkey	26.3	19.6	a	19.6	**26.1**	a	a	a	a	**a**
	United Kingdom	26.0	13.1	29.0	12.4	**24.8**	21.1	16.4	19.2	10.1	**19.5**
	United States	20.3	17.7	a	17.7	**20.0**	23.7	19.4	a	19.4	**23.2**
	OECD average	21.3	20.5	21.0	20.2	**21.2**	23.4	22.5	22.8	21.2	**23.3**
	EU21 average	19.9	19.0	20.0	18.1	**19.9**	21.8	22.0	22.4	19.9	**21.8**
Other G20	Argentina[1]	24.6	25.5	29.5	24.1	**25.4**	28.2	28.5	30.1	26.9	**28.4**
	Brazil	25.7	17.7	a	17.7	**24.2**	29.3	24.9	a	24.9	**28.7**
	China	37.7	44.2	x(2)	x(2)	**38.0**	53.0	52.2	x(7)	x(7)	**52.9**
	India	m	m	m	m	**m**	m	m	m	m	**m**
	Indonesia	26.2	22.4	a	22.4	**25.4**	34.8	31.1	a	31.1	**33.4**
	Russian Federation	17.5	11.2	a	11.2	**17.5**	18.3	10.1	a	10.1	**18.2**
	Saudi Arabia	m	m	m	m	**m**	m	m	m	m	**m**
	South Africa	m	m	m	m	**m**	m	m	m	m	**m**
	G20 average	24.3	22.6	~	~	**24.1**	26.4	24.8	~	~	**26.2**

1. Year of reference 2010.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes (*www.oecd.org/edu/eag htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851592

Table D2.2. Ratio of students to teaching staff in educational institutions (2011)

By level of education, calculations based on full-time equivalents

		Pre-primary education		Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education		
		Students to contact staff (teachers and teachers' aides)	Students to teaching staff		Lower secondary education	Upper secondary education	All secondary education		Tertiary-type B	Tertiary-type A and advanced research programmes	All tertiary education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia[1, 2]	m	m	15.6	x(6)	x(6)	12.0	m	m	14.7	m
	Austria	9.7	14.0	12.1	9.1	9.8	9.4	10.4	n	16.6	16.6
	Belgium[3]	16.1	16.1	12.4	8.1	10.1	9.4	x(5)	x(10)	x(10)	20.1
	Canada[2, 4]	m	x(4)	x(4)	15.9	14.2	15.3	m	m	17.7	m
	Chile	10.7	21.9	23.1	23.6	25.4	24.8	a	m	m	m
	Czech Republic	13.6	13.9	18.7	11.1	11.7	11.4	18.2	17.8	21.3	21.0
	Denmark	m	m	x(4)	11.8	m	m	m	m	m	m
	Estonia	m	6.8	13.2	10.1	13.7	11.9	16.4	m	m	m
	Finland	m	10.8	13.7	9.3	16.3	13.1	x(5)	n	13.6	13.6
	France[3]	14.1	21.1	18.4	14.8	10.0	12.3	x(8)	20.9	16.7	17.5
	Germany	10.0	12.7	16.3	14.2	13.8	14.0	14.5	14.1	10.9	11.4
	Greece	m	m	m	m	m	m	m	m	m	m
	Hungary	m	11.2	10.7	10.5	12.4	11.5	13.5	20.4	15.9	16.3
	Iceland	5.8	5.8	10.2	10.6	11.5	11.1	x(5, 10)	x(10)	x(10)	11.3
	Ireland[2]	m	m	15.7	x(6)	x(6)	14.4	x(6)	x(10)	x(10)	14.6
	Israel[2]	11.5	24.2	15.9	13.6	11.3	12.2	m	m	m	m
	Italy[2]	m	11.8	11.7	11.5	12.8	12.2	m	7.5	19.1	19.0
	Japan	14.8	15.6	18.1	14.2	12.2	13.1	x(5, 10)	m	m	m
	Korea	16.3	16.3	19.6	18.8	15.8	17.2	a	m	m	m
	Luxembourg	m	11.4	9.9	x(6)	x(6)	9.6	m	m	m	m
	Mexico	25.2	25.2	28.1	31.9	26.8	29.9	a	15.8	14.4	14.4
	Netherlands	14.3	15.5	15.8	15.3	18.2	16.7	19.5	16.2	15.1	15.1
	New Zealand	7.2	7.2	16.3	16.3	13.9	15.1	22.6	18.0	17.6	17.7
	Norway[2]	m	m	10.4	10.0	9.7	9.8	x(5)	x(10)	x(10)	9.3
	Poland	m	16.1	11.0	10.0	11.1	10.6	15.0	9.0	15.7	15.6
	Portugal[5]	m	15.8	11.2	8.2	7.3	7.7	x(5, 10)	x(10)	x(10)	14.6
	Slovak Republic	12.3	12.4	16.9	13.1	14.3	13.7	14.1	10.0	14.6	14.5
	Slovenia	9.4	9.4	16.0	7.9	14.3	11.0	x(5)	x(10)	x(10)	19.2
	Spain	m	12.8	13.2	10.3	9.8	10.1	a	9.8	12.0	11.5
	Sweden	6.3	6.3	11.3	11.3	13.0	12.2	24.2	x(10)	x(10)	12.1
	Switzerland	m	m	m	m	m	m	m	m	m	m
	Turkey	m	23.1	21.0	a	17.8	17.8	a	53.0	15.0	18.9
	United Kingdom	12.2	17.1	19.9	15.2	17.3	16.3	a	x(10)	x(10)	17.9
	United States	10.9	13.1	15.3	15.2	15.3	15.2	17.8	x(10)	x(10)	16.2
	OECD average	12.2	14.4	15.4	13.3	13.9	13.6	16.9	15.2	15.7	15.6
	EU21 average	11.8	13.1	14.1	11.2	12.7	12.0	16.2	14.0	15.6	15.9
Other G20	Argentina	m	m	m	m	m	m	a	m	m	m
	Brazil	12.6	17.1	22.5	19.8	16.9	18.5	a	m	m	m
	China	20.6	23.2	17.1	14.6	18.4	16.3	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m
	Indonesia	17.3	18.8	20.3	18.3	20.1	19.1	a	x(10)	x(10)	28.5
	Russian Federation[2]	m	m	20.0	x(6)	x(6)	8.7	x(6)	10.5	13.9	13.1
	Saudi Arabia	m	11.0	11.0	9.8	10.9	10.3	a	x(10)	x(10)	20.2
	South Africa[4]	m	m	m	m	m	m	a	x(10)	x(10)	27.6
	G20 average	15.4	17.4	18.3	15.3	15.9	15.5	~	~	~	~

1. Includes only general programmes in upper secondary education.
2. Public institutions only (for Australia, at tertiary-type A and advanced research programmes only; for Canada, at the tertiary level only; for Ireland, at tertiary level only; for Italy, from pre-primary to secondary level; for the Russian Federation, at primary and secondary levels only).
3. Excludes independent private institutions.
4. Year of reference 2010.
5. Data refer to teachers (head count) in primary, secondary and post-secondary non-tertiary education.

Source: OECD. China: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: UNESCO Institute for Statistics and Observatory on Higher Education; South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table D2.3. Ratio of students to teaching staff by type of institution (2011)

By level of education, calculations based on full-time equivalents

		Lower secondary education				Upper secondary education				All secondary education			
			Private				Private				Private		
		Public	Total private institutions	Government-dependent private institutions	Independent private institutions	Public	Total private institutions	Government-dependent private institutions	Independent private institutions	Public	Total private institutions	Government-dependent private institutions	Independent private institutions
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia[1]	x(9)	x(10)	x(11)	a	x(9)	x(10)	x(11)	a	12.2	11.6	11.6	a
	Austria	9.0	10.4	x(2)	x(2)	10.1	8.2	x(6)	x(6)	9.4	9.2	x(10)	x(10)
	Belgium[2]	7.5	m	8.6	m	10.7	m	9.8	m	9.5	m	9.4	m
	Canada[3, 4, 5]	16.0	14.2	x(2)	x(2)	14.5	11.4	x(6)	x(6)	15.4	13.2	x(10)	x(10)
	Chile	22.7	24.4	25.7	18.3	25.9	25.1	27.2	15.9	24.7	24.9	26.7	16.6
	Czech Republic	11.1	10.2	10.2	a	11.5	12.9	12.9	a	11.3	12.5	12.5	a
	Denmark[4]	11.7	12.7	12.7	m	m	m	m	m	m	m	m	m
	Estonia	10.2	8.3	a	8.3	13.9	11.7	a	11.7	12.0	9.8	a	9.8
	Finland[6]	9.3	9.5	9.5	a	15.5	21.0	21.0	a	12.5	18.5	18.5	a
	France	14.2	m	17.2	m	9.6	m	11.6	m	11.9	m	14.3	m
	Germany	14.2	13.7	13.7	x(3)	13.9	12.9	12.9	x(7)	14.1	13.4	13.4	x(11)
	Greece	m	m	m	m	m	m	m	m	m	m	m	m
	Hungary	10.5	10.0	10.0	a	12.5	12.2	12.2	a	11.5	11.5	11.5	a
	Iceland[6]	10.8	4.3	4.3	n	11.4	11.9	11.9	n	11.1	11.3	11.3	n
	Ireland[2]	x(9)	m	a	m	x(9)	m	a	m	14.5	m	a	m
	Israel	13.6	m	m	a	11.3	m	m	a	12.2	m	m	a
	Italy	11.5	m	a	m	12.8	m	a	m	12.2	m	a	m
	Japan[6]	14.4	12.5	a	12.5	11.5	13.9	a	13.9	13.0	13.6	a	13.6
	Korea	18.6	19.5	19.5	a	15.1	16.8	16.8	a	17.0	17.5	17.5	a
	Luxembourg	9.4	x(10)	x(11)	x(12)	9.5	x(10)	x(11)	x(12)	9.4	10.6	11.9	9.5
	Mexico	34.8	19.5	a	19.5	32.4	14.6	a	14.6	33.9	16.9	a	16.9
	Netherlands	15.3	14.7	a	14.7	18.1	20.2	a	20.2	16.6	18.1	a	18.1
	New Zealand	16.5	12.9	a	12.9	14.0	13.3	20.7	10.0	15.3	13.2	20.7	11.0
	Norway	10.0	m	m	m	9.7	m	m	m	9.8	m	m	m
	Poland	10.1	9.0	11.7	8.2	11.1	11.2	11.7	11.1	10.6	10.4	11.7	10.1
	Portugal[7]	7.9	10.7	9.6	12.4	7.6	6.4	10.7	5.5	7.8	7.5	10.0	6.6
	Slovak Republic	13.2	12.5	12.5	n	14.6	12.5	12.5	n	13.8	12.5	12.5	n
	Slovenia[2]	7.9	6.5	6.5	n	14.3	12.4	11.6	14.5	10.9	12.1	11.2	14.5
	Spain	8.9	14.8	14.8	15.1	9.0	14.1	14.6	13.5	8.9	14.6	14.7	14.1
	Sweden	11.2	11.9	11.9	n	12.7	14.3	14.3	n	12.0	13.5	13.5	n
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	a	a	a	a	18.7	7.6	a	7.6	18.7	7.6	a	7.6
	United Kingdom	15.4	14.7	19.4	8.0	14.4	21.6	24.9	10.3	14.9	19.1	23.3	9.1
	United States	15.9	10.4	a	10.4	15.9	10.4	a	10.4	15.9	10.4	a	10.4
	OECD average	13.2	12.5	12.8	9.3	13.9	13.8	15.1	10.0	13.6	13.3	14.5	9.9
	EU21 average	11.0	11.3	12.6	11.1	12.3	13.7	13.9	12.4	11.8	12.9	13.5	11.5
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	21.4	12.6	a	12.6	18.4	11.9	a	11.9	20.1	12.2	a	12.2
	China	14.5	16.5	x(2)	x(2)	18.5	17.4	x(6)	x(6)	16.2	17.0	x(10)	x(10)
	India	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	17.7	19.6	a	19.6	16.9	25.2	a	25.2	17.4	22.0	a	22.0
	Russian Federation	x(9)	x(10)	a	x(12)	x(9)	x(10)	a	x(12)	8.7	m	a	m
	Saudi Arabia	9.7	10.0	x(2)	x(2)	10.5	13.5	x(6)	x(6)	10.1	12.1	x(10)	x(10)
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	14.1	13.8	~	~	14.2	15.2	~	~	13.8	14.3	~	~

1. Includes only general programmes in lower and upper secondary education.
2. Upper secondary includes post-secondary non-tertiary education.
3. Year of reference 2010.
4. Lower secondary includes primary education.
5. Lower secondary includes pre-primary education.
6. Upper secondary education includes programmes from post-secondary education.
7. Data refer to teachers (head count) in primary, secondary and post-secondary non-tertiary education.

Source: OECD. China: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia, South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

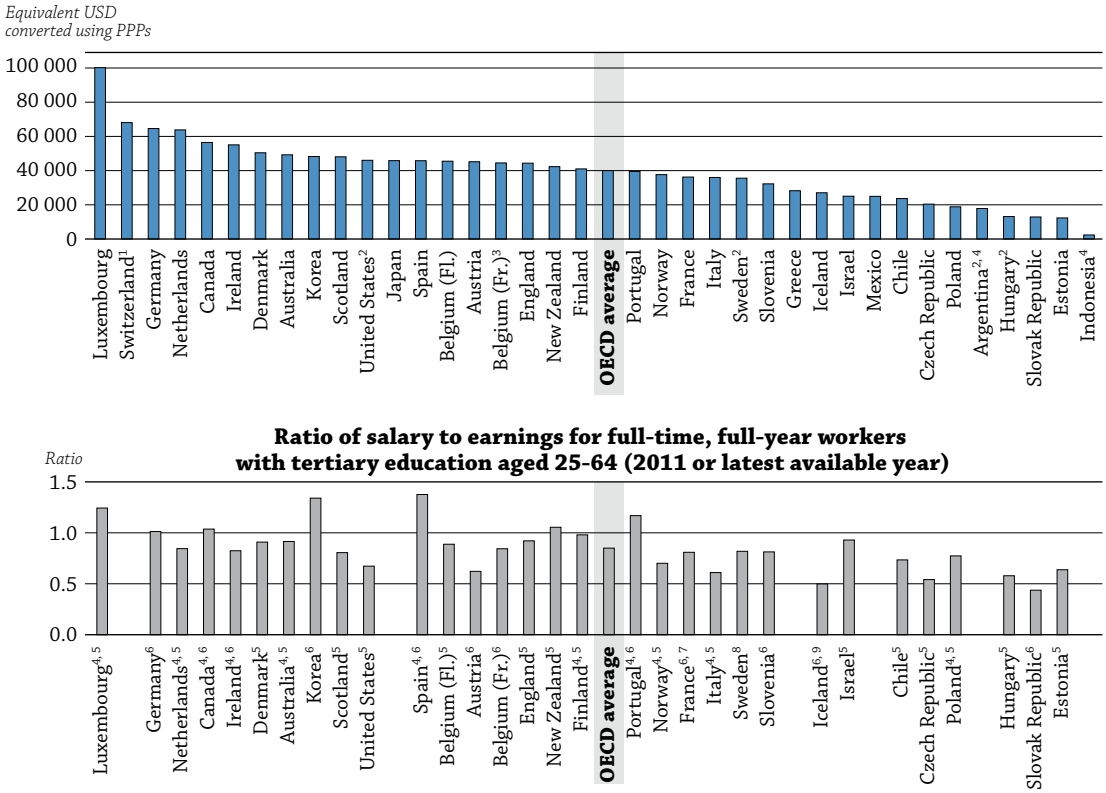
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HOW MUCH ARE TEACHERS PAID?

- The statutory salaries of teachers with 15 years of experience average USD 36 135 at the pre-primary level, USD 38 136 at the primary level, USD 39 934 at the lower secondary level, and USD 41 665 at the upper secondary level.
- On average across OECD countries, pre-primary teachers earn 80% of the salary of a tertiary-educated, 25-64 year-old full-time, full-year worker, primary-school teachers earn 82% of that benchmark, lower secondary teachers are paid 85%, and upper secondary teachers are paid 89% of that benchmark salary.

Chart D3.1. Teachers' salaries in lower secondary education (2011)

Annual statutory teachers' salaries for teachers with 15 years of experience and minimum training, in public institutions, in equivalent USD converted using PPPs



1. Salaries after 11 years of experience.
2. Actual base salaries.
3. Salaries of teachers with typical qualification instead of minimum.
4. Year of reference 2010.
5. Ratio of average actual salary, including bonuses and allowances, for teachers aged 25-64 to earnings for full-time, full-year workers with tertiary education aged 25-64.
6. Ratio of statutory salary after 15 years of experience and minimum training to earnings for full-time, full-year workers with tertiary education aged 25-64.
7. Year of reference 2009.
8. Ratio of average actual salary for teachers aged 25-64, not including bonuses and allowances, to earnings for full-time, full-year workers with tertiary education aged 25-64.
9. Year of reference 2006.

Countries are ranked in descending order of teachers' salaries in lower secondary education for teachers with 15 years of experience and minimum training.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Tables D3.1 and D3.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Context

Teachers' salaries represent the largest single cost in formal education and have a direct impact on the attractiveness of the teaching profession. They influence decisions to enrol in teacher education, become a teacher after graduation (as graduates' career choices are associated with relative earnings in teaching and non-teaching occupations, and their likely growth over time), return to the teaching profession after a career interruption, and/or remain a teacher (as, in general, the higher the salaries, the fewer the people who choose to leave the profession) (OECD, 2005). Burgeoning national debt, spurred by governments' responses to the financial crisis of late 2008, have put pressure on policy makers to reduce government expenditure – particularly on public payrolls. Since compensation and working conditions are important for attracting, developing and retaining skilled and high-quality teachers, policy makers should carefully consider teachers' salaries as they try to ensure both quality teaching and sustainable education budgets (see Indicators B6, available on line, and B7).

Other findings

- In most OECD countries, **teachers' salaries increase with the level of education they teach**. For example, in Belgium, Denmark, Finland, Hungary, Indonesia, Poland and Switzerland, the salary of an upper secondary school teacher with 15 years of experience is at least 25% higher than that of a pre-primary school teacher with the same experience.
- **Salaries at the top of the scale are, on average, 58%, 59%, 61% and 62% higher, respectively, than starting salaries in pre-primary, primary, lower secondary and upper secondary education**, and the difference tends to be greatest when it takes many years to progress through the scale. In countries where it takes 30 years or more to reach the top of the salary scale, salaries at that level are an average of 78% higher than starting salaries.
- Teachers with maximum qualifications at the top of their salary scales are paid, on average, USD 47 243 at the pre-primary level, USD 49 609 at the primary level, USD 52 697 at the lower secondary level, and USD 53 449 at the upper secondary level. However, **the salary premium for higher qualifications varies.** In Israel, Mexico, Poland and Slovenia, for example, primary teachers who hold the maximum qualification earn at least 30% more than primary teachers with similar experience, but who hold the minimum qualification. However, in around 40% of countries there is no difference.
- In 9 out of 21 countries with available data, the **average annual salaries of upper secondary teachers**, including bonuses and allowances, are at least 10% higher than statutory salaries for upper secondary teachers with 15 years of experience.

Trends

Between 2000 and 2011, teachers' salaries rose, in real terms, in most countries with available data. Notable exceptions are France and Japan, where there was a decline in teachers' salaries in real terms during that period. In some countries, the economic downturn in 2008 also had a direct impact on teachers' salaries, which were either frozen or cut in these countries between 2009 and 2011.

D3

Analysis

Statutory teachers' salaries

Teachers' salaries are one component of teachers' total compensation. Other benefits, such as regional allowances for teaching in remote areas, family allowances, reduced rates on public transport and tax allowances on the purchase of cultural materials, may also form part of teachers' total remuneration. There are also large differences in taxation and social-benefits systems in OECD countries. All this should be borne in mind when comparing salaries across countries.

Teachers' salaries vary widely across countries. The salaries of lower secondary school teachers with 15 years of experience range from less than USD 15 000 in Estonia, Hungary, Indonesia and the Slovak Republic, to USD 60 000 or more in Germany, the Netherlands and Switzerland (for teachers with at least 11 years of experience) and exceed USD 100 000 in Luxembourg (Table D3.1 and Chart D3.1).

In most OECD countries, teachers' salaries increase with the level of education taught. In Belgium, the Czech Republic, Denmark, Hungary, Indonesia, the Netherlands, Poland and the Slovak Republic, upper secondary teachers with 15 years of experience earn between 20% and 30% more than pre-primary teachers with the same experience; they earn around 50% more in Finland and in Switzerland (for teachers with 11 years of experience). In Finland and the Slovak Republic, the difference is mainly explained by the gap between pre-primary and primary teachers' salaries. In the Netherlands, the main difference is found between the primary and lower secondary level, whereas in Belgium, teachers' salaries at the upper secondary level are significantly higher than at the other levels of education. The differences between salaries at each level of education should be interpreted in light of the requirements to enter the teaching profession (see Indicator D5, "Who are the teachers?", in OECD, 2012).

In Australia, Canada, Korea and Turkey, there is less than a 5% difference between salaries for upper secondary and pre-primary school teachers with 15 years of experience; in England, Greece, Portugal, Scotland and Slovenia, teachers receive the same salary irrespective of the level of education taught. This is also true in Estonia, Ireland and Japan at the primary, lower secondary and upper secondary levels. In contrast, in Argentina, teachers' salaries decrease with the level of education taught: an upper secondary school teacher earns 15% less than a pre-primary school teacher although an upper secondary school teacher is required to teach twice the amount of time (see Indicator D4). In Israel, there is an 18% difference between the salaries of an upper secondary teacher and a pre-primary teacher in favour of the latter. This difference is the result of the "New Horizon" reform, gradually implemented since 2008, that increased salaries for pre-primary, primary and lower secondary teachers. Another reform, launched in 2012, will also increase salaries for upper secondary teachers. In Luxembourg, primary school teachers with 15 years of experience earned around 50% less than secondary teachers with the same amount of experience prior to a reform in 2009. Now, however, the difference between primary and secondary school teachers' salaries is less than 10%.

Differences in teachers' salaries at different education levels may influence how schools and school systems attract and retain teachers and may also influence the extent to which teachers move among education levels.

Minimum and maximum teachers' salaries

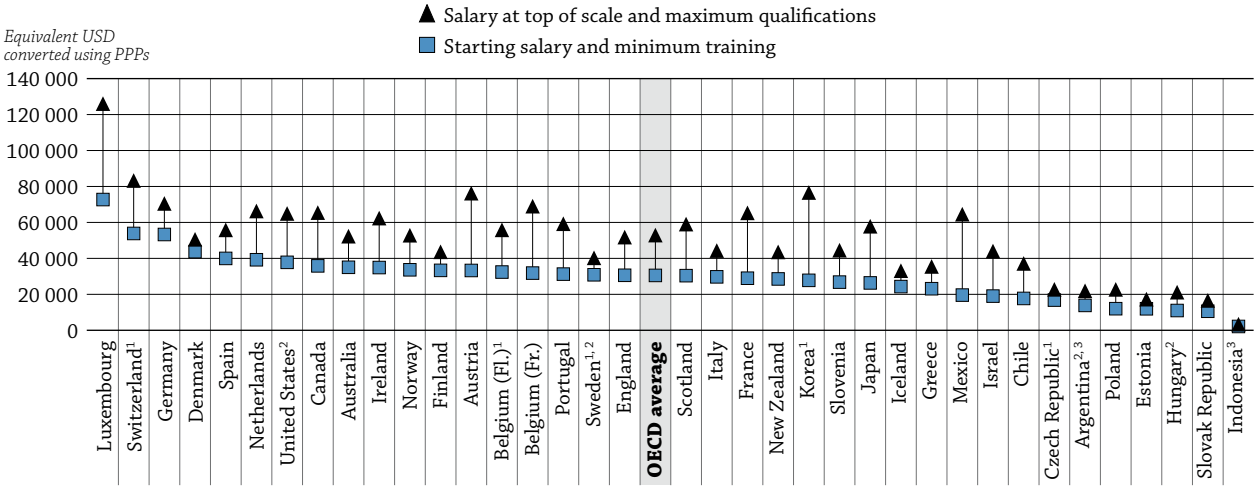
Education systems face a challenge in recruiting high-quality graduates as teachers. Research evidence indicates that salaries and alternative employment opportunities are important influences on the attractiveness of teaching (Santiago, 2004). The starting salaries of teachers relative to other non-teaching occupations and the likely growth in earnings have a huge influence over a graduate's decision to become a teacher. Countries that are looking to increase the supply of teachers, especially those with an ageing teacher workforce and/or a growing school-age population, might consider offering more attractive starting wages and career prospects. However, to ensure a well-qualified teaching workforce, efforts must be made not only to recruit and select only the most competent and qualified teachers, but also to retain effective teachers.

At the lower secondary level, new teachers entering the profession with the minimum qualification earn, on average, USD 30 216. This minimum salary ranges from below USD 15 000 in Argentina, Estonia, Hungary,

Indonesia, Poland and the Slovak Republic, to more than USD 40 000 in Denmark, Germany, Luxembourg and Switzerland. For teachers at the top of the salary scale and with the maximum qualifications, salaries average USD 52 697. This maximum salary ranges from less than USD 20 000 in Estonia, Indonesia and the Slovak Republic, to USD 75 000 or more in Austria, Korea and Switzerland and more than USD 125 000 in Luxembourg. Most countries with starting salaries below the OECD average also show lower maximum salaries. The exceptions are France, Japan, Korea and Mexico, where starting salaries are at least 5% lower than the OECD average, but maximum salaries are significantly higher. The opposite is true for Australia, Denmark and Norway where starting salaries are at least 10% above the OECD average but maximum statutory salaries are within the OECD average (Chart D3.2 and Table D3.5, available on line).

Chart D3.2. **Minimum and maximum teachers' salaries in lower secondary education (2011)**

Annual statutory teachers' salaries, in public institutions, in equivalent USD converted using PPPs



1. Salary at top of scale and minimum training.
2. Actual base salaries.
3. Year of reference 2010.

Countries are ranked in descending order of starting teachers' salaries with minimum training in lower secondary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table D3.5, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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A number of countries have relatively flat salary scales. For example, the difference between minimum and maximum salaries is less than 30%, in Denmark at the pre-primary, primary and lower secondary levels, and in the Czech Republic, Finland, Norway and Sweden at the pre-primary level.

Weak financial incentives may make it more difficult to retain teachers as teachers approach the peak of their earnings. However, there may be some benefits to compressed pay scales. It is often argued, for example, that organisations in which there are smaller differences in salaries among employees enjoy more trust, freer flows of information and more collegiality among co-workers.

In contrast, maximum salaries are at least twice the amount of starting salaries in Austria, the French community of Belgium (pre-primary, primary and lower secondary levels), Chile, France (lower and upper secondary levels), Hungary (upper secondary level), Israel, Japan (primary and secondary levels), Korea and Poland (pre-primary and primary levels), and they are more than three times the starting salaries in Mexico (pre-primary, primary and lower secondary levels) (Chart D3.2 and Table D3.5, available on line).

The salary premium for a higher level of qualification, at the top of the salary scale, also varies across countries. At the lower secondary level, while there is no difference between salaries at the top of the scale for teachers with minimum and maximum qualifications in 11 of 32 countries with data for both, teachers at the top of

the scale holding the maximum qualifications in the French community of Belgium, France, Israel, Norway, Scotland and Slovenia earn at least 20% more than teachers with the same experience, but with minimum training. This salary gap is as wide as 57% in Mexico. A similar picture is seen at the upper secondary level (Table D3.1 and Table D3.5, available on line).

When considering salary structure for teachers, it is important to remember that not all teachers reach the top of the salary scale. For example, in Italy, less than 5% of all teachers were at the top of the salary scale in 2011.

Box D3.1. Additional payments: Incentives and allowances

In addition to basic pay scales, school systems increasingly use schemes that offer additional payments or other rewards for teachers. Together with the starting salary, these payments may influence a person's decision to enter or remain in the teaching profession. Data have been collected on whether additional payments are available and on the level at which the decision to award such payments is taken (Tables D3.6a, b, c and d, available on line, and Annex 3 available at *www.oecd.org/edu/eag.htm*).

Additional payments are most often awarded for particular responsibilities or working conditions, such as teaching in more disadvantaged schools, particularly those located in very poor neighbourhoods or those with a large proportion of students whose language is not the language of instruction. These schools often have difficulty attracting teachers and are more likely to have less-experienced teachers (OECD, 2005). These additional payments are provided in almost three-quarters of the countries.

Additional payments based on teachers' qualifications, training and performance are also common in OECD and other G20 countries. The most common types of payments reward an initial education qualification and/or a level of teacher certification and training that is higher than the minimum requirement. Over three-quarters of the countries make these payments available. Moreover, among the 38 countries with available data, half offer an additional payment to teachers for outstanding performance. In 15 of the 19 countries that offer this performance incentive, the decision to award the additional payments can be made at the school level.

Half of all OECD countries offer additional payments based on teachers' demographic characteristics (family status or age), and most of these are annual payments.

Teaching experience and salary scales

Salary structures define the salaries paid to teachers at different points in their careers. Deferred compensation, which rewards employees for staying in organisations or professions and for meeting established performance criteria, is also used in teachers' salary structures. OECD data on teachers' salaries are limited to information on statutory salaries at four points of the salary scale: starting salaries, salaries after 10 years of service, salaries after 15 years of experience, and salaries at the top of the scale. The salaries discussed here are those of teachers who have the minimum required training. As mentioned above, further qualifications can lead to wage increases in some countries.

In OECD countries, statutory salaries for lower secondary school teachers with 10 and 15 years of experience are, respectively, 25% and 35% higher, on average, than starting salaries. Furthermore, salaries at the top of the scale, which is reached after an average of 24 years of experience, are 61% higher, on average, than starting salaries. In Hungary, Israel, Italy, Korea and Spain, lower secondary school teachers reach the top of the salary scale after at least 35 years of service. In contrast, lower secondary school teachers in Australia, Denmark, Estonia, New Zealand and Scotland reach the highest step on the salary scale within six to nine years (Tables D3.1 and D3.2).

While salary increases are gradual in slightly more than half of the 32 OECD countries with relevant data, in the remaining countries, salary scales include steps of uneven size.

Statutory salaries per hour of net teaching time

The average statutory salary per teaching hour after 15 years of experience is USD 49 for primary school teachers, USD 58 for lower secondary teachers, and USD 66 for upper secondary teachers in general education. Argentina, Chile, the Czech Republic (primary level), Estonia, Hungary, Indonesia, Mexico (primary and lower secondary levels) and the Slovak Republic show the lowest salaries per teaching hour: USD 30 or less. In contrast, salaries per hour reach USD 90 or more in Belgium, Denmark, Germany and Japan at the upper secondary level, and in Luxembourg at all education levels (Table D3.2).

As secondary school teachers are required to teach fewer hours than primary school teachers, their salaries per teaching hour are usually higher than those of teachers at lower levels of education, even in countries where statutory salaries are similar (see Indicator D4). On average across OECD countries, upper secondary teachers' salaries per teaching hour exceed those of primary teachers by around 31% (Table D3.2). In Scotland, there is no difference, while in Denmark, upper secondary teachers earn double the salary of primary teachers per teaching hour. In contrast, in Argentina, secondary school teachers' salaries per teaching hour amount to less than 50% of those of primary school teachers.

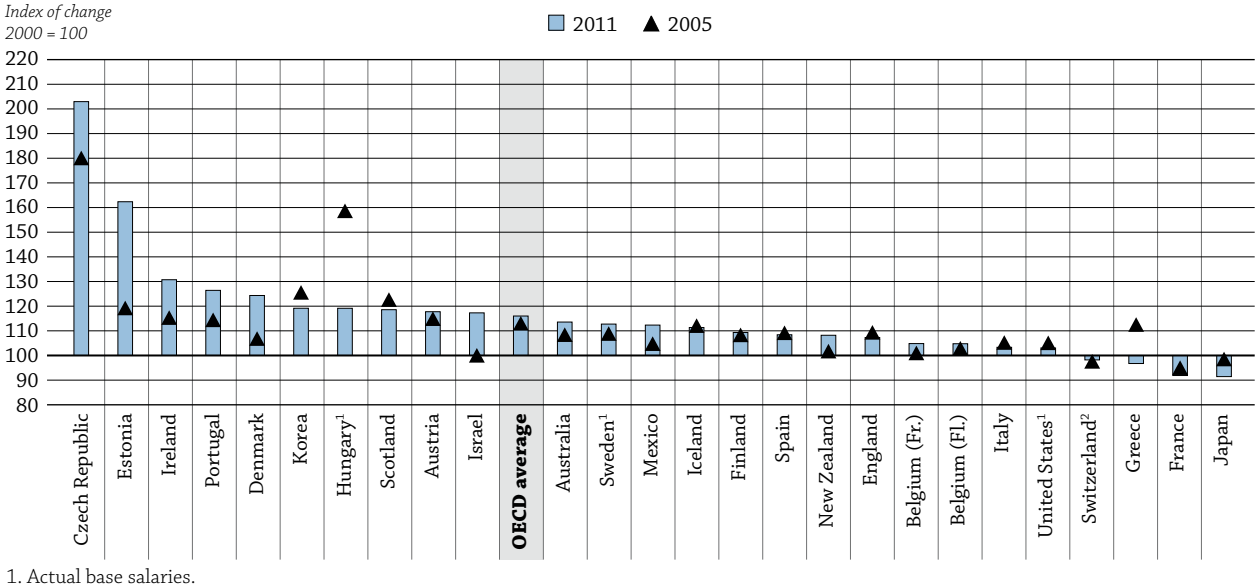
However, the difference in salaries between primary and secondary teachers may disappear when comparing salaries per hour of working time. In Portugal, for example, there is a 14% difference in salaries per teaching hour between primary and upper secondary teachers, even though statutory salaries and working time are actually the same at these levels. The difference is explained by the fact that primary teachers spend more time in teaching activities than upper secondary teachers do (see Table D4.1).

Trends since 2000

Between 2000 and 2011, teachers' salaries increased in real terms in most countries. In Denmark, Estonia, Ireland and Portugal, salaries increased at all levels of education by at least 20%. In the Czech Republic (primary and lower secondary levels) and in Turkey (upper secondary level), salaries doubled over the past decade. Only in France and Japan did teachers' salaries decrease in real terms by almost 10% (Table D3.4 and Chart D3.3).

Chart D3.3. Change in teachers' salaries in lower secondary education (2000, 2005, 2011)

Index of change between 2000 and 2011 (2000 = 100, constant prices), for teachers with 15 years of experience and minimum training



1. Actual base salaries.
2. Salaries after 11 years of experience.

Countries are ranked in descending order of the index of change between 2000 and 2011 in teachers' salaries in lower secondary education, for teachers with 15 years of experience.

Source: OECD. Table D3.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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In most countries, salaries increased less since 2005 than between 2000 and 2005. The exceptions to this pattern are the French community of Belgium (secondary levels), Denmark, Estonia, Israel and Mexico (primary and lower secondary levels) and New Zealand, where most of the increase in teachers' salaries occurred after 2005.

The above analysis on trends in salaries is based on teachers with 15 years of experience (a proxy for mid-career teachers); however, teachers at certain stages of their career may experience more rapid pay increases than teachers at another stage of their career. For example, some countries that have been experiencing teachers' shortages may implement targeted policies to improve the attractiveness of the profession by increasing the salaries of beginning teachers (OECD, 2005). In 2011, French teachers with less than seven years of experience received an increase in pay, and the most significant increase was for teachers entering the profession/starting teachers.

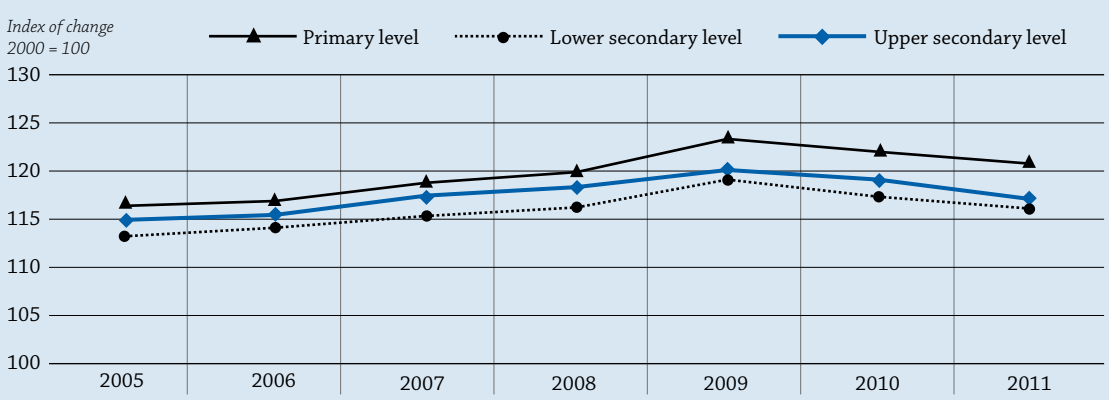
In most countries, similar increases and decreases in teachers' salaries were seen at the primary, lower secondary and upper secondary levels. However, in Turkey, teachers' salaries increased notably more at the upper secondary level than they did at the primary level between 2000 and 2011, whereas in the Czech Republic and Iceland, they increased significantly more at the primary and lower secondary levels than at the upper secondary level over the same period. In Israel, teachers' salaries increased significantly more at the primary level than at other levels of education. This was largely the result of the gradual implementation of the "New Horizon" reform in primary and lower secondary schools, begun in 2008, following an agreement between the education authorities and the Israeli Teachers Union (for primary and lower secondary education). This reform includes higher teacher pay in exchange for more working hours (see Indicator D4). In 2011, 80% of the full-time equivalent teachers in primary education, 26% in lower secondary education and 8% in pre-primary education were included in the reform. The same year, the Israeli government negotiated a similar programme for upper secondary schools with the union of secondary school teachers. As the implementation of these reforms continues, salaries at the lower and upper secondary level are also expected to increase significantly.

Box D3.2. **Effect of the economic crisis**

The financial and economic crisis that hit the world economy in the last months of 2008 significantly affected the salaries for civil servants and public sector workers in general. The pressure to trim government spending in order to reduce national debt has resulted in cuts in teachers' and other civil-service salaries in a growing number of countries. On average across OECD countries with available data, teachers' salaries decreased, for the first time since 2000, by around 2% at all levels of education between 2009 and 2011.

Chart a. Change in teachers' salaries in OECD countries (2005-11)

OECD average of the index of change between 2005 and 2011 (2000 = 100, constant prices) for teachers with 15 years of experience and minimum training



Source: OECD. Table D3.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

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Teachers' salaries were, for example, significantly affected by the crisis in Estonia, Greece, Hungary, Ireland and Spain. In Estonia, minimum teachers' salaries were cut back to their 2008 levels in 2009 and have been frozen at that level ever since. In Greece, various reductions in teachers' benefits and allowances affected teachers' salaries in 2010 and 2011. As a result, gross salaries fell by 17%, in real terms, between 2009 and 2011. In addition, Greek teachers also saw their net salaries shrink as a tax for solidarity was created. This tax increased the level of taxation on teachers' already reduced gross salary; and the insurance coverage paid by teachers is still calculated based on their earlier, higher salaries. In Hungary, the 13th month of salary (a supplemental bonus that was paid to all employees) was suspended in 2009. Although a compensatory bonus was paid to all public-sector employees whose wages where under a certain threshold, the base salary of teachers was still considerably affected. In Spain, all civil servants saw their salaries reduced in July 2010. The extent of the decrease depended on the annual amount earned but it affected both the base salary and bonuses. In Ireland, teachers' salaries were reduced as of 1 January 2010 as part of a public service-wide reduction in pay. In addition, teachers who entered the profession after 1 January 2011 are paid according to a new salary scale which is 10% lower than the salary scale that applied to those recruited prior to that. In other countries, similar measures were implemented after 2011.

The economic downturn may also have an influence on the supply of teachers. In general, when the general economy is weak, and there is high unemployment among graduates and low graduate earnings, teaching might seem to be a more attractive job choice than other occupations (OECD, 2005).

Actual average salaries

Statutory salaries as reported by most of the countries in this indicator must be distinguished from actual expenditures on wages by governments and from teachers' average salaries, which are influenced by factors such as the age structure and levels of experience of the teaching force and the prevalence of bonuses and allowances in the compensation system.

Table D3.3 provides the average actual annual salaries of teachers aged 25-64 including all bonuses, allowances and additional payments. In Chile, Estonia (primary and secondary levels), Hungary, Iceland (upper secondary level), Israel (secondary levels) and Poland (pre-primary, primary and lower secondary levels), average salaries, including bonuses and allowances, are at least 20% higher than statutory salaries for teachers with 15 years of experience. In contrast, in the Czech Republic (pre-primary level), Luxembourg (pre-primary and primary levels), the Netherlands and Scotland, average salaries of teachers aged 25-64 are at least 5% lower than statutory salaries for teachers with 15 years of experience (Table D3.3).

In some countries, average actual teachers' salaries vary more across education levels than statutory salaries for teachers with 15 years of experience. In the Czech Republic, England and Norway, the gap between average actual salaries of upper secondary teachers and average actual salaries of pre-primary teachers is at least 10 percentage points greater than the difference in their statutory salaries. In Israel, statutory salaries of upper secondary teachers are 18% lower than statutory salaries of pre-primary teachers, but the opposite is true when looking at actual average salaries: upper secondary teachers earn on average 10% more than pre-primary ones. In Poland, there is a 15% difference between average actual salaries at the pre-primary and primary levels, despite similar statutory salaries at these levels; the opposite is true between the primary and upper secondary levels. The variety of bonuses available for different levels of education partly explains these differences (see Annex 3 available at *www.oecd.org/edu/eag.htm*).

Teachers' salaries relative to earnings for tertiary-educated workers

The propensity of young people to undertake teacher training, as well as of graduates from teacher-training programmes to enter or stay in the profession, will be influenced by the salaries of teachers relative to those of other occupations requiring similar levels of qualifications and by likely salary increases. In all OECD countries, a tertiary qualification is required to become a teacher (see Indicator D5, "Who are the teachers?", in OECD, 2012), so the likely alternative to teacher education is another tertiary education programme.

Thus, to interpret salary levels in different countries and reflect comparative labour-market conditions, teachers' salaries are compared to those of other similarly-educated professionals: 25-64 year-old full-time, full-year workers with a tertiary education.

Pre-primary teachers' salaries amount to 80% of full-time, full-year earnings, on average, for 25-64 year-olds with tertiary education, primary teachers earn 82% of that benchmark salary, lower secondary teachers are paid 85%, and upper secondary teachers earn 89% of that benchmark salary. At this latter level, teachers in 11 of the 31 countries with available data earn as much or more than workers with tertiary education (Table D3.2 and Chart D3.1). Relative salaries for teachers are highest in Korea, Luxembourg (lower and upper secondary levels) and Spain, where teachers' salaries are at least 20% higher than those of comparably educated workers. The lowest relative teachers' salaries, compared to the salaries of other professionals with comparable education, are found in the Czech Republic for pre-primary school teachers, in Iceland for primary and lower secondary school teachers, and in the Slovak Republic at all levels of education, where statutory salaries for teachers with 15 years of experience are, on average, 50% or less of what a full-time, full-year worker with a tertiary education earns.

Definitions

Actual salaries for teachers aged 25-64 refer to the annual average earnings received by full-time teachers aged 25 to 64, before taxes. It includes work-related payments such as annual bonuses, result-related bonuses, extra pay for holidays and sick-leave pay. Income from other sources, such as government social transfers, investment income, and any other income that is not directly related to their profession, are not included.

An **adjustment to base salary** is defined as any difference in salary between what a particular teacher actually receives for work performed at school and the amount that he or she would expect to receive on the basis of experience (i.e. number of years in the teaching profession). Adjustments may be temporary or permanent, and they can effectively move a teacher off the scale and to a different salary scale or to a higher step on the same salary scale.

Earnings for workers with tertiary education are average earnings for full-time, full-year workers aged 25 to 64 with an education at ISCED 5A/5B/6 level. The relative salary indicator is calculated for the latest year with available earnings data. For countries in which teachers' salaries and workers' earnings information are not available for the same year (e.g. Australia, Italy and Sweden), the indicator is adjusted for inflation using the deflators for private consumption. Reference statistics for earnings for workers with tertiary education are provided in Annexes 2 and 3.

Salaries after 15 years of experience refer to the scheduled annual salary of a full-time classroom teacher with the minimum training necessary to be fully qualified plus 15 years of experience.

Starting salaries refer to the average scheduled gross salary per year for a full-time teacher with the minimum training necessary to be fully qualified at the beginning of the teaching career; **maximum salaries** refer to the maximum annual salary (top of the salary scale) for a full-time classroom teacher with the maximum qualifications recognised for compensation.

Statutory salaries refer to scheduled salaries according to official pay scales. The salaries reported are gross (total sum paid by the employer) less the employer's contribution to social security and pension, according to existing salary scales. Salaries are "before tax", i.e. before deductions for income tax. In Table D3.2, salary per hour of net contact divides a teacher's annual statutory salary by the annual net teaching time in hours (see Table D4.1).

Methodology

Data on statutory teachers' salaries and bonuses are derived from the 2012 OECD-INES Survey on Teachers and the Curriculum. Data refer to the school year 2010-11 and are reported in accordance with formal policies for public institutions.

Measuring the statutory salary of a full-time teacher relative to the number of hours per year that a teacher is required to spend teaching does not adjust salaries for the amount of time that teachers spend in various other teaching-related activities. Since the proportion of teachers' working time spent teaching varies across

OECD countries, statutory salaries per hour of net teaching time must be interpreted with caution (see Indicator D4). However, it can provide an estimate of the cost of the actual time teachers spend in the classroom.

Gross teachers' salaries were converted using PPPs for private consumption from the OECD National Accounts database. Prior to the 2012 edition of *Education at a Glance*, salaries used to be converted using PPPs for GDP. As a consequence, teachers' salaries in USD (Table D3.1) are not directly comparable with the figures published prior to the 2012 edition of *Education at a Glance*. Information on trends in teachers' salaries can be found in Table D3.4. As a complement to Table D3.1, which presents teachers' salaries in equivalent USD, converted using PPPs, a table with teachers' salaries in national currency is included in Annex 2. The period of reference for teachers' salaries is from 1 July 2010 to 30 June 2011. The reference date for PPPs is 2010-11.

For calculation of changes in teachers' salaries (Table D3.4), the deflator for private consumption is used to convert salaries to 2000 prices.

The ratio of teachers' salaries to earnings for full-time, full-year workers with tertiary education aged 25 to 64 is calculated using the annual average salaries (including bonuses and allowances) for teachers aged 25 to 64, for countries with available data (see Table D3.3). For other countries, the ratio is calculated using statutory salaries of teachers with 15 years of experience and the minimum required training. The methodology used for each country is provided in Table D3.2.

Notes on definitions and methodologies for each country are provided in Annex 3 at *www.oecd.org/edu/eag.htm*.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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Indicator D3 Tables

	Table D3.1	**Teachers' statutory salaries at different points in their careers (2011)** StatLink http://dx.doi.org/10.1787/888932851763
	Table D3.2	**Comparison of teachers' salaries (2011)** StatLink http://dx.doi.org/10.1787/888932851782
	Table D3.3	**Average actual teachers' salaries (2011)** StatLink http://dx.doi.org/10.1787/888932851801
	Table D3.4	**Trends in teachers' salaries between 2000 and 2011** StatLink http://dx.doi.org/10.1787/888932851820
WEB	**Table D3.5**	**Minimum and maximum teachers' statutory salaries (2011)** StatLink http://dx.doi.org/10.1787/888932851839
WEB	**Table D3.6a**	**Criteria determining base salary and additional payments for teachers in public institutions (2011)** StatLink http://dx.doi.org/10.1787/888932851858
WEB	**Table D3.6b**	**Decisions made by school principal on payments for teachers in public institutions (2011)** StatLink http://dx.doi.org/10.1787/888932851877
WEB	**Table D3.6c**	**Decisions made by local or regional authority on payments for teachers in public institutions (2011)** StatLink http://dx.doi.org/10.1787/888932851896
WEB	**Table D3.6d**	**Decisions made by the national authority on payments for teachers in public institutions (2011)** StatLink http://dx.doi.org/10.1787/888932851915

D3

Table D3.1. [1/2] Teachers' statutory salaries at different points in their careers (2011)

Annual salaries in public institutions, in equivalent USD converted using PPPs for private consumption

		Pre-primary education				Primary education			
		Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training	Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia	34 477	47 576	47 576	47 576	34 610	48 522	48 522	48 522
	Austria	31 501	37 115	41 633	62 129	31 501	37 115	41 633	62 129
	Belgium (Fl.)	32 095	40 309	45 413	55 619	32 095	40 309	45 413	55 619
	Belgium (Fr.)[1]	31 515	39 432	44 407	54 360	31 515	39 432	44 407	54 360
	Canada	35 534	53 631	56 349	56 349	35 534	53 631	56 349	56 349
	Chile	17 385	21 728	23 623	31 201	17 385	21 728	23 623	31 201
	Czech Republic	15 286	17 159	17 792	19 662	16 680	19 321	20 185	22 236
	Denmark	41 590	44 126	45 328	45 328	43 461	48 616	50 332	50 332
	England	30 289	44 269	44 269	44 269	30 289	44 269	44 269	44 269
	Estonia	m	m	m	m	11 621	12 306	12 306	16 985
	Finland	25 855	28 879	29 125	29 385	30 587	35 742	37 886	40 160
	France	25 646	30 963	33 152	48 916	25 646	30 963	33 152	48 916
	Germany	m	m	m	m	47 488	m	58 662	63 286
	Greece	22 803	26 112	28 184	34 037	22 803	26 112	28 184	34 037
	Hungary[2]	10 212	11 388	12 212	16 051	10 654	12 216	13 115	17 497
	Iceland	20 756	23 083	23 083	26 410	23 988	26 297	26 991	28 145
	Ireland	m	m	m	m	33 484	49 060	54 954	62 166
	Israel	16 269	22 788	25 842	38 245	18 692	24 224	27 174	38 377
	Italy	27 288	30 020	32 969	40 119	27 288	30 020	32 969	40 119
	Japan	m	m	m	m	26 031	38 665	45 741	57 621
	Korea	27 026	40 153	46 904	76 528	27 581	41 373	48 251	76 528
	Luxembourg	64 043	82 736	93 397	112 997	64 043	82 736	93 397	112 997
	Mexico	15 081	15 174	19 590	32 136	15 081	15 174	19 590	32 136
	Netherlands	36 626	44 951	52 292	53 974	36 626	44 951	52 292	53 974
	New Zealand	m	m	m	m	28 225	41 755	41 755	41 755
	Norway	32 689	38 043	38 043	38 043	33 350	37 585	37 585	42 055
	Poland	10 362	13 605	16 506	17 200	10 362	13 605	16 506	17 200
	Portugal	30 946	37 152	39 424	52 447	30 946	37 152	39 424	52 447
	Scotland	30 078	47 984	47 984	47 984	30 078	47 984	47 984	47 984
	Slovak Republic	9 153	10 077	10 529	11 360	10 241	12 499	12 858	13 864
	Slovenia	26 486	29 385	32 193	33 173	26 486	29 385	32 193	33 817
	Spain	35 881	39 077	41 339	50 770	35 881	39 077	41 339	50 770
	Sweden[2]	30 059	32 106	33 896	35 687	30 059	33 363	34 387	39 865
	Switzerland[3]	41 966	52 769	m	64 615	47 330	59 445	m	73 585
	Turkey	23 159	23 906	24 854	26 865	23 494	24 241	25 189	27 201
	United States[2]	37 717	m	m	m	37 595	43 747	46 130	53 180
	OECD average	28 057	34 190	36 135	43 448	28 854	35 503	38 136	45 602
	EU21 average	28 386	34 342	37 102	43 273	29 123	34 829	38 602	45 001
Other G20	Argentina[2,4]	16 780	m	20 906	25 347	16 567	m	19 442	25 062
	Brazil	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia[4]	1 638	1 855	2 072	2 361	1 638	1 855	2 072	2 361
	Russian Federation	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m

1. Salaries of teachers with typical qualifications instead of minimum. Please refer to Annex 3 for salaries of teachers with minimum qualifications.
2. Actual base salaries.
3. Salaries after 11 years of experience for Columns 2, 6, 10 and 14.
4. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table D3.1. [2/2] Teachers' statutory salaries at different points in their careers (2011)

Annual salaries in public institutions, in equivalent USD converted using PPPs for private consumption

		Lower secondary education				Upper secondary education			
		Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training	Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training
		(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OECD	Australia	34 746	49 144	49 144	49 144	34 746	49 144	49 144	49 144
	Austria	32 973	40 124	45 105	64 510	33 398	35 975	46 317	67 444
	Belgium (Fl.)	32 095	40 309	45 413	55 619	40 102	51 179	58 398	70 430
	Belgium (Fr.)[1]	31 515	39 432	44 407	54 360	39 230	50 031	57 071	68 803
	Canada	35 534	53 631	56 349	56 349	35 534	53 869	56 569	56 569
	Chile	17 385	21 728	23 623	31 201	18 034	23 034	25 027	33 002
	Czech Republic	16 472	19 432	20 360	22 455	17 244	20 879	21 733	24 130
	Denmark	43 461	48 616	50 332	50 332	44 710	58 347	58 347	58 347
	England	30 289	44 269	44 269	44 269	30 289	44 269	44 269	44 269
	Estonia	11 621	12 306	12 306	16 985	11 621	12 306	12 306	16 985
	Finland	33 034	38 601	40 917	43 372	34 008	41 636	43 302	45 900
	France	28 653	33 970	36 159	52 090	28 892	34 209	36 398	52 352
	Germany	53 026	m	64 491	70 332	57 357	m	69 715	79 088
	Greece	22 803	26 112	28 184	34 037	22 803	26 112	28 184	34 037
	Hungary[2]	10 654	12 216	13 115	17 497	11 642	14 223	15 515	22 083
	Iceland	23 988	26 297	26 991	28 145	22 628	25 715	27 159	28 412
	Ireland	34 604	49 060	54 954	62 166	34 604	49 060	54 954	62 166
	Israel	18 692	22 218	24 997	35 177	14 254	18 960	21 316	31 973
	Italy	29 418	32 588	35 922	44 059	29 418	33 380	36 928	46 060
	Japan	26 031	38 665	45 741	57 621	26 031	38 665	45 741	59 197
	Korea	27 476	41 268	48 146	76 423	27 476	41 268	48 146	76 423
	Luxembourg	72 499	90 625	100 013	125 962	72 499	90 625	100 013	125 962
	Mexico	19 252	19 808	24 910	40 886	m	m	m	m
	Netherlands	38 941	53 256	63 695	66 117	38 941	53 256	63 695	66 117
	New Zealand	28 251	42 241	42 241	42 241	28 277	42 726	42 726	42 726
	Norway	33 350	37 585	37 585	42 055	36 712	40 430	40 430	44 595
	Poland	11 663	15 432	18 806	19 600	13 181	17 625	21 518	22 429
	Portugal	30 946	37 152	39 424	52 447	30 946	37 152	39 424	52 447
	Scotland	30 078	47 984	47 984	47 984	30 078	47 984	47 984	47 984
	Slovak Republic	10 241	12 499	12 858	13 864	10 241	12 499	12 858	13 864
	Slovenia	26 486	29 385	32 193	33 817	26 486	29 385	32 193	33 817
	Spain	39 693	43 222	45 689	55 603	40 308	43 945	46 479	56 536
	Sweden[2]	30 571	34 280	35 495	40 025	31 978	35 943	37 584	42 775
	Switzerland[3]	53 599	67 942	m	83 105	61 437	79 032	m	94 038
	Turkey	a	a	a	a	24 053	24 799	25 747	27 758
	United States[2]	37 507	43 841	45 950	56 364	38 012	44 891	49 414	56 303
	OECD average	30 216	37 213	39 934	48 177	31 348	38 899	41 665	50 119
	EU21 average	30 510	36 403	40 526	47 283	31 738	38 183	42 834	50 175
Other G20	Argentina[2,4]	13 500	m	17 819	21 643	13 500	m	17 819	21 643
	Brazil	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia[4]	1 764	2 053	2 361	2 565	2 019	2 053	2 615	2 849
	Russian Federation	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m

1. Salaries of teachers with typical qualifications instead of minimum. Please refer to Annex 3 for salaries of teachers with minimum qualifications.
2. Actual base salaries.
3. Salaries after 11 years of experience for Columns 2, 6, 10 and 14.
4. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm).*
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table D3.2. Comparison of teachers' salaries (2011)

Relative to other tertiary-educated workers and to other teachers

		Ratio of salary to earnings for full-time, full-year workers with tertiary education aged 25 to 64				Ratio of salary at top of scale to starting salary				Years from starting to top salary (lower secondary education)	Salary per hour of net contact (teaching) time after 15 years of experience			Ratio of salary per teaching hour of upper secondary to primary teachers (after 15 years of experience)
		Pre-primary education	Primary education	Lower secondary education	Upper secondary education	Pre-primary education	Primary education	Lower secondary education	Upper secondary education		Primary education	Lower secondary education	Upper secondary education	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
OECD	Australia[1,2]	0.91	0.92	0.91	0.91	1.38	1.40	1.41	1.41	9	56	61	61	1.10
	Austria[3]	0.57	0.57	0.62	0.64	1.97	1.97	1.96	2.02	34	53	74	79	1.47
	Belgium (Fl.)[1]	0.89	0.90	0.89	1.17	1.73	1.73	1.73	1.76	27	60	68	93	1.55
	Belgium (Fr.)[3]	0.84	0.84	0.84	1.08	1.72	1.72	1.72	1.75	27	62	67	95	1.54
	Canada[2,3]	1.04	1.04	1.04	1.04	1.59	1.59	1.59	1.59	11	71	76	76	1.07
	Chile[1]	0.73	0.73	0.73	0.77	1.79	1.79	1.79	1.83	30	21	21	23	1.06
	Czech Republic[1]	0.42	0.54	0.54	0.58	1.29	1.33	1.36	1.40	27	24	32	36	1.50
	Denmark[1]	0.83	0.91	0.91	1.10	1.09	1.16	1.16	1.31	8	77	77	158	2.04
	England[1]	0.83	0.83	0.92	0.92	1.46	1.46	1.46	1.46	12	65	64	64	0.98
	Estonia[1]	m	0.64	0.64	0.64	m	1.46	1.46	1.46	7	20	20	22	1.09
	Finland[1,2]	0.75	0.89	0.98	1.10	1.14	1.31	1.31	1.35	20	56	69	78	1.41
	France[3,4]	0.75	0.75	0.81	0.82	1.91	1.91	1.82	1.81	34	35	56	56	1.59
	Germany[3]	m	0.92	1.01	1.09	m	1.33	1.33	1.38	28	73	85	98	1.34
	Greece	m	m	m	m	1.49	1.49	1.49	1.49	33	48	68	68	1.42
	Hungary[1,5]	0.52	0.58	0.58	0.66	1.57	1.64	1.64	1.90	40	22	22	26	1.18
	Iceland[3,6]	m	0.50	0.50	0.61	1.27	1.17	1.17	1.26	18	43	43	50	1.15
	Ireland[2,3]	0.82	0.82	0.82	0.82	m	1.86	1.80	1.80	22	60	75	75	1.25
	Israel[1]	0.85	0.95	0.93	0.94	2.35	2.05	1.88	2.24	36	32	41	41	1.27
	Italy[1,2]	0.58	0.58	0.61	0.65	1.47	1.47	1.50	1.57	35	43	57	59	1.37
	Japan	m	m	m	m	m	2.21	2.21	2.27	34	63	76	90	1.43
	Korea[3]	1.31	1.34	1.34	1.34	2.83	2.77	2.78	2.78	37	59	78	79	1.33
	Luxembourg[1,2]	1.08	1.08	1.24	1.24	1.76	1.76	1.74	1.74	30	115	135	135	1.17
	Mexico	m	m	m	m	2.13	2.13	2.12	m	14	24	24	m	m
	Netherlands[1,2]	m	0.70	0.84	0.84	1.47	1.47	1.70	1.70	15	56	85	85	1.51
	New Zealand[1]	m	1.03	1.05	1.08	m	1.48	1.50	1.51	8	45	50	56	1.26
	Norway[1,2]	0.61	0.70	0.70	0.75	1.16	1.26	1.26	1.21	16	51	57	77	1.53
	Poland[1,2]	0.66	0.76	0.77	0.75	1.66	1.66	1.68	1.70	20	34	39	46	1.33
	Portugal[2,3]	1.17	1.17	1.17	1.17	1.69	1.69	1.69	1.69	34	45	51	51	1.14
	Scotland[1]	0.81	0.81	0.81	0.81	1.60	1.60	1.60	1.60	6	56	56	56	1.00
	Slovak Republic[3]	0.36	0.44	0.44	0.44	1.24	1.35	1.35	1.35	32	15	20	21	1.35
	Slovenia[3]	0.81	0.81	0.81	0.81	1.25	1.28	1.28	1.28	13	51	51	56	1.10
	Spain[2,3]	1.23	1.23	1.38	1.40	1.41	1.41	1.40	1.40	38	47	64	67	1.43
	Sweden[5,7]	0.75	0.82	0.82	0.87	1.19	1.33	1.31	1.34	a	m	m	m	m
	Switzerland[8]	m	m	m	m	1.54	1.55	1.55	1.53	27	m	m	m	m
	Turkey	m	m	m	m	1.16	1.16	a	1.15	a	39	a	45	1.15
	United States[1,5]	0.65	0.66	0.67	0.70	m	1.41	1.50	1.48	m	42	43	47	1.12
	OECD average	0.80	0.82	0.85	0.89	1.58	1.59	1.61	1.62	24	49	58	66	1.31
	EU21 average	0.77	0.80	0.84	0.89	1.51	1.54	1.54	1.58	25	51	61	69	1.35
Other G20	Argentina[5,9]	m	m	m	m	m	1.51	1.60	1.60	25	27	12	12	0.46
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia[9]	m	m	m	m	1.44	1.44	1.45	1.41	32	2	4	3	1.68
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Ratio of average actual salary, including bonuses and allowances, for teachers aged 25-64 to earnings for full-time, full-year workers with tertiary education aged 25-64 for Columns 1, 2, 3 and 4.
2. Year of reference 2010 for Columns 1, 2, 3 and 4.
3. Ratio of statutory salary after 15 years of experience and minimum training to earnings for full-time, full-year workers with tertiary education aged 25-64 for Columns 1, 2, 3 and 4.
4. Year of reference 2009 for Columns 1, 2, 3 and 4.
5. Actual base salaries (not including bonuses and allowances) for Columns 5 to 13.
6. Year of reference 2006 for Columns 1, 2, 3 and 4.
7. Ratio of average actual salary for teachers aged 25-64, not including bonuses and allowances, to earnings for full-time, full-year workers with tertiary education aged 25-64 for Columns 1, 2, 3 and 4.
8. Salaries after 11 years of experience.
9. Year of reference 2010 for Columns 5 to 13.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table D3.3. Average actual teachers' salaries (2011)

Annual average salaries (including bonuses and allowances) for teachers aged 25-64 in public institutions, in equivalent USD converted using PPPs for private consumption

		Pre-primary education	Primary education	Lower secondary education	Upper secondary education
		(1)	(2)	(3)	(4)
OECD	Australia	48 138	49 299	49 058	49 060
	Austria	m	m	m	m
	Belgium (Fl.)	46 772	47 188	46 754	61 447
	Belgium (Fr.)	m	m	m	m
	Canada	m	m	m	m
	Chile	31 447	31 447	31 447	33 101
	Czech Republic[1]	15 116	19 349	19 360	20 831
	Denmark	48 652	53 182	53 182	64 080
	England	47 002	47 002	51 913	51 913
	Estonia[2]	m	15 030	15 030	15 030
	Finland[3]	35 183	40 855	44 747	50 282
	France	m	m	m	m
	Germany	m	m	m	m
	Greece	m	m	m	m
	Hungary	15 284	17 087	17 087	19 404
	Iceland[4]	m	m	m	35 014
	Ireland	m	m	m	m
	Israel	27 569	30 829	30 183	30 453
	Italy	32 833	32 833	35 346	36 725
	Japan	m	m	m	m
	Korea	m	m	m	m
	Luxembourg	88 519	88 519	101 706	101 706
	Mexico	m	m	m	m
	Netherlands	48 353	48 353	56 918	56 918
	New Zealand	m	42 216	43 095	43 974
	Norway	39 069	43 196	43 196	46 319
	Poland	21 929	25 325	25 645	25 077
	Portugal	m	m	m	m
	Scotland	45 393	45 393	45 393	45 393
	Slovak Republic	m	m	m	m
	Slovenia	m	m	m	m
	Spain	m	m	m	m
	Sweden[5]	32 351	35 079	35 165	37 552
	Switzerland	m	m	m	77 527
	Turkey	m	m	m	m
	United States	49 069	50 120	51 166	53 235
	Countries' average	39 569	40 121	41 915	45 478
Other G20	Argentina	m	m	m	m
	Brazil	m	m	m	m
	China	m	m	m	m
	India	m	m	m	m
	Indonesia	m	m	m	m
	Russian Federation[2]	17 875	17 875	17 875	17 875
	Saudi Arabia	m	m	m	m
	South Africa	m	m	m	m

1. Includes unqualified teachers' salaries.
2. Average actual teachers' salaries for all teachers, irrespective of the level of education they teach.
3. Refers to pre-primary teachers working in primary schools only for Column 1.
4. Year of reference 2010.
5. Average actual teachers' salaries, not including bonuses and allowances.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table D3.4. Trends in teachers' salaries between 2000 and 2011

Index of change in statutory teachers' salaries for teachers with 15 years of experience and minimum training (2000 = 100), by level of education, converted to constant prices using deflators for private consumption

		Primary level								Lower secondary level								Upper secondary level							
		2000	2005	2006	2007	2008	2009	2010	2011	2000	2005	2006	2007	2008	2009	2010	2011	2000	2005	2006	2007	2008	2009	2010	2011
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
OECD	Australia	100	108	104	105	109	109	111	112	100	108	105	106	110	109	111	114	100	108	105	106	110	109	111	114
	Austria	100	111	111	112	112	114	115	113	100	115	115	116	116	119	120	118	100	106	107	108	108	111	111	109
	Belgium (Fl.)	100	109	108	108	105	110	110	110	100	103	103	102	100	104	105	105	100	103	103	102	100	105	105	105
	Belgium (Fr.)	100	106	107	107	104	111	111	112	100	101	101	100	98	105	104	105	100	101	101	100	98	105	104	105
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	100	180	181	211	207	211	201	201	100	180	181	211	212	216	204	203	100	150	151	185	185	186	178	178
	Denmark	100	107	108	108	111	130	127	124	100	107	108	108	111	130	127	124	100	111	114	112	114	127	126	123
	England	100	109	110	110	109	109	109	107	100	109	110	110	109	109	109	107	100	109	110	110	109	109	109	107
	Estonia	100	119	131	147	164	177	169	162	100	119	131	147	164	177	169	162	100	119	131	147	164	177	169	162
	Finland	100	117	118	121	122	122	121	119	100	108	109	111	112	112	111	109	100	109	110	112	113	113	112	110
	France	100	95	95	94	92	91	92	91	100	95	94	93	91	91	93	92	100	96	95	94	92	92	93	92
	Germany	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Greece	100	113	112	114	116	117	104	97	100	113	112	114	116	117	104	97	100	113	112	114	116	117	104	97
	Hungary[1]	100	159	155	149	145	129	125	119	100	159	155	149	145	129	125	119	100	158	148	147	139	123	117	112
	Iceland	100	112	118	111	117	125	116	111	100	112	118	111	117	125	116	111	100	111	122	120	117	107	99	95
	Ireland	100	117	121	125	124	134	135	132	100	115	120	123	123	133	133	131	100	115	120	123	123	133	133	131
	Israel	100	100	103	113	120	130	134	142	100	100	103	102	109	110	111	117	100	99	102	102	109	103	102	101
	Italy	100	106	105	103	103	105	105	104	100	105	104	103	103	105	105	103	100	105	104	102	102	104	105	103
	Japan	100	99	99	95	92	93	92	91	100	99	99	95	92	93	92	91	100	99	99	95	92	92	92	91
	Korea	100	125	127	126	124	120	117	119	100	126	127	126	124	120	117	119	100	126	127	126	124	120	117	119
	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Mexico	100	104	106	107	108	108	108	112	100	105	107	108	109	108	109	112	m	m	m	m	m	m	m	m
	Netherlands	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	New Zealand	100	102	102	103	104	105	107	107	100	102	102	103	104	105	109	108	100	102	102	103	104	105	112	109
	Norway	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal	100	114	113	112	111	123	125	126	100	114	113	112	111	123	125	126	100	114	113	112	111	123	125	126
	Scotland	100	123	123	122	122	122	122	119	100	123	123	122	122	122	122	119	100	123	123	122	122	122	122	119
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	100	105	106	105	109	113	113	106	100	109	110	109	110	116	116	108	100	104	105	103	107	111	110	103
	Sweden[1]	100	106	m	110	m	110	m	109	100	109	m	112	m	113	m	113	100	110	m	112	m	112	m	112
	Switzerland[2]	100	103	101	101	100	104	103	103	100	98	97	96	96	98	98	98	100	96	96	95	95	97	96	96
	Turkey	100	181	170	178	182	191	202	197	a	a	a	a	a	a	a	a	100	199	189	197	202	212	224	217
	United States[1]	100	104	105	105	103	103	103	103	100	105	106	107	103	103	103	103	100	98	99	99	103	103	103	103
	OECD average	100	116	117	118	120	123	122	120	100	113	114	115	116	119	117	116	100	115	115	117	118	120	119	117
	OECD average for countries with data available for all reference years	100	116	117	119	120	123	122	121	100	113	114	115	116	119	117	116	100	115	115	117	118	120	119	117
	EU21 average for countries with data available for all reference years	100	118	119	122	122	126	124	121	100	117	118	121	121	125	123	121	100	115	115	118	119	122	120	118
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 Average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Actual base salaries.
2. Salaries after 11 years of experience.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

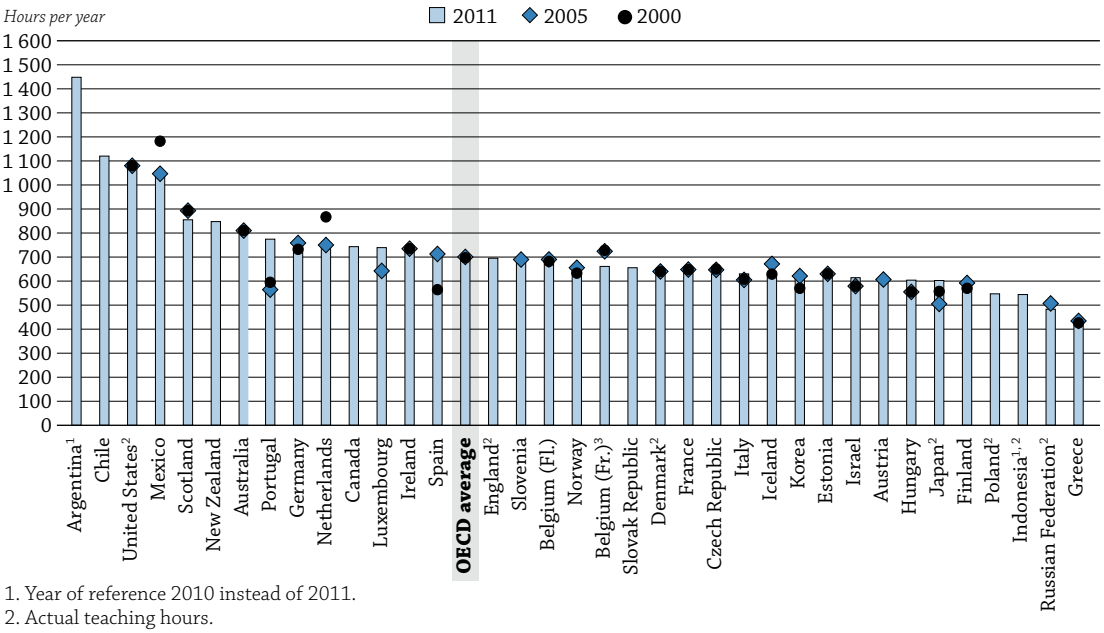
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HOW MUCH TIME DO TEACHERS SPEND TEACHING?

- Public-school teachers teach an average of 994 hours per year at the pre-primary level, 790 hours at the primary level, 709 hours at the lower secondary level, and 664 hours at the upper secondary level of education.
- In almost half of the countries with available data, the amount of teaching time increased or decreased by at least 10% between 2000 and 2011 in primary, lower secondary and/or upper secondary education.

Chart D4.1. Number of teaching hours per year in lower secondary education in 2000, 2005 and 2011

Net statutory contact time in public institutions



1. Year of reference 2010 instead of 2011.
2. Actual teaching hours.
3. Break in time series following methodological changes in 2006.

Countries are ranked in descending order of the number of teaching hours per year in lower secondary education in 2011.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table D4.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847868

Context

Although statutory working hours and teaching hours only partly determine teachers' actual workload, they do offer valuable insight into the demands placed on teachers in different countries. Teaching hours and the extent of non-teaching duties may also affect the attractiveness of the teaching profession. Together with teachers' salaries (see Indicator D3) and average class size (see Indicator D2), this indicator presents some key measures regarding the working lives of teachers.

The proportion of statutory working time spent teaching provides information on the amount of time available for non-teaching activities such as lesson preparation, correction, in-service training and staff meetings. A large proportion of statutory working time spent teaching may indicate that less time is devoted to tasks such as assessing students and preparing lessons.

In addition to class size and the ratio of students to teaching staff (see Indicator D2), students' hours of instruction (see Indicator D1) and teachers' salaries (see Indicator D3), the amount of time teachers spend teaching also affects the financial resources countries need to allocate to education (see Indicator B7).

Other findings

- **The average number of teaching hours in public pre-primary schools is 994 hours per year**, but ranges from 450 hours in Indonesia to over 1 500 hours in Iceland, Norway and Sweden.
- **Public primary school teachers teach an average of 790 hours per year**, but teaching time ranges from less than 600 hours in Greece and the Russian Federation to over 1 000 hours in Chile and the United States.
- **The number of teaching hours in public lower secondary schools averages 709 hours per year**, but ranges from 415 hours in Greece to over 1 000 hours in Argentina, Chile, Mexico and the United States.
- **Teachers in public upper secondary schools teach an average of 664 hours per year**, but ranges from 369 hours in Denmark to 1 448 hours in Argentina.
- On average, **pre-primary teachers are required to teach almost 30% more hours than primary school teachers**, but the time during which teachers are required to be working at school, or their total working time, is often equivalent for these two levels of education.
- **Regulations concerning teachers' required working time vary significantly**. In most countries, teachers are formally required to work a specific number of hours per year. In some, teaching time is only specified by the number of lessons per week and assumptions may be made about the amount of non-teaching time required per lesson at school or elsewhere.

Trends

Nearly half of the countries with available data reported a 10% or more increase or decrease in teaching time between 2000 and 2011 in primary, lower secondary and/or upper secondary education. In most countries with a significant change, teaching time increased over this period. The number of teaching hours changed dramatically in a few countries: it increased by more than 25% in Portugal and Spain at the secondary level.

D4

Analysis

Teaching time

At all levels of education, countries vary in the number of teaching hours per year required of the average public school teacher.

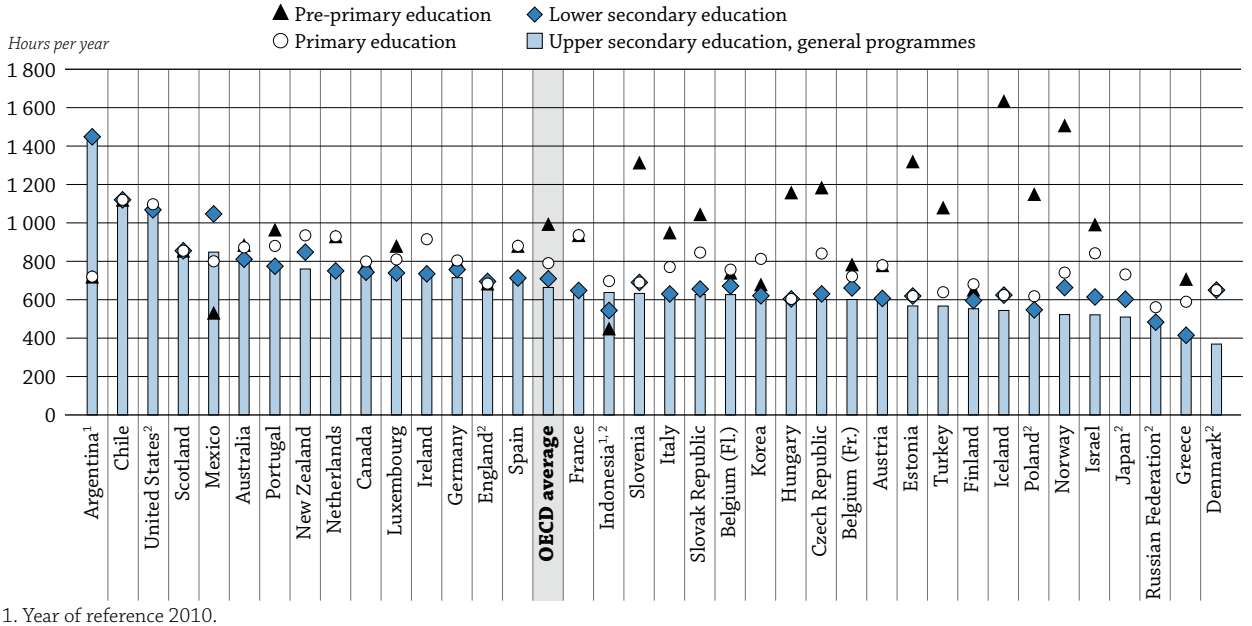
At the pre-primary level, the teaching time required in public schools varies more across countries than it does for any other level. The number of teaching days ranges from 141 days in France to 232 in Indonesia; annual teaching hours range from less than 700 hours in England, Finland, Indonesia, Korea and Mexico to more than 1 500 in Iceland, Norway and Sweden. On average across OECD countries, teachers at this level of education are required to teach 994 hours per year spread over 40 weeks or 193 days of teaching.

Primary school teachers are required to teach an average of 790 hours per year. In most countries with available data, teachers are required to teach between 3 and 6 hours a day. The exceptions are Chile, France and the United States, where teachers teach more than 6 hours per day, and Indonesia, where teachers teach less than 3 hours per day. There is no set rule on how teaching time is distributed throughout the year. In Spain, for example, primary school teachers must teach 880 hours per year, about 100 hours more than the OECD average. However, those teaching hours are spread over fewer days of instruction than the OECD average because primary school teachers in Spain teach an average of five hours per day compared to the OECD average of 4.3 hours. In contrast, primary school teachers in Korea must complete a very large number of days of instruction – more than five days a week, on average – but their average teaching time per day is only 3.7 hours.

Lower secondary school teachers teach an average of 709 hours per year. On average across OECD countries that are part of the European Union, teachers are required to teach 665 hours per year, almost 45 hours less than the average for all OECD countries. The teaching time at the lower secondary level ranges from less than 600 hours in Finland, Greece, Indonesia, Poland and the Russian Federation to more than 1 000 hours in Argentina, Chile, Mexico and the United States.

Chart D4.2. Number of teaching hours per year, by level of education (2011)

Net statutory contact time in public institutions



1. Year of reference 2010.
2. Actual teaching hours.

Countries are ranked in descending order of the number of teaching hours per year in upper secondary education.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). Table D4.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847887

A teacher of general subjects in upper secondary education has an average teaching load of 664 hours per year. Teaching time exceeds 800 hours in only six countries: Argentina, Australia, Chile, Mexico, Scotland and the United States. In contrast, teachers are required to teach less than 500 hours per year in Denmark, Greece and the Russian Federation. Teachers in Denmark, Finland, Greece, Israel, Japan, Korea, Norway and the Russian Federation teach for three hours or less per day, on average, compared to more than five hours in Chile and the United States and up to eight hours in Argentina. Including breaks between classes in teaching time in some countries, but not in others, may explain some of these differences (Table D4.1 and Chart D4.2).

Differences in teaching time between levels of education

In most countries, teaching time at the upper secondary level is lower than at the pre-primary level. The exceptions are Chile and Scotland, where teachers are required to teach the same number of hours irrespective of the level of education taught and Argentina, England, Indonesia and Mexico where secondary school teachers are required to teach more hours than pre-primary school teachers (Table D4.1 and Chart D4.2).

Teaching time requirements vary the most between the pre-primary and primary levels of education. On average across OECD countries, pre-primary school teachers are required to spend almost 30% more time in the classroom than primary school teachers. In Estonia, Iceland and Norway, pre-primary school teachers are required to teach at least twice the amount of time than primary school teachers. Even though the duties of teachers are likely to be different between these two levels of education, considerable differences in working conditions between pre-primary and other levels of education might affect the attractiveness of the teaching profession at the pre-primary level of education.

In the Czech Republic, France, Greece, Israel and Korea, primary school teachers have at least 30% more annual teaching time than lower secondary school teachers. In contrast, the difference does not exceed 3% in the United States, and there is no difference in Chile, Denmark, Estonia, Hungary, Iceland, Scotland and Slovenia. Argentina, England and Mexico are the only countries in which the teaching load for primary school teachers is lighter than for lower secondary school teachers.

Teaching time at the lower and upper secondary levels is similar across most countries. However, in Mexico and Norway, the annual required teaching time at the lower secondary level is at least 20% more than at the upper secondary level. This difference amounts to over 75% in Denmark.

Trends in teaching time

In almost half of the countries with available data, teaching time varied by at least 10% at one or various levels of education between 2000 and 2011. In most countries with a significant change, teaching time increased over this period (Table D4.2 and Chart D4.1).

In Israel and Japan, there was a 15% increase in teaching time at the primary level between 2000 and 2011. In Israel, this increase in teaching and working time is part of the "New Horizon" reform that has been gradually implemented since 2008. One of the key measures of this reform was to lengthen teachers' workweek to accommodate small-group teaching in exchange for more generous compensation. Teachers' working time has been increased from 30 to 36 hours per week and now includes five hours of small-group teaching in primary schools. To compensate, salaries have been raised substantially (see Indicator D3).

Secondary school teachers in Portugal and Spain were required to teach over 25% more in 2011 than in 2000 (up to 50% more in Portugal at the upper secondary level); in Luxembourg, secondary school teachers were required to teach 15% more hours in 2011 than in 2005. Teaching time also increased by around 15% at the upper secondary level in Korea and Iceland.

In contrast, net teaching time dropped by around 10% between 2000 and 2011 in Mexico (lower secondary level), in the Netherlands (lower and upper secondary levels) and in Scotland (primary level). In Scotland, the decrease was part of the Teachers' Agreement, "A teaching profession for the 21st century", which introduced a 35-hour working week for all teachers and a phased reduction of maximum teaching time to 22.5 hours per

week for primary, secondary and special school teachers in 2001. However, even with this decrease of net contact time, teachers at these levels in Scotland are still required to teach more hours than on average across OECD countries.

Teachers' working time

In most countries, teachers are formally required to work a specified number of hours per week, including teaching and non-teaching time, to earn their full-time salary. Some countries also regulate the time a teacher has to be present in the school. Within this framework, however, countries differ in how they allocate time for each activity (Chart D4.3).

Australia, Belgium (Flemish Community, for pre-primary and primary education), Canada, Chile, England, Estonia, Finland, France (for pre-primary and primary education), Greece, Iceland, Indonesia, Ireland (for primary and secondary education), Israel, Luxembourg, Mexico, New Zealand (for primary and secondary education), Norway, Portugal, Spain, Sweden, Turkey and the United States, all specify the time during which teachers are required to be available at school, for both teaching and non-teaching activities. In around two-thirds of these countries, the difference between the time upper secondary school teachers and pre-primary school teachers are required to be available at school is less than 10% (Table D4.1).

In Austria (pre-primary, primary and lower secondary education), the Czech Republic, France (lower and upper secondary education), Germany, Hungary, Japan, Korea, the Netherlands (primary, lower and upper secondary education) and Scotland, teachers' total annual working time, at school or elsewhere, is specified, but the allocation of time spent at school and time spent elsewhere is not.

In Sweden, although the total working time per year is decided through collective agreements, the school leader decides on the number of working hours per week and on the use of teachers' time (teaching or non-teaching activities) – after consultation with the local teacher unions.

In addition, workload and teaching load requirements may evolve throughout the career. While some beginning teachers might have a reduced teaching load as part of their induction programmes, some countries also encourage older teachers to stay in the teaching profession by diversifying their duties and reducing their teaching hours. For example, Greece reduces teaching hours according to how many years a teacher has served. At the secondary level, teachers are required to teach 21 class sessions per week. After 6 years, this drops to 19 sessions, and after 12 years to 18 sessions. After 20 years of service, teachers are required to teach 16 class sessions a week – more than 25% less than teachers who have just started their careers. However, the remaining hours of teachers' working time must be spent at school.

Non-teaching time

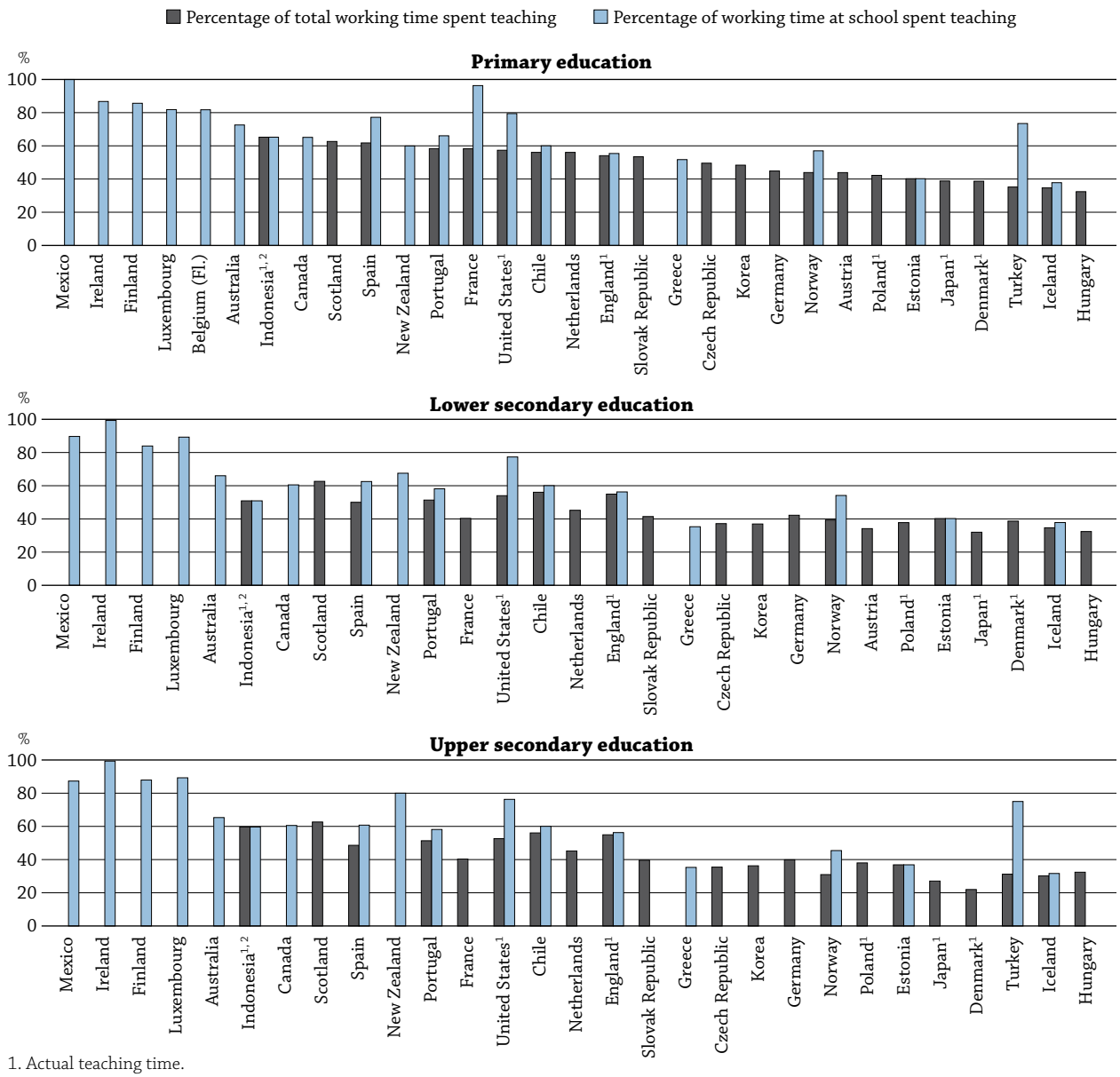
Although teaching time is a substantial component of teachers' workloads, assessing students, preparing lessons, corrections, in-service training and staff meetings should also be taken into account when analysing the demands placed on teachers in different countries. The amount of time available for these non-teaching activities varies across countries, and a large proportion of statutory working time spent teaching may indicate that less time is devoted to activities such as assessing students and preparing lessons.

In the 22 countries that specify both teaching and total working time, the percentage of teachers' working time spent teaching ranges from less than 40% in Denmark, Hungary, Iceland, Japan and Turkey at primary, lower and upper secondary levels of education, to 65% in Indonesia at the primary level. In 13 countries, the proportion of non-teaching time is higher at the secondary level than at the primary level (Table D4.1 and Chart D4.3).

In the 20 countries that specify both teaching time and the amount of time that teachers are required to be available at school at primary, lower or upper secondary levels of education, the percentage of teachers' working time at school spent teaching ranges from less than 40% in Estonia (upper secondary level), Greece (secondary level) and Iceland (primary and secondary levels), to 100% in Mexico (primary level). In 9 countries, the proportion of time spent in non-teaching activities is greater at the secondary level than at the primary level.

Chart D4.3. Percentage of teachers' working time spent teaching, by level of education (2011)

Net teaching time as a percentage of total statutory working time and working time required at school



1. Actual teaching time.
2. Year of reference 2010.

Countries are ranked in descending order of the percentage of teachers' working time spent teaching in primary education.

Source: OECD. Table D4.1. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847906

In Austria (for the upper secondary level), Belgium (Flemish Community, for the secondary level), Belgium (French Community), Italy, the Netherlands (for the pre-primary level), the Russian Federation and Slovenia, there are no formal requirements regarding time spent on non-teaching activities. However, this does not mean that teachers are given total freedom to carry out other tasks. In Belgium (Flemish Community), although there are no regulations regarding the time devoted to preparing lessons, correcting tests, marking students' papers, etc., additional non-teaching hours at school are set at the school level. In Italy, there is a requirement of up to 80 hours of scheduled non-teaching collegial work at school per year. Of these 80 hours, up to 40 hours of compulsory working time per year are dedicated to meetings of the teachers' assembly, staff planning meetings and meetings with parents; the remaining compulsory 40 hours are dedicated to class councils.

Definitions

The **number of teaching days** is the number of teaching weeks multiplied by the number of days per week a teacher teaches, less the number of days on which the school is closed for holidays.

The **number of teaching weeks** refers to the number of weeks of instruction excluding holiday weeks.

Teaching time is defined as the scheduled number of hours per year that a full-time teacher teaches a group or class of students as set by policy. It is normally calculated as the number of teaching days per year multiplied by the number of hours a teacher teaches per day (excluding periods of time formally allowed for breaks between lessons or groups of lessons). Some countries provide estimates of teaching time based on survey data. At the primary school level, short breaks between lessons are included if the classroom teacher is responsible for the class during these breaks.

Working time refers to the number of hours that a full-time teacher is expected to work as set by policy. It does not include paid overtime. According to a country's formal policy, working time can refer to:

- the time directly associated with teaching and other curricular activities for students, such as assignments and tests; and
- the time directly associated with teaching and hours devoted to other activities related to teaching, such as preparing lessons, counselling students, correcting assignments and tests, professional development, meetings with parents, staff meetings, and general school tasks.

Working time in school refers to the time teachers are required to spend working in school, including teaching and non-teaching time.

Methodology

Data are from the 2012 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2010-11.

In interpreting differences in teaching hours among countries, net contact time, as used here, does not necessarily correspond to the teaching load. Although contact time is a substantial component of teachers' workloads, preparing for classes and necessary follow-up, including correcting students' work, also need to be included when making comparisons. Other relevant elements, such as the number of subjects taught, the number of students taught, and the number of years a teacher teaches the same students, should also be taken into account.

Notes on definitions and methodologies for each country are provided in Annex 3 at *www.oecd.org/edu/eag.htm*.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Indicator D4 Tables

Table D4.1	Organisation of teachers' working time (2011)	StatLink http://dx.doi.org/10.1787/888932851953
Table D4.2	Number of teaching hours per year (2000 and 2005-11)	StatLink http://dx.doi.org/10.1787/888932851972

Table D4.1. Organisation of teachers' working time (2011)

Number of teaching weeks, teaching days, net teaching hours, and teachers' working time in public institutions over the school year

		Number of weeks of teaching				Number of days of teaching				Net teaching time, in hours				Working time required at school, in hours				Total statutory working time, in hours			
		Pre-primary education	Primary education	Lower secondary education	Upper secondary education, general programmes	Pre-primary education	Primary education	Lower secondary education	Upper secondary education, general programmes	Pre-primary education	Primary education	Lower secondary education	Upper secondary education, general programmes	Pre-primary education	Primary education	Lower secondary education	Upper secondary education, general programmes	Pre-primary education	Primary education	Lower secondary education	Upper secondary education, general programmes
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	Australia[1]	40	40	40	40	196	196	196	195	885	873	811	802	1 135	1 202	1 228	1 228	a	a	a	a
	Austria[1]	38	38	38	38	180	180	180	180	779	779	607	589	a	a	a	a	1 776	1 776	1 776	a
	Belgium (Fl.)[1]	37	37	37	37	178	178	179	179	740	757	671	626	926	926	a	a	a	a	a	a
	Belgium (Fr.)[1]	37	37	37	37	181	181	181	181	784	721	661	601	a	a	a	a	a	a	a	a
	Canada[1]	37	37	37	37	183	183	183	183	788	799	743	747	1 217	1 227	1 228	1 234	a	a	a	a
	Chile[2]	38	38	38	38	182	182	182	182	1 120	1 120	1 120	1 120	1 866	1 866	1 866	1 866	1 998	1 998	1 998	1 998
	Czech Republic[1]	39	39	39	39	191	191	191	191	1 184	840	630	602	a	a	a	a	1 696	1 696	1 696	1 696
	Denmark[3]	42	42	42	42	200	200	200	200	m	650	650	369	m	m	m	m	1 680	1 680	1 680	1 680
	England[3]	38	38	38	38	190	190	190	190	684	684	695	695	1 235	1 235	1 235	1 235	1 265	1 265	1 265	1 265
	Estonia[2]	46	35	35	35	220	172	172	172	1 320	619	619	568	1 610	1 540	1 540	1 540	1 610	1 540	1 540	1 540
	Finland[4]	38	38	38	38	189	189	189	189	652	680	595	553	766	794	709	629	a	a	a	a
	France[1]	36	36	36	36	141	141	m	m	936	936	648	648	972	972	a	a	1 607	1 607	1 607	1 607
	Germany[1]	40	40	40	40	193	193	193	193	800	804	757	715	a	a	a	a	1 793	1 793	1 793	1 793
	Greece[1]	36	36	31	31	177	177	153	153	708	589	415	415	1 140	1 140	1 176	1 176	a	a	a	a
	Hungary[4]	37	37	37	37	181	183	183	183	1 158	604	604	604	a	a	a	a	1 864	1 864	1 864	1 864
	Iceland[1]	48	37	37	35	227	180	180	170	1 634	624	624	544	1 800	1 650	1 650	1 720	1 800	1 800	1 800	1 800
	Ireland[1]	m	37	33	33	m	183	167	167	m	915	735	735	m	1 055	740	740	a	a	a	a
	Israel[1]	38	38	37	37	183	183	175	175	992	842	614	521	992	1 165	874	700	a	a	a	a
	Italy[4]	42	39	39	39	190	175	175	175	950	770	630	630	a	a	a	a	a	a	a	a
	Japan[3]	39	40	40	39	m	200	200	196	m	731	602	510	a	a	a	a	1 883	1 883	1 883	1 883
	Korea[2]	40	40	40	40	220	220	220	220	680	812	621	609	a	a	a	a	1 680	1 680	1 680	1 680
	Luxembourg[1]	36	36	36	36	176	176	176	176	880	810	739	739	1 060	990	828	828	a	a	a	a
	Mexico[1]	41	41	41	36	200	200	200	173	532	800	1 047	848	772	800	1 167	971	a	a	a	a
	Netherlands[2]	40	40	m	m	195	195	m	m	930	930	750	750	a	a	a	a	a	1 659	1 659	1 659
	New Zealand[1]	m	39	39	38	m	195	193	190	m	935	848	760	m	1 560	1 255	950	a	a	a	a
	Norway[1]	45	38	38	38	225	190	190	190	1 508	741	663	523	1 508	1 300	1 225	1 150	1 688	1 688	1 688	1 688
	Poland[3]	45	37	36	36	219	179	177	175	1 150	618	547	544	m	m	m	m	1 808	1 464	1 448	1 432
	Portugal[2]	42	38	38	38	193	176	176	176	965	880	774	774	1 421	1 332	1 332	1 332	1 614	1 508	1 508	1 508
	Scotland[2]	38	38	38	38	190	190	190	190	855	855	855	855	a	a	a	a	1 365	1 365	1 365	1 365
	Slovak Republic[1]	42	39	39	39	201	190	190	190	1 045	846	656	627	m	m	m	m	1 583	1 583	1 583	1 583
	Slovenia[1]	46	40	40	40	219	190	190	190	1 314	690	690	633	a	a	a	a	a	a	a	a
	Spain[1]	37	37	37	36	176	176	176	171	880	880	713	693	1 140	1 140	1 140	1 140	1 425	1 425	1 425	1 425
	Sweden[1]	47	a	a	a	224	a	a	a	1 792	m	m	m	1 792	1 360	1 360	1 360	a	1 767	1 767	1 767
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey[1]	38	38	a	38	180	180	a	180	1 080	639	a	567	1 160	870	a	756	1 816	1 816	a	1 816
	United States[3]	36	36	36	36	180	180	180	180	1 090	1 097	1 068	1 051	1 380	1 381	1 381	1 378	1 824	1 913	1 977	1 998
	OECD average	40	38	38	37	193	185	185	183	994	790	709	664	1 257	1 215	1 219	1 154	1 689	1 671	1 667	1 669
	EU21 average	40	38	37	37	191	182	181	181	977	766	665	635	1 206	1 135	1 118	1 109	1 622	1 599	1 598	1 585
Other G20	Argentina[5]	38	38	38	38	180	180	181	181	720	720	1 448	1 448	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia[3,5]	42	44	44	44	232	244	200	200	450	697	544	638	1 069	1 069	1 069	1 069	1 069	1 069	1 069	1 069
	Russian Federation[3]	m	34	35	35	m	170	210	210	m	561	483	483	a	a	a	a	a	a	a	a
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Typical teaching time.
2. Maximum teaching time.
3. Actual teaching time.
4. Minimum teaching time.
5. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851953

D4

Table D4.2. Number of teaching hours per year (2000 and 2005-2011)

Net statutory contact time in public institutions, in hours per year, by level of education

		Primary level			Lower secondary level			Upper secondary level		
		2000	2005	2011	2000	2005	2011	2000	2005	2011
		(1)	(2)	(8)	(9)	(10)	(16)	(17)	(18)	(24)
OECD	Australia	882	888	873	811	810	811	803	810	802
	Austria	m	774	779	m	607	607	m	589	589
	Belgium (Fl.)	767	761	757	682	690	671	638	645	626
	Belgium (Fr.)[1]	804	722	721	728	724	661	668	664	601
	Canada	m	m	799	m	m	743	m	m	747
	Chile	m	1 128	1 120	m	1 128	1 120	m	1 128	1 120
	Czech Republic	m	813	840	650	647	630	621	617	602
	Denmark[2]	640	640	650	640	640	650	m	m	369
	England[2]	m	m	684	m	m	695	m	m	695
	Estonia	630	630	619	630	630	619	578	578	568
	Finland	656	677	680	570	592	595	527	550	553
	France	936	936	936	648	648	648	648	648	648
	Germany	783	808	804	732	758	757	690	714	715
	Greece	609	604	589	426	434	415	429	430	415
	Hungary	583	583	604	555	555	604	555	555	604
	Iceland	629	671	624	629	671	624	464	560	544
	Ireland	915	915	915	735	735	735	735	735	735
	Israel	731	731	842	579	579	614	524	524	521
	Italy	744	739	770	608	605	630	608	605	630
	Japan[2]	635	578	731	557	505	602	478	429	510
	Korea	865	883	812	570	621	621	530	605	609
	Luxembourg	m	774	810	m	642	739	m	642	739
	Mexico	800	800	800	1 182	1 047	1 047	m	848	848
	Netherlands	930	930	930	867	750	750	867	750	750
	New Zealand	m	m	935	m	m	848	m	m	760
	Norway	713	741	741	633	656	663	505	524	523
	Poland[2]	m	m	618	m	m	547	m	m	544
	Portugal	815	855	880	595	564	774	515	513	774
	Scotland	950	893	855	893	893	855	893	893	855
	Slovak Republic	m	m	846	m	m	656	m	m	627
	Slovenia	m	690	690	m	690	690	m	633	633
	Spain	880	880	880	564	713	713	548	693	693
	Sweden	m	m	m	m	m	m	m	m	m
	Switzerland	884	m	m	859	m	m	674	m	m
	Turkey	639	639	639	a	a	a	504	567	567
	United States[2]	1 080	1 080	1 097	1 080	1 080	1 068	1 080	1 080	1 051
	OECD average	780	785	790	697	700	709	628	662	664
	OECD average for countries with 2000, 2005 and 2011 data	776	776	784	690	689	698	626	639	648
	EU21 average for countries with 2000, 2005 and 2011 data	776	774	777	658	661	669	635	639	651
Other G20	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia[2]	m	m	m	m	m	m	m	m	m
	Russian Federation[2]	m	615	561	m	507	483	m	507	483
	Saudi Arabia	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

Notes: Years 2006, 2007, 2008, 2009 and 2010 are available for consultation on line (see *StatLink* below).

1. Break in time series following methodological changes in 2006.
2. Actual teaching time.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932851972

Indicator D5 is on line at:

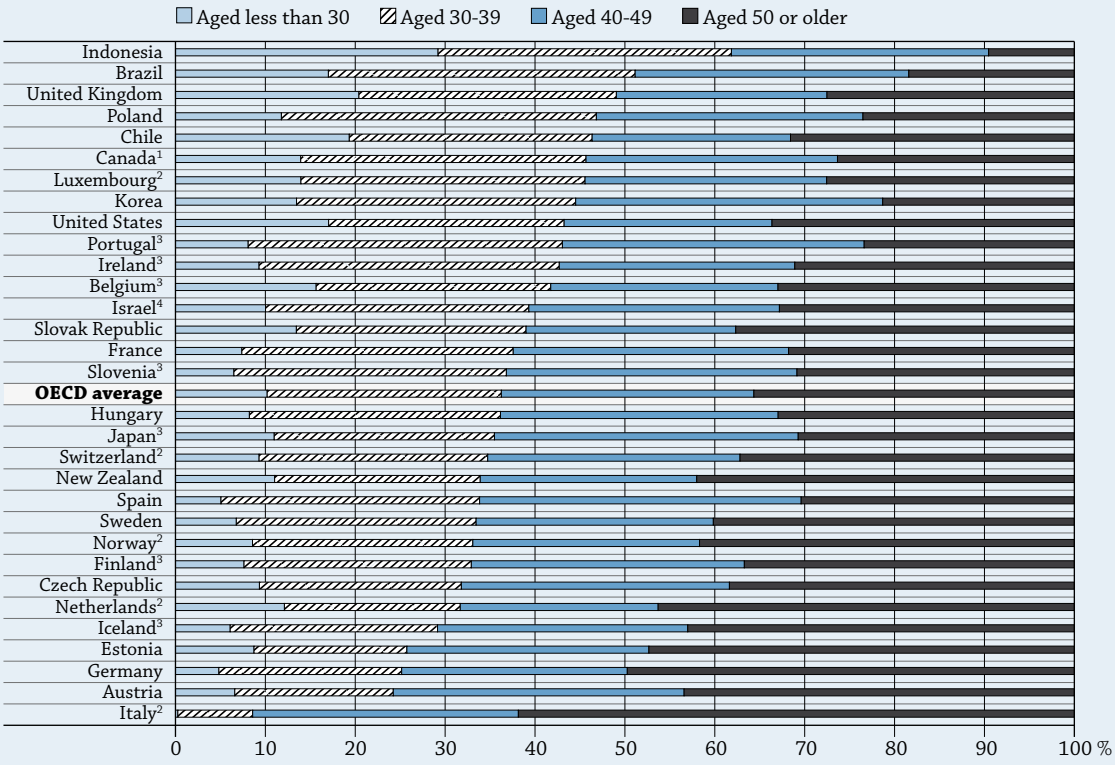
StatLink http://dx.doi.org/10.1787/888932851991

WHO ARE THE TEACHERS?

- In 19 of 31 OECD and other G20 countries, 60% or more of secondary school teachers were at least 40 years old in 2011. In Austria, the Czech Republic, Estonia, Germany and Italy 70% or more belong to this age group.
- On average across OECD countries, two-thirds of teachers and academic staff are women, but the proportion of female teachers decreases as the level of education increases: from 97% at the pre-primary level, 82% at the primary level, 68% at the lower secondary level, 56% at the upper secondary level, and to 41% at the tertiary level.
- Thirteen OECD countries require that teachers at some or all levels of education participate in continuing training/education to maintain employment.

Chart D5.1. Age distribution of teachers in secondary education (2011)

Distribution of teachers in educational institutions, by age group



1. Year of reference 2010.
2. Public institutions only.
3. Secondary education includes post-secondary non-tertiary education.
4. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Countries are ranked in ascending order of the percentage of teachers aged 40 or older at the secondary level.

Source: OECD. Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table D5.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888932847925

Indicator D5 Charts

Chart D5.1 Age distribution of teachers in secondary education (2011)
StatLink http://dx.doi.org/10.1787/888932847925

Chart D5.2 Gender distribution of teachers (2011)
StatLink http://dx.doi.org/10.1787/888932847944

Chart D5.3 Age distribution of teachers in primary education (2011)
StatLink http://dx.doi.org/10.1787/888932847963

Indicator D5 Tables

Table D5.1 Age distribution of teachers (2011)
StatLink http://dx.doi.org/10.1787/888932852010

Table D5.2 Age distribution of teachers (2011, 1998)
StatLink http://dx.doi.org/10.1787/888932852029

Table D5.3 Gender distribution of teachers (2011)
StatLink http://dx.doi.org/10.1787/888932852048

Annex

1

Characteristics of Education Systems

Table X1.1a. [1/2] Upper secondary graduation rate: Typical graduation age and method used to calculate graduation rates (2011)

The typical age refers to the age of the students at the beginning of the school year; students will generally be one year older than the age indicated when they graduate at the end of the school year. The typical age is used for the gross graduation rate calculation.

		Typical graduation ages						
			Programme orientation		Educational/labour market destination			
		First-time	General programmes	Pre-vocational or vocational programmes	ISCED 3A programmes	ISCED 3B programmes	ISCED 3C short programmes[1]	ISCED 3C long programmes[1]
OECD	Australia	17	17	17	17	a	a	17
	Austria	17-18	17-18	17-19	17-18	17-19	14-15	16-17
	Belgium	18	18	18	18	a	18	18
	Canada	17-18	17-18	17-18	17-18	a	a	17-18
	Chile	17	17	17	17	a	a	a
	Czech Republic	18-20	19-20	18-20	19-20	19-20	a	18-19
	Denmark	18-19	18-19	20-21	18-19	a	27	20-21
	Estonia	19	19	19	19	18-19	a	19
	Finland	19	19	19	19	a	a	a
	France	17-19	17-18	16-19	17-18	18-20	16-18	18-20
	Germany	19-20	19-20	19-20	19-20	19-20	19-20	a
	Greece	18	18	18	18	a	18	18
	Hungary	18	18	18-19	18	a	18	18-19
	Iceland	19	19	17	19	20	19	19
	Ireland	18-19	18	19	18	a	19	18
	Israel	17	17	17	17	a	a	17
	Italy	18	18	18	18	18	17	a
	Japan	17	17	17	17	17	15	17
	Korea	18	18	18	18	a	a	18
	Luxembourg	17-20	17-18	17-20	17-19	18-20	16-18	17-19
	Mexico	17-18	17-18	17-18	17-18	a	a	17-18
	Netherlands	17-19	17	19	17	a	a	18
	New Zealand	17-18	17-18	17-18	18	17	17	17
	Norway	18-20	18	19-20	18	a	m	19-20
	Poland	18-19	19	20	19	a	a	19
	Portugal	17	17	18	m	m	m	m
	Slovak Republic	18-19	18	18-19	18-19	a	17	17-18
	Slovenia	18	18	16-18	18	18	16	17
	Spain	17	17	17	17	17	17	17
	Sweden	18	18	18	18	18	18	18
	Switzerland	18-20	18-20	18-20	18-20	18-20	17-19	18-20
	Turkey	17	17	17	17	a	m	a
	United Kingdom	16	16	16	18	18	16	16
	United States	17	17	m	17	m	m	m
Other G20	Argentina	m	17	17	17	a	a	a
	Brazil	17-18	17	18	17-18	17-18	a	a
	China	17	17	17	17	m	17	17
	India	m	m	m	m	m	m	m
	Indonesia	17	17	17	17	17	a	a
	Russian Federation	17	17	17	17	17	16	17
	Saudi Arabia	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m

1. Duration categories for ISCED 3C: short – at least one year shorter than ISCED 3A/3B programmes; long – of similar duration to ISCED 3A or 3B programmes.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).

See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932852086

Table X1.1a. [2/2] Upper secondary graduation rate: Typical graduation age and method used to calculate graduation rates (2011)

		Graduation rate calculation: Gross versus net						
			Programme orientation		Educational/labour market destination			
		First-time	General programmes	Pre-vocational or vocational programmes	ISCED 3A programmes	ISCED 3B programmes	ISCED 3C short programmes[1]	ISCED 3C long programmes[1]
OECD	Australia	m	net	net	net	a	a	net
	Austria	net	net	net	net	net	net	net
	Belgium	m	net	net	net	a	net	net
	Canada	net	net	net	net	a	a	net
	Chile	net	net	net	net	a	a	a
	Czech Republic	net	net	net	net	gross	a	net
	Denmark	net	net	net	net	a	net	net
	Estonia	m	net	net	net	net	a	net
	Finland	net	net	net	net	a	a	a
	France	m	net	net	net	net	net	net
	Germany	gross	gross	gross	gross	gross	gross	a
	Greece	gross	gross	gross	gross	a	m	gross
	Hungary	net	net	net	net	a	m	net
	Iceland	net	net	net	net	net	net	net
	Ireland	net	net	net	net	a	net	net
	Israel	net	net	net	net	a	a	net
	Italy	gross	net	gross	net	gross	gross	a
	Japan	gross	gross	gross	gross	gross	m	gross
	Korea	gross	gross	gross	gross	a	a	gross
	Luxembourg	net	net	net	net	net	net	net
	Mexico	net	net	net	net	a	a	net
	Netherlands	net	net	net	net	a	a	net
	New Zealand	m	m	m	m	m	m	m
	Norway	net	net	net	net	a	m	net
	Poland	net	net	net	net	a	a	net
	Portugal	net	net	net	m	m	m	m
	Slovak Republic	net	net	net	net	a	net	net
	Slovenia	gross	net	gross	net	gross	net	gross
	Spain	gross	gross	gross	gross	gross	gross	gross
	Sweden	net	net	net	net	n	n	net
	Switzerland	m	gross	gross	gross	gross	gross	gross
	Turkey	net	net	net	net	a	m	a
	United Kingdom	gross	m	m	m	m	gross	gross
	United States	net	m	m	m	m	m	m
Other G20	Argentina	m	net	net	net	a	a	a
	Brazil	m	net	net	net	net	a	a
	China	gross	gross	gross	gross	m	gross	gross
	India	m	m	m	m	m	m	m
	Indonesia	m	net	net	net	net	a	a
	Russian Federation	m	gross	gross	gross	gross	gross	gross
	Saudi Arabia	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m

1. Duration categories for ISCED 3C: short – at least one year shorter than ISCED 3A/3B programmes; long – of similar duration to ISCED 3A or 3B programmes.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).

See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932852086

Table X1.1b. Post-secondary non-tertiary graduation rates: Typical graduation age and method used to calculate graduation rates (2011)

The typical age refers to the age of the students at the beginning of the school year; students will generally be one year older than the age indicated when they graduate at the end of the school year. The typical age is used for the gross graduation rate calculation.

		Typical graduation ages				Graduation rate calculation: Gross versus net			
			Educational/labour market destination			Educational/labour market destination			
		First-time	ISCED 4A programmes	ISCED 4B programmes	ISCED 4C programmes	First-time graduates	ISCED 4A programmes	ISCED 4B programmes	ISCED 4C programmes
OECD	Australia	18-20	a	a	18-20	net	a	a	net
	Austria	18-19	18-19	19-20	23-24	net	net	net	net
	Belgium	19-21	19	19-21	19-21	m	net	net	net
	Canada	m	m	m	30-34	m	m	m	m
	Chile	a	a	a	a	a	a	a	a
	Czech Republic	20-22	20-22	a	20-22	net	net	a	gross
	Denmark	21	21	a	a	net	net	a	a
	Estonia	21	a	21	a	m	a	net	a
	Finland	35-39	a	a	35-39	net	a	a	net
	France	m	m	m	m	m	gross	a	gross
	Germany	22	22	22	a	gross	gross	gross	a
	Greece	20	a	a	20	m	a	a	net
	Hungary	a	a	a	19-20	net	a	a	net
	Iceland	a	a	a	27	net	n	n	net
	Ireland	23	a	a	23	net	a	a	net
	Israel	m	m	m	a	m	m	m	a
	Italy	20	a	a	20	gross	a	a	gross
	Japan	18	18	18	18	m	m	m	m
	Korea	a	a	a	a	a	a	a	a
	Luxembourg	21-25	a	a	21-25	net	a	a	net
	Mexico	a	a	a	a	a	a	a	a
	Netherlands	20	a	a	20	net	a	a	net
	New Zealand	18	18	18	18	net	net	net	net
	Norway	20-22	20-22	a	21-22	net	net	a	net
	Poland	21	a	a	21	net	a	a	net
	Portugal	21	m	m	m	net	m	m	m
	Slovak Republic	20-21	20-21	a	a	net	net	a	a
	Slovenia	19-20	19-20	19-20	a	net	net	net	a
	Spain	a	a	a	a	a	a	a	a
	Sweden	19-22	m	m	19-22	net	n	n	net
	Switzerland	21-23	21-23	21-23	a	m	gross	gross	a
	Turkey	a	a	a	a	a	a	a	a
	United Kingdom	a	a	a	a	a	a	a	a
	United States	m	m	m	m	m	m	m	m
Other G20	Argentina	a	a	a	a	a	a	a	a
	Brazil	a	a	a	a	a	a	a	a
	China	18	18	18	18	m	gross	gross	gross
	India	m	m	m	m	m	m	m	m
	Indonesia	a	a	a	a	a	a	a	a
	Russian Federation	18	a	a	18	m	a	a	gross
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme).
See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932852105

Table X1.1c. [1/2] Tertiary graduation rate: Typical graduation ages and method used to calculate graduation rates (2011)

The typical age refers to the age of the students at the beginning of the school year; students will generally be one year older than the age indicated when they graduate at the end of the school year. The typical age is used for the gross graduation rate calculation.

		Typical graduation ages						
					Tertiary-type A (first and second degrees)			
		First-time tertiary-type B	Tertiary-type B (first degree)	First-time tertiary-type A	3 to less than 5 years	5 to 6 years	More than 6 years	Advanced research programmes
OECD	Australia	20-21	20-21	21-22	21-22	22-23	24	26-29
	Austria	21-23	21-23	23-25	22-24	24-26	a	27-29
	Belgium	21-22	21-22	21	m	m	m	27-29
	Canada	21-24	21-24	22-24	22	23-24	25	27-29
	Chile	22-25	22-25	23-26	23-26	24-26	25-26	30-34
	Czech Republic	22	22	22-24	22-23	25-26	a	30-34
	Denmark	23-25	23-25	24	24	26	25-29	30-34
	Estonia	22	22	22-24	22	24	a	30-34
	Finland	30-34	30-34	25-29	24	a	a	30-34
	France	19-23	19-23	19-24	19-22	21-24	27-29	26-28
	Germany	21-23	21-23	24-27	24-26	25-27	a	28-29
	Greece	24-25	24-25	23-24	23-24	23-24	a	30-34
	Hungary	20	20	22-24	21-23	23-24	a	30-34
	Iceland	24	24	23	23	25	a	30-34
	Ireland	20-21	20-21	21	21	23	25	27
	Israel	m	a	26	26	28-29	a	30-34
	Italy	22-23	22-23	23	23	25	a	30-34
	Japan	19	19	21-23	21	23	a	26
	Korea	20	20	22-24	22-26	24-25	a	30-34
	Luxembourg	m	m	m	m	m	m	m
	Mexico	20	20	23	23	23-26	m	24-28
	Netherlands	m	27	23	23	a	a	28-29
	New Zealand	19-21	19-21	21-23	21-23	23	24	27-28
	Norway	24	24	22-27	22-23	24-25	26-27	30-34
	Poland	22	22	23-25	23	25	a	25-29
	Portugal	m	m	22	22	>40	a	30-34
	Slovak Republic	21-22	21-22	21-22	21-22	23-24	a	26-28
	Slovenia	23-25	23-25	23-25	23-24	24-25	a	28
	Spain	19-21	19-21	22-23	20-22	22-23	a	30-34
	Sweden	21-23	21-23	25	25	25	n	30-34
	Switzerland	23-29	23-29	24-26	24-26	25-27	25-27	30-34
	Turkey	21	21	22-24	23-24	25-26	30-34	30-34
	United Kingdom	19-24	19-24	20-25	20-22	22-24	23-25	25-29
	United States	19	19	21	21	23	24	26
Other G20	Argentina	m	20-24	m	20-24	25-29	a	25-29
	Brazil	m	m	22-24	22-24	m	m	30-34
	China	20	20	21	21	22	22	27
	India	m	m	m	m	m	m	m
	Indonesia	24	24	22	22	24	26	27
	Russian Federation	20	20	22	21	22	23	25-26
	Saudi Arabia	19	19	21	21	22-23	24	26
	South Africa	20	20	21	21	22	22	25

Note: Where tertiary-type A data are available by duration of programme, the graduation rate for all programmes is the sum of the graduation rates by duration of programme.

Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

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Table X1.1c. [2/2] Tertiary graduation rate: Typical graduation age and method used to calculate graduation rates (2011)

		Graduation rate calculation: Gross versus net											
		Tertiary-type B (ISCED 5B)				Tertiary-type A (ISCED 5A)						Advanced research programmes (ISCED 6)	
		First-time		First degree		First-time		First degree		Second degree			
		Graduation rate (all students)	Graduation rate for international/ foreign students only	Graduation rate (all students)	Graduation rate for international/ foreign students only	Graduation rate (all students)	Graduation rate for international/ foreign students only	Graduation rate (all students)	Graduation rate for international/ foreign students only	Graduation rate (all students)	Graduation rate for international/ foreign students only	Graduation rate (all students)	Graduation rate for international/ foreign students only
OECD	Australia	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Austria	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Belgium	**m**	*m*	net	*net*	**m**	*m*	net	*net*	net	*net*	net	*net*
	Canada	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Chile	**m**	*m*	net	*m*	**m**	*m*	net	*m*	net	*m*	net	*m*
	Czech Republic	**net**	*m*	net	*m*	**net**	*m*	net	*m*	net	*m*	net	*m*
	Denmark	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Estonia	**m**	*m*	net	*m*	**m**	*m*	net	*m*	net	*m*	net	*m*
	Finland	**net**	*net*	net	*n*	**net**	*m*	net	*net*	net	*net*	net	*net*
	France	**m**	*m*	gross	*m*	**m**	*m*	gross	*m*	gross	*m*	gross	*m*
	Germany	**gross**	*m*	gross	*m*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Greece	**m**	*m*	net	*m*	**m**	*m*	net	*m*	net	*m*	gross	*m*
	Hungary	**net**	*m*	net	*m*	**net**	*m*	net	*m*	net	*m*	net	*m*
	Iceland	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Ireland	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Israel	**m**	*m*	m	*m*	**net**	*m*	net	*m*	net	*m*	net	*m*
	Italy	**gross**	*m*	gross	*gross*	**net**	*m*	net	*m*	m	*m*	m	*m*
	Japan	**gross**	*m*	gross	*m*	**gross**	*m*	gross	*m*	gross	*m*	gross	*m*
	Korea	**m**	*m*	net	*m*	**m**	*m*	net	*m*	net	*m*	net	*m*
	Luxembourg	**m**	*m*	m	*m*	**m**	*m*	m	*m*	m	*m*	m	*m*
	Mexico	**net**	*m*	net	*m*	**net**	*m*	net	*m*	gross	*m*	gross	*m*
	Netherlands	**net**	*net*	net	*m*	**net**	*net*	net	*net*	net	*net*	gross	*m*
	New Zealand	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Norway	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Poland	**net**	*m*	net	*m*	**net**	*net*	net	*net*	gross	*net*	gross	*gross*
	Portugal	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Slovak Republic	**net**	*m*	net	*m*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Slovenia	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Spain	**net**	*m*	net	*m*	**net**	*m*	net	*m*	net	*m*	net	*m*
	Sweden	**net**	*net*	net	*net*	**net**	*net*	net	*net*	net	*net*	net	*net*
	Switzerland	**gross**	*m*	gross	*m*	**net**	*m*	net	*net*	net	*net*	net	*net*
	Turkey	**net**	*m*	net	*m*	**gross**	*m*	net	*m*	net	*m*	net	*m*
	United Kingdom	**net**	*m*	net	*net*	**net**	*m*	net	*net*	net	*net*	net	*net*
	United States	**gross**	*gross*	gross	*gross*	**gross**	*gross*	gross	*gross*	gross	*gross*	gross	*gross*
Other G20	Argentina	**m**	*m*	gross	*m*	**m**	*m*	gross	*m*	gross	*m*	gross	*m*
	Brazil	**m**	*m*	net	*m*	**m**	*m*	net	*m*	net	*m*	net	*m*
	China	**m**	*m*	gross	*m*	**m**	*m*	gross	*m*	gross	*m*	gross	*m*
	India	**m**	*m*	m	*m*	**m**	*m*	m	*m*	m	*m*	m	*m*
	Indonesia	**m**	*m*	net	*m*	**m**	*m*	net	*m*	net	*m*	net	*m*
	Russian Federation	**m**	*m*	gross	*m*	**m**	*m*	gross	*m*	gross	*m*	gross	*m*
	Saudi Arabia	**gross**	*gross*	gross	*gross*	**gross**	*gross*	gross	*gross*	gross	*gross*	gross	*gross*
	South Africa	**m**	*m*	gross	*m*	**m**	*m*	gross	*m*	gross	*m*	gross	*m*

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Table X1.1d. Tertiary entry rate: Typical age of entry and method used to calculate entry rates (2011)

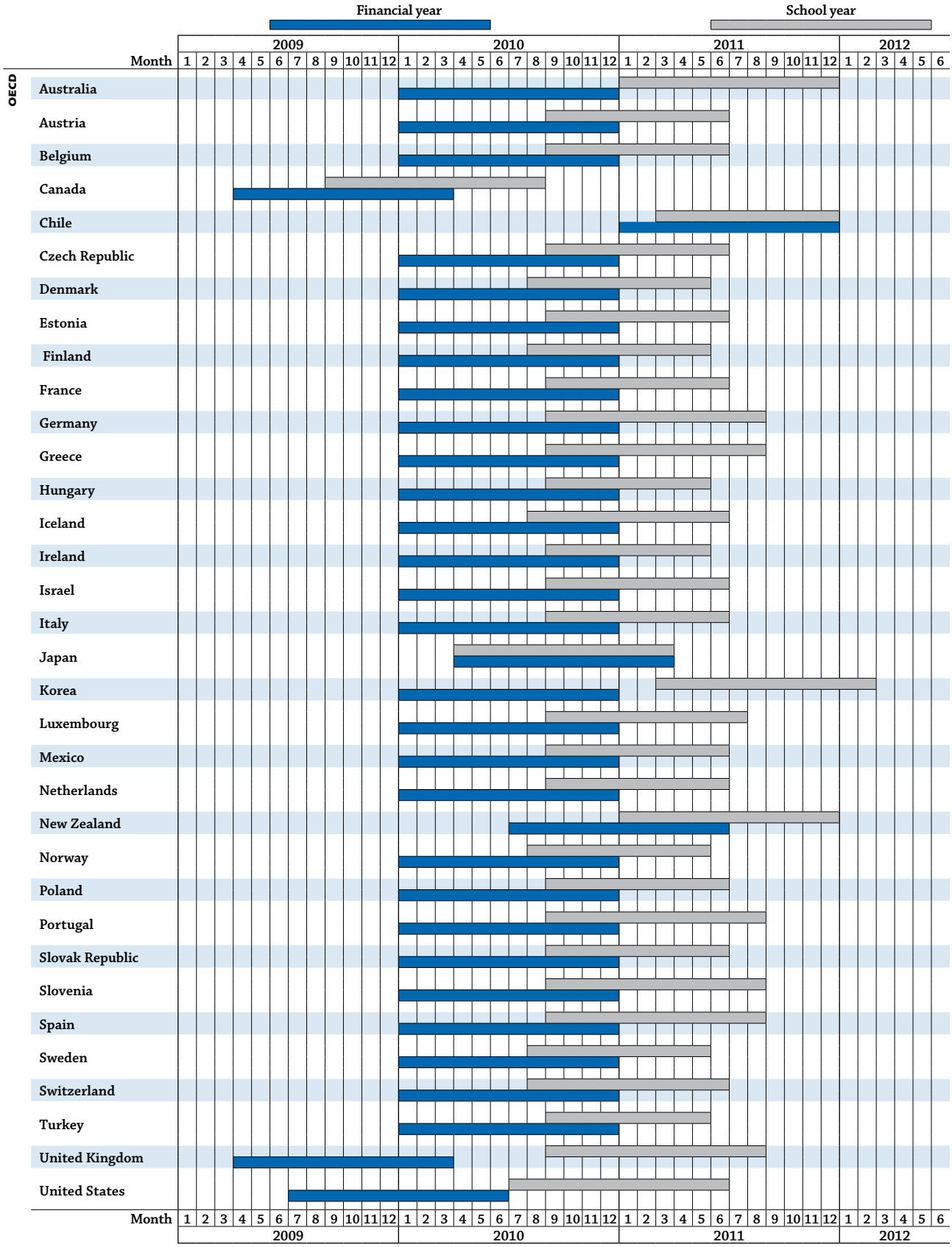
		Typical age of entry			Entry rate calculation: Gross versus net – All students			Entry rate calculation: Gross versus net – International students		
		ISCED 5A	ISCED 5B	ISCED 6	ISCED 5A	ISCED 5B	ISCED 6	ISCED 5A	ISCED 5B	ISCED 6
OECD	Australia	18	18	22-23	net	m	net	net	m	net
	Austria	19-20	20-21	25-26	net	net	net	net	net	net
	Belgium	18	18	m	net	net	m	m	m	m
	Canada	m	m	m	m	m	m	m	m	m
	Chile	18-19	18-19	24-28	net	net	net	net	net	net
	Czech Republic	19-20	19-20	24-25	net	net	net	m	m	m
	Denmark	20-21	20-21	25-27	net	net	net	net	net	net
	Estonia	19	19	24	net	net	net	m	m	m
	Finland	19	a	26-28	net	a	net	m	a	m
	France	18	19	23-25	net	m	net	m	m	m
	Germany	19-21	18-21	26-27	net	net	net	net	m	net
	Greece	18	18	24	net	net	m	m	m	m
	Hungary	19	19	24	net	net	net	m	m	m
	Iceland	20	20	25	net	net	net	net	n	net
	Ireland	18	18	m	net	net	m	net	net	m
	Israel	22-24	18	27-29	net	net	net	m	m	m
	Italy	19	a	24	net	a	net	net	a	net
	Japan	18	18	24	net	net	net	m	m	m
	Korea	18	18	24-29	net	net	net	gross	gross	m
	Luxembourg	m	m	m	m	m	m	m	m	m
	Mexico	18	18	24	net	net	net	m	m	m
	Netherlands	18-19	17-18	24-25	net	net	net	net	net	net
	New Zealand	18	18	23-24	net	net	net	net	net	net
	Norway	19-20	19	26-27	net	net	net	m	m	m
	Poland	19-20	19-20	m	net	net	m	net	m	m
	Portugal	18	22	24-29	net	net	net	net	net	net
	Slovak Republic	19	19	24	net	net	net	net	m	net
	Slovenia	19	19-20	24-26	net	net	net	net	net	net
	Spain	18	19-20	26-29	net	net	net	m	m	m
	Sweden	19	19	25-27	net	net	net	net	net	net
	Switzerland	19-21	20-25	25-27	net	net	net	net	m	net
	Turkey	18-19	18-19	25-26	net	net	net	m	m	m
	United Kingdom	18	18	22-24	net	net	net	m	m	m
	United States	18	18	24	net	m	m	gross	m	m
Other G20	Argentina	18	18	25	net	net	gross	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m
	China	17	17	21	gross	gross	gross	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	18	18	25-26	net	net	net	m	m	m
	Russian Federation	17-19	18	23-24	net	gross	gross	m	m	m
	Saudi Arabia	18-22	18	24	gross	gross	gross	gross	gross	gross
	South Africa	m	m	m	m	m	m	m	m	m

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

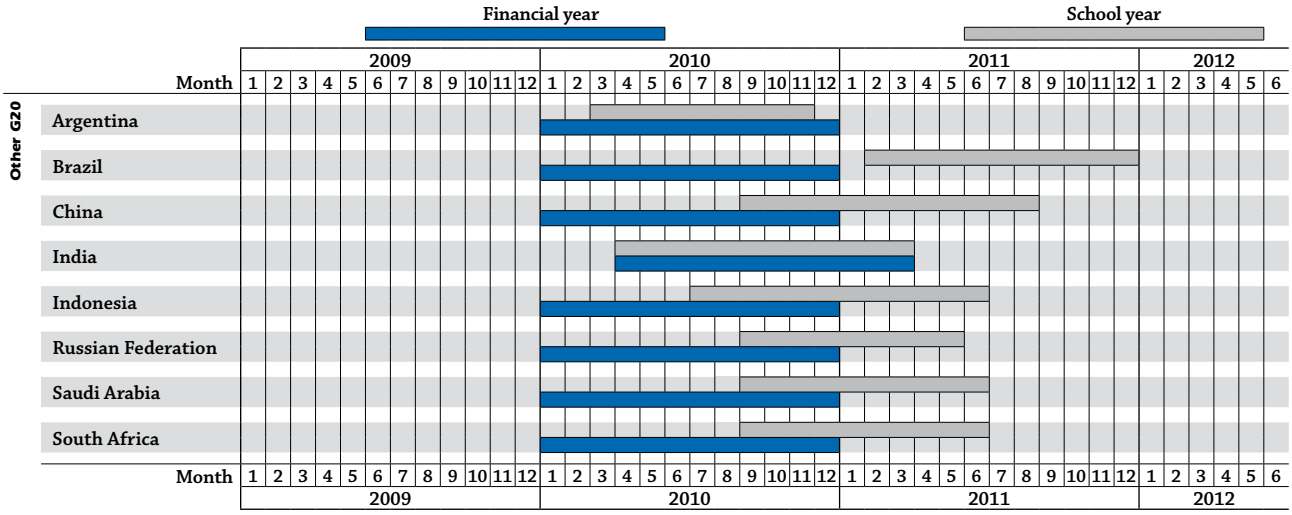
StatLink http://dx.doi.org/10.1787/888932852143

Table X1.2a. School year and financial year used for the calculation of indicators, OECD countries



Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
StatLink http://dx.doi.org/10.1787/888932852162

Table X1.2b. School year and financial year used for the calculation of indicators, other G20 countries



Source: OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Saudi Arabia: Observatory on Higher Education. South Africa: UNESCO Institute for Statistics. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

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Annex

2

Reference Statistics

Table X2.1. Overview of the economic context using basic variables (reference period: calendar year 2010, 2010 current prices)

		Total public expenditure as a percentage of GDP	GDP per capita (in equivalent USD converted using PPPs)	GDP deflator (2005 = 100)	GDP deflator (2000 = 100)
		(1)	(2)	(3)	(4)
OECD	Australia	33.8	40 801	123.5	146.5
	Austria	52.5	40 411	109.1	118.0
	Belgium	52.7	37 878	110.5	122.7
	Canada[1]	40.5	40 136	111.4	125.3
	Chile[2]	23.2	17 312	121.3	173.6
	Czech Republic	43.8	25 364	106.8	120.0
	Denmark	57.6	40 600	114.1	128.1
	Estonia	40.6	20 093	127.2	163.4
	Finland	55.8	36 030	109.0	114.0
	France	56.6	34 395	109.4	120.5
	Germany	47.5	37 661	104.9	110.6
	Greece	m	27 539	114.7	134.5
	Hungary	49.7	20 625	121.9	167.2
	Iceland	51.5	35 509	148.8	181.0
	Ireland	66.4	41 000	94.0	113.5
	Israel	43.8	26 552	109.6	116.6
	Italy	50.4	32 110	109.4	124.9
	Japan	40.9	35 238	94.2	87.8
	Korea	30.1	28 829	112.4	129.5
	Luxembourg	42.8	84 672	120.3	138.9
	Mexico	25.7	15 195	130.1	181.5
	Netherlands	51.2	41 682	107.1	123.2
	New Zealand	35.7	29 629	116.0	131.5
	Norway[3]	57.8	44 825	120.5	138.6
	Poland	45.3	20 034	114.4	129.9
	Portugal	51.4	25 519	109.5	127.3
	Slovak Republic	40.0	23 194	106.3	132.4
	Slovenia	49.8	26 649	113.5	147.0
	Spain	45.7	31 574	110.6	136.0
	Sweden	52.2	39 251	111.2	119.0
	Switzerland	33.0	48 962	107.8	111.9
	Turkey	39.0	15 775	144.7	451.0
	United Kingdom	50.2	35 299	112.8	126.2
	United States	42.7	46 548	111.0	125.1
Other G20	Argentina	m	15 868	m	m
	Brazil	32.1	12 537	138.7	219.3
	China	m	7 554	127.6	149.4
	India	m	m	m	m
	Indonesia	m	4 638	175.4	278.0
	Russian Federation	39.0	19 811	175.9	386.8
	Saudi Arabia	m	m	m	m
	South Africa	m	10 542	145.2	205.0

1. Year of reference 2009.
2. Year of reference 2011 instead of 2010. GDP deftators refer to 2001-2011 instead of 2000-2010, and to 2006-2011 instead of 2005-2010.
3. The GDP Mainland market value is used for Norway.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932852219

Table X2.2a. Basic reference statistics (reference period: calendar year 2010, 2010 current prices)[1]

		Gross domestic product (in millions of local currency)[2]	Gross domestic product (adjusted to financial year)[3]	Total public expenditure (in millions of local currency)	Total population in thousand (mid-year estimates)	Purchasing power parity for GDP (PPP) (USD = 1)	Purchasing power parity for GDP (PPP) (Euro Zone = 1)	Purchasing power parity for private consumption (PPP) (USD = 1)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD	Australia	1 401 168		473 579	22 446	1.52996	1.8888	1.5805
	Austria	286 397		150 328	8 388	0.84494	1.0431	0.8574
	Belgium	356 125		187 615	10 883	0.86391	1.0666	0.9056
	Canada[4]	1 624 608	1 576 830	638 212	33 730	1.20007	1.4816	1.2999
	Chile[5]	120 232 603		27 847 954	17 268	402.19601	496.5383	370.1642
	Czech Republic	3 799 547		1 665 240	10 517	14.2434	17.5844	15.565
	Denmark	1 761 116		1 014 512	5 546	7.82132	9.6560	8.5705
	Estonia	14 323		5 811	1 340	0.53191	0.6567	0.6214
	Finland	178 796		99 835	5 363	0.92525	1.1423	1.0019
	France	1 937 261		1 095 602	64 824	0.86888	1.0727	0.9019
	Germany	2 496 200		1 185 750	81 757	0.81071	1.0009	0.8503
	Greece	222 152		114 213	11 308	0.7134	0.8807	0.7793
	Hungary	26 607 339		13 227 838	10 000	129.00454	159.2649	145.0074
	Iceland	1 536 512		791 880	318	136.06644	167.9833	145.9209
	Ireland	156 487		103 923	4 476	0.85276	1.0528	0.9621
	Israel	813 938		356 355	7 624	4.021	4.9642	4.47
	Italy	1 553 083		782 301	60 483	0.79969	0.9873	0.8385
	Japan[6]	481 773 200	478 985 700	196 120 100	128 057	106.76508	131.8087	121.3658
	Korea	1 173 274 900		353 006 600	49 410	823.67347	1016.8808	910.4712
	Luxembourg	39 906		17 085	508	0.92866	1.1465	0.9938
	Mexico	13 043 195		3 355 288	108 292	7.92656	9.7859	8.9529
	Netherlands	588 740		301 213	16 612	0.85027	1.0497	0.8822
	New Zealand	197 068		70 450	4 384	1.51713	1.8730	1.6071
	Norway[7]	1 985 014		1 148 189	4 889	9.05771	11.1824	9.8063
	Poland	1 416 585		642 088	38 187	1.85167	2.2860	1.9923
	Portugal	172 670		88 726	10 637	0.63609	0.7853	0.7147
	Slovak Republic	65 869		26 348	5 430	0.52302	0.6457	0.58
	Slovenia	35 607		17 748	2 049	0.65215	0.8051	0.7078
	Spain	1 048 883		479 645	46 073	0.72104	0.8902	0.7898
	Sweden	3 337 531		1 743 435	9 378	9.06697	11.1938	9.4636
	Switzerland	574 314		189 408	7 786	1.50649	1.8599	1.6538
	Turkey	1 098 799		428 909	73 003	0.95411	1.1779	1.1474
	United Kingdom	1 466 569	1 412 028	735 606	62 262	0.6673	0.8238	0.7046
	United States	14 419 400	14 280 450	6 153 839	309 774	1	1.2346	1
	Euro Zone					0.810		
Other G20	Argentina	1 442 655		m	40 519	2.2438	2.7701	m
	Brazil	3 770 085		1 211 373	190 756	1.5765	1.9463	m
	China	40 151 280		m	1 340 910	3.964	m	m
	India	m		m	m	18.525	m	m
	Indonesia[5]	7 427 086 082		m	242 206	6610.848901	8161.5419	m
	Russian Federation	45 172 748		17 616 656	142 850	15.9625	19.7068	17.4149
	Saudi Arabia[5]	m		m	m	m	m	m
	South Africa	2 664 269		m	50 034	5.051	m	m

1. Data on GDP, PPPs and total public expenditure in countries in the Euro zone are provided in Euros.
2. GDP calculated for the fiscal year in Australia and GDP and total public expenditure calculated for the fiscal year in New Zealand.
3. For countries where GDP is not reported for the same reference period as data on educational finance, GDP is estimated as: wt-1 (GDPt - 1) + wt (GDPt), where wt and wt-1 are the weights for the respective portions of the two reference periods for GDP which fall within the educational financial year. Adjustments were made in Chapter B for Canada, Japan, the United Kingdom and the United States.
4. Year of reference 2009.
5.Year of reference 2011.
6. Total public expenditure adjusted to financial year.
7. The GDP Mainland market value is used for Norway.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932852238

Table X2.2b. Basic reference statistics (reference period: calendar year 1995, 2000, 2005, 2010)[1]

		Gross Domestic Product (in millions of local currency, current prices)			Total public expenditure (in millions of local currency, current prices)			Change in Gross domestic product (2005=100, constant prices)			
		1995	2000	2005	1995	2000	2005	1995	2000	2005	2010
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	529 705	706 895	994 803	184 270	225 913	309 431	70	84	100	114
OECD	Austria	174 794	208 474	245 243	98 361	108 175	122 585	79	92	100	107
OECD	Belgium	207 927	252 543	303 435	108 336	123 943	157 976	80	92	100	106
OECD	Canada	810 426	1 076 577	1 373 845	392 886	442 560	539 234	72	88	100	106
OECD	Chile[2]	m	m	82 018 171	m	m	15 327 440	62	76	100	121
OECD	Czech Republic	1 533 676	2 269 695	3 116 056	798 790	915 413	1 340 123	75	82	100	114
OECD	Denmark	1 019 545	1 293 963	1 545 257	604 404	694 479	815 717	82	94	100	100
OECD	Estonia	2 767	6 160	11 182	17 866	34 815	3 757	51	71	100	101
OECD	Finland	96 064	132 195	157 429	58 947	63 794	79 325	69	88	100	104
OECD	France	1 196 181	1 439 603	1 718 047	650 606	744 119	920 351	81	92	100	103
OECD	Germany	1 848 500	2 047 500	2 224 400	1 014 050	923 360	1 043 450	89	97	100	107
OECD	Greece	88 742	135 043	193 050	40 783	63 627	86 097	69	82	100	100
OECD	Hungary	5 727 829	13 089 047	22 018 283	3 197 916	6 251 647	11 032 047	71	82	100	99
OECD	Iceland	454 013	683 747	1 025 740	m	286 259	433 346	64	81	100	101
OECD	Ireland	53 787	105 775	163 037	21 841	32 836	54 993	48	78	100	102
OECD	Israel	289 555	506 173	600 011	149 518	239 809	273 209	71	90	100	124
OECD	Italy	952 158	1 198 292	1 436 379	497 487	550 032	688 251	87	95	100	99
OECD	Japan	501 706 900	509 860 000	503 903 000	181 284 700	193 917 400	183 659 700	90	94	100	101
OECD	Korea	409 653 600	603 236 000	865 240 900	83 399 300	135 324 800	230 062 600	62	80	100	121
OECD	Luxembourg	15 108	21 998	30 270	5 996	8 270	12 573	62	84	100	110
OECD	Mexico	2 013 954	6 020 649	9 220 649	384 960	1 139 998	1 979 808	70	91	100	109
OECD	Netherlands	305 261	417 960	513 407	172 305	184 612	229 965	77	94	100	107
OECD	New Zealand	94 545	117 508	160 573	31 743	m	62 645	72	83	100	106
OECD	Norway[3]	806 858	1 113 894	1 464 974	480 575	626 569	818 805	73	87	100	112
OECD	Poland	337 222	744 378	983 302	147 561	294 012	427 147	66	86	100	126
OECD	Portugal	87 841	127 317	154 269	36 447	52 237	70 363	78	96	100	102
OECD	Slovak Republic	19 319	31 177	49 314	9 392	16 255	18 730	67	79	100	126
OECD	Slovenia	10 357	18 566	28 722	0	8 636	13 011	68	84	100	109
OECD	Spain	447 205	629 907	909 298	198 730	246 542	349 501	70	85	100	104
OECD	Sweden	1 809 575	2 265 447	2 769 375	1 175 180	1 248 029	1 491 382	74	88	100	108
OECD	Switzerland	383 096	432 405	479 088	139 873	151 837	176 236	85	94	100	111
OECD	Turkey	10 435	166 658	648 932	m	m	m	65	80	100	117
OECD	United Kingdom	733 266	975 294	1 262 710	322 956	381 199	553 045	73	86	100	103
OECD	United States	7 359 300	9 898 800	12 564 300	2 732 629	3 353 547	4 563 353	72	89	100	103
Other G20	Brazil	646 192	1 179 482	2 147 944	224 283	394 349	670 514	m	m	m	m
Other G20	Russian Federation	499 375 940	1 389 769 900	2 774 281 100	m	2 016 630	7 380 575	69	74	100	119

1. Data on GDP, and total public expenditure in countries in the Euro zone are provided in Euros.
2. Years of reference 1996, 2001, 2006 and 2011 instead of 1995, 2000, 2005 and 2010.
3. The GDP Mainland market value is used for Norway.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888932852257

Table X2.3a. [1/2] Teachers' statutory salaries at different points in their careers (2011)

Annual salaries in public institutions, in national currency

		Pre-primary education				Primary education			
		Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training	Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	Australia	54 521	75 235	75 235	75 235	54 731	76 732	76 732	76 732
	Austria	27 155	31 994	35 889	53 557	27 155	31 994	35 889	53 557
	Belgium (Fl.)	29 042	36 476	41 094	50 329	29 042	36 476	41 094	50 329
	Belgium (Fr.)[1]	28 518	35 682	40 184	49 190	28 518	35 682	40 184	49 190
	Canada	46 131	69 625	73 154	73 154	46 131	69 625	73 154	73 154
	Chile	6 465 240	8 080 460	8 785 016	11 603 204	6 465 240	8 080 460	8 785 016	11 603 204
	Czech Republic	236 113	265 041	274 829	303 713	257 652	298 442	311 793	343 478
	Denmark	359 285	381 192	391 577	391 577	375 448	419 978	434 802	434 802
	England	21 588	31 552	31 552	31 552	21 588	31 552	31 552	31 552
	Estonia	m	m	m	m	7 298	7 728	7 728	10 667
	Finland	26 084	29 135	29 383	29 646	30 858	36 059	38 222	40 516
	France	23 077	27 861	29 831	44 016	23 077	27 861	29 831	44 016
	Germany	m	m	m	m	40 142	m	49 587	53 496
	Greece	17 766	20 344	21 958	26 518	17 766	20 344	21 958	26 518
	Hungary[2]	1 488 240	1 659 540	1 779 564	2 339 028	1 552 560	1 780 164	1 911 204	2 549 748
	Iceland	3 066 123	3 409 863	3 409 863	3 901 395	3 543 514	3 884 631	3 987 224	4 157 620
	Ireland	m	m	m	m	31 972	46 844	52 472	59 359
	Israel	72 956	102 193	115 884	171 507	83 822	108 629	121 858	172 097
	Italy	23 048	25 355	27 845	33 885	23 048	25 355	27 845	33 885
	Japan	m	m	m	m	3 105 000	4 612 000	5 456 000	6 873 000
	Korea	24 769 200	36 800 400	42 987 600	70 138 800	25 278 000	37 918 800	44 222 400	70 138 800
	Luxembourg	63 895	82 545	93 182	112 736	63 895	82 545	93 182	112 736
	Mexico	135 978	136 811	176 627	289 751	135 978	136 811	176 627	289 751
	Netherlands	32 295	39 635	46 108	47 591	32 295	39 635	46 108	47 591
	New Zealand	m	m	m	m	45 568	67 413	67 413	67 413
	Norway	321 800	374 500	374 500	374 500	328 300	370 000	370 000	414 000
	Poland	20 640	27 100	32 878	34 260	20 640	27 100	32 878	34 260
	Portugal	22 033	26 451	28 069	37 340	22 033	26 451	28 069	37 340
	Scotland	21 438	34 200	34 200	34 200	21 438	34 200	34 200	34 200
	Slovak Republic	5 352	5 892	6 156	6 642	5 988	7 308	7 518	8 106
	Slovenia	18 632	20 671	22 646	23 336	18 632	20 671	22 646	23 789
	Spain	28 369	30 897	32 685	40 141	28 369	30 897	32 685	40 141
	Sweden[2]	282 000	301 200	318 000	334 800	282 000	313 000	322 600	374 000
	Switzerland[3]	68 424	86 039	m	105 353	77 170	96 923	m	119 979
	Turkey	27 419	28 303	29 426	31 807	27 816	28 700	29 822	32 204
	United States[2]	37 717	m	m	m	37 595	43 747	46 130	53 180
Other G20	Argentina[2,4]	30 073	m	37 467	45 425	29 690	m	34 842	44 914
	Brazil	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia[4]	8 804 400	9 973 200	11 142 000	12 693 600	8 804 400	9 973 200	11 142 000	12 693 600
	Russian Federation	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m

1. Salaries of teachers with typical qualifications instead of minimum. Please refer to Annex 3 for salaries of teachers with minimum qualifications.
2. Actual base salaries.
3. Salaries after 11 years of experience for Columns 2, 6, 10 and 14.
4. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932852295

Table X2.3a. [2/2] Teachers' statutory salaries at different points in their careers (2011)

Annual salaries in public institutions, in national currency

		Lower secondary education				Upper secondary education			
		Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training	Starting salary, minimum training	Salary after 10 years of experience, minimum training	Salary after 15 years of experience, minimum training	Salary at top of scale, minimum training
		(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OECD	Australia	54 946	77 715	77 715	77 715	54 946	77 715	77 715	77 715
	Austria	28 423	34 588	38 882	55 609	28 790	31 011	39 927	58 139
	Belgium (Fl.)	29 042	36 476	41 094	50 329	36 288	46 312	52 844	63 732
	Belgium (Fr.)[1]	28 518	35 682	40 184	49 190	35 499	45 273	51 643	62 259
	Canada	46 131	69 625	73 154	73 154	46 131	69 935	73 440	73 440
	Chile	6 465 240	8 080 460	8 785 016	11 603 204	6 706 721	8 565 809	9 307 217	12 272 849
	Czech Republic	254 434	300 163	314 495	346 859	266 367	322 504	335 696	372 720
	Denmark	375 448	419 978	434 802	434 802	386 236	504 046	504 046	504 046
	England	21 588	31 552	31 552	31 552	21 588	31 552	31 552	31 552
	Estonia	7 298	7 728	7 728	10 667	7 298	7 728	7 728	10 667
	Finland	33 327	38 944	41 280	43 757	34 310	42 005	43 686	46 307
	France	25 783	30 567	32 537	46 872	25 998	30 782	32 752	47 108
	Germany	44 823	m	54 514	59 451	48 484	m	58 930	66 853
	Greece	17 766	20 344	21 958	26 518	17 766	20 344	21 958	26 518
	Hungary[2]	1 552 560	1 780 164	1 911 204	2 549 748	1 696 596	2 072 664	2 260 944	3 218 184
	Iceland	3 543 514	3 884 631	3 987 224	4 157 620	3 342 600	3 798 600	4 012 000	4 197 000
	Ireland	33 041	46 844	52 472	59 359	33 041	46 844	52 472	59 359
	Israel	83 822	99 635	112 095	157 749	63 921	85 024	95 590	143 378
	Italy	24 846	27 524	30 340	37 212	24 846	28 193	31 190	38 902
	Japan	3 105 000	4 612 000	5 456 000	6 873 000	3 105 000	4 612 000	5 456 000	7 061 000
	Korea	25 182 000	37 822 800	44 126 400	70 042 800	25 182 000	37 822 800	44 126 400	70 042 800
	Luxembourg	72 332	90 416	99 782	125 671	72 332	90 416	99 782	125 671
	Mexico	173 579	178 595	224 596	368 645	m	m	m	m
	Netherlands	34 336	46 958	56 163	58 298	34 336	46 958	56 163	58 298
	New Zealand	45 611	68 197	68 197	68 197	45 653	68 980	68 980	68 980
	Norway	328 300	370 000	370 000	414 000	361 400	398 000	398 000	439 000
	Poland	23 232	30 739	37 459	39 040	26 255	35 107	42 860	44 676
	Portugal	22 033	26 451	28 069	37 340	22 033	26 451	28 069	37 340
	Scotland	21 438	34 200	34 200	34 200	21 438	34 200	34 200	34 200
	Slovak Republic	5 988	7 308	7 518	8 106	5 988	7 308	7 518	8 106
	Slovenia	18 632	20 671	22 646	23 789	18 632	20 671	22 646	23 789
	Spain	31 384	34 173	36 124	43 963	31 870	34 745	36 749	44 701
	Sweden[2]	286 800	321 600	333 000	375 500	300 000	337 200	352 600	401 300
	Switzerland[3]	87 392	110 777	m	135 500	100 172	128 860	m	153 327
	Turkey	a	a	a	a	28 477	29 360	30 483	32 864
	United States[2]	37 507	43 841	45 950	56 364	38 012	44 891	49 414	56 303
Other G20	Argentina[2, 4]	24 193	m	31 934	38 787	24 193	m	31 934	38 787
	Brazil	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m
	Indonesia[4]	9 484 000	11 038 800	12 693 600	13 790 400	10 854 800	11 038 800	14 058 000	15 319 200
	Russian Federation	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m

1. Salaries of teachers with typical qualifications instead of minimum. Please refer to Annex 3 for salaries of teachers with minimum qualifications.
2. Actual base salaries.
3. Salaries after 11 years of experience for Columns 2, 6, 10 and 14.
4. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932852295

Table X2.3b. [1/2] Trends in teachers' salaries, between 2000 and 2011[1]

Annual statutory teachers' salaries in public institutions for teachers with 15 years of experience and minimum training, by level of education, in national currency

		Primary level								Lower secondary level			
		2000	2005	2006	2007	2008	2009	2010	2011	2000	2005	2006	2007
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	50 995	62 240	61 243	63 977	68 586	70 696	73 706	76 732	51 016	62 384	62 106	64 984
	Austria	25 826	31 050	31 935	32 830	33 717	34 848	35 526	35 889	26 916	33 635	34 418	35 467
	Belgium (Fl.)	29 579	35 417	36 390	37 236	37 432	39 670	40 042	41 094	31 191	35 417	36 390	37 236
	Belgium (Fr.)	28 638	33 598	34 825	35 697	35 917	38 872	38 875	40 184	30 482	33 973	34 825	35 697
	Canada	m	m	m	m	m	m	71 608	73 154	m	m	m	m
	Chile	m	m	4 430 124	4 636 394	m	8 257 733	8 493 461	8 785 016	m	m	4 430 124	4 636 394
	Czech Republic	125 501	250 559	254 921	302 856	309 994	323 789	310 711	311 793	125 501	250 559	254 921	302 856
	Denmark	285 200	332 015	341 001	346 569	362 222	434 439	434 802	434 802	285 200	332 015	341 001	346 569
	England	23 193	27 123	28 005	28 707	29 427	30 148	30 842	31 552	23 193	27 123	28 005	28 707
	Estonia	3 068	4 379	5 039	6 013	7 264	8 038	7 728	7 728	3 068	4 379	5 039	6 013
	Finland	26 506	33 171	33 868	35 299	36 540	37 417	37 769	38 222	31 115	36 109	36 867	38 123
	France	27 288	28 395	28 791	29 097	29 271	29 438	29 674	29 831	29 456	30 667	31 068	31 274
	Germany	m	m	m	m	m	46 134	47 647	49 587	m	m	m	m
	Greece	16 292	21 237	21 872	22 989	24 146	25 001	22 707	21 958	16 292	21 237	21 872	22 989
	Hungary[2]	897 168	1 944 576	1 970 676	1 983 240	2 059 668	1 914 504	1 916 568	1 911 204	897 168	1 944 576	1 970 676	1 983 240
	Iceland	1 884 000	2 573 556	2 837 950	2 830 814	3 268 766	3 987 224	3 987 224	3 987 224	1 884 000	2 573 556	2 837 950	2 830 814
	Ireland	33 370	46 591	49 421	52 177	53 221	55 916	53 620	52 472	33 729	46 591	49 421	52 177
	Israel	68 421	73 496	77 475	86 089	94 432	105 899	112 005	121 858	76 048	82 030	86 256	86 838
	Italy	20 849	25 234	25 528	25 799	26 470	27 374	27 645	27 845	22 836	27 487	27 797	28 095
	Japan	6 645 000	6 236 000	6 235 725	5 958 000	5 753 000	5 720 000	5 555 000	5 456 000	6 645 000	6 236 000	6 235 725	5 958 000
	Korea	26 757 000	39 712 000	40 841 220	41 387 505	42 003 300	42 003 300	42 003 257	44 222 400	26 661 000	39 616 000	40 745 220	41 291 505
	Luxembourg	m	62 139	63 692	65 284	64 244	67 230	93 182	93 182	m	81 258	83 289	85 371
	Mexico	86 748	124 082	130 526	137 323	145 917	155 022	163 419	176 627	109 779	157 816	166 107	174 854
	Netherlands	m	m	m	39 463	40 543	42 654	44 288	46 108	m	m	m	47 427
	New Zealand	49 450	54 979	56 628	58 327	60 660	63 086	65 609	67 413	49 450	54 979	56 628	58 327
	Norway	m	302 000	305 000	313 000	327 300	337 800	349 000	370 000	m	302 000	305 000	313 000
	Poland	m	19 022	m	m	26 944	28 902	30 785	32 878	m	19 022	m	m
	Portugal	17 180	22 775	23 186	23 541	23 987	26 763	27 038	28 069	17 180	22 775	23 186	23 541
	Scotland	22 743	29 827	30 602	31 241	32 052	32 855	33 666	34 200	22 743	29 827	30 602	31 241
	Slovak Republic	m	m	m	m	m	7 276	7 492	7 518	m	m	m	m
	Slovenia	m	17 939	19 025	20 005	20 911	22 361	22 433	22 646	m	17 939	19 025	20 005
	Spain	22 701	28 122	29 347	29 934	32 193	33 754	33 889	32 685	24 528	31 561	32 922	33 580
	Sweden[2]	248 300	283 200	m	298 800	m	313 600	m	322 600	248 300	290 400	m	306 300
	Switzerland[3]	85 513	90 483	89 909	91 017	92 617	96 918	96 241	96 923	102 409	103 037	102 985	104 157
	Turkey	2 638	17 166	17 609	19 822	22 114	25 043	28 144	29 822	a	a	a	a
	United States[2]	35 323	40 734	42 404	43 633	44 172	44 788	45 226	46 130	35 185	41 090	42 775	44 015
Other G20	Argentina[2]	m	m	m	m	m	30 574	34 842	m	m	m	m	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	11 142 000	11 142 000	11 142 000	11 142 000	m	m	m	m	11 142 000
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m

1. Data on salaries for countries now in the euro zone are shown in euros.
2. Actual base salaries.
3. Salaries after 11 years of experience.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932852314

Table X2.3b. [2/2] Trends in teachers' salaries, between 2000 and 2011[1]

Annual statutory teachers' salaries in public institutions for teachers with 15 years of experience and minimum training, by level of education, in national currency

		Lower secondary level				Upper secondary level							
		2008	2009	2010	2011	2000	2005	2006	2007	2008	2009	2010	2011
		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
OECD	Australia	69 794	70 696	73 706	77 715	51 016	62 384	62 106	64 984	69 794	70 696	73 706	77 715
	Austria	36 455	37 664	38 451	38 882	29 728	34 265	35 273	36 493	37 508	38 787	39 535	39 927
	Belgium (Fl.)	37 432	39 670	40 042	41 094	39 886	45 301	46 477	47 644	47 976	50 852	51 454	52 844
	Belgium (Fr.)	35 917	38 872	38 875	40 184	39 207	43 704	44 750	45 820	46 039	50 106	50 108	51 643
	Canada	m	m	71 608	73 154	m	m	m	m	m	m	71 886	73 440
	Chile	m	8 257 733	8 493 461	8 785 016	m	m	4 638 231	4 852 425	m	8 638 812	9 004 818	9 307 217
	Czech Republic	316 173	330 923	314 897	314 495	152 941	255 125	258 535	323 566	337 024	347 334	334 084	335 696
	Denmark	362 222	434 439	434 802	434 802	335 000	404 229	424 212	423 426	436 926	497 723	504 046	504 046
	England	29 427	30 148	30 842	31 552	23 193	27 123	28 005	28 707	29 427	30 148	30 842	31 552
	Estonia	7 264	8 038	7 728	7 728	3 068	4 379	5 039	6 013	7 264	8 038	7 728	7 728
	Finland	39 464	40 411	40 791	41 280	32 681	38 263	39 066	40 396	41 805	42 808	43 168	43 686
	France	31 461	31 641	32 258	32 537	29 456	30 895	31 296	31 525	31 715	31 896	32 472	32 752
	Germany	m	50 929	52 784	54 514	m	m	m	m	m	55 533	57 150	58 930
	Greece	24 146	25 001	22 707	21 958	16 292	21 237	21 872	22 989	24 146	25 001	22 707	21 958
	Hungary[2]	2 059 668	1 914 504	1 916 568	1 911 204	1 128 996	2 432 388	2 358 240	2 474 508	2 474 388	2 298 900	2 262 636	2 260 944
	Iceland	3 268 766	3 987 224	3 987 224	3 987 224	2 220 000	3 014 000	3 446 964	3 619 000	3 840 000	4 025 000	4 012 000	4 012 000
	Ireland	53 221	55 916	53 620	52 472	33 729	46 591	49 421	52 177	53 221	55 916	53 620	52 472
	Israel	95 405	99 247	102 514	112 095	75 097	80 052	84 190	85 118	93 786	91 563	93 450	95 590
	Italy	28 831	29 824	30 121	30 340	23 518	28 259	28 574	28 880	29 637	30 661	30 966	31 190
	Japan	5 753 000	5 720 000	5 555 000	5 456 000	6 649 000	6 237 000	6 235 725	5 958 000	5 753 000	5 720 000	5 555 000	5 456 000
	Korea	41 907 300	41 907 300	41 907 257	44 126 400	26 661 000	39 616 000	40 745 220	41 291 505	41 907 300	41 907 300	41 907 257	44 126 400
	Luxembourg	93 772	101 058	99 782	99 782	m	81 258	83 289	85 371	93 772	101 058	99 782	99 782
	Mexico	185 616	196 707	209 350	224 596	m	m	m	m	m	m	m	m
	Netherlands	48 615	50 955	53 984	56 163	m	m	m	47 427	48 615	50 955	53 984	56 163
	New Zealand	60 660	63 086	67 295	68 197	49 450	54 979	56 628	58 327	60 660	63 086	68 980	68 980
	Norway	327 300	337 800	349 000	370 000	m	321 000	324 000	332 500	347 300	362 800	376 400	398 000
	Poland	30 850	32 920	35 071	37 459	m	19 022	m	m	35 459	37 670	40 120	42 860
	Portugal	23 987	26 763	27 038	28 069	17 180	22 775	23 186	23 541	23 987	26 763	27 038	28 069
	Scotland	32 052	32 855	33 666	34 200	22 743	29 827	30 602	31 241	32 052	32 855	33 666	34 200
	Slovak Republic	m	7 276	7 492	7 518	m	m	m	m	m	7 276	7 498	7 518
	Slovenia	20 911	22 361	22 433	22 646	m	17 939	19 025	20 005	20 911	22 361	22 433	22 646
	Spain	35 200	37 669	37 820	36 124	26 366	32 293	33 666	34 339	36 818	38 459	38 613	36 749
	Sweden[2]	m	324 000	m	333 000	264 700	313 600	m	326 900	m	342 300	m	352 600
	Switzerland[3]	105 874	110 096	109 537	110 777	121 629	120 602	121 187	122 259	124 936	129 158	127 839	128 860
	Turkey	a	a	a	a	2 441	17 403	18 074	20 329	22 650	25 625	28 883	30 483
	United States[2]	44 000	44 614	45 049	45 950	37 838	41 044	42 727	43 966	47 317	47 977	48 446	49 414
Other G20	Argentina[2]	m	26 455	31 934	m	m	m	m	m	m	26 455	31 934	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m
	China	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	12 693 600	12 693 600	12 693 600	m	m	m	m	11 142 000	14 058 000	14 058 000	14 058 000	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m

1. Data on salaries for countries now in the euro zone are shown in euros.
2. Actual base salaries.
3. Salaries after 11 years of experience.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag.htm)*.
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888932852314

Table X2.3c. Reference statistics used in calculating teachers' salaries (2000, 2005-11)

		Purchasing power parity for private consumption (PPP)[1]			Private consumption deflators (2000=100)								Reference year for 2011 salary data
		2010	2011	Jan 2011	Jan 2000	Jan 2005	Jan 2006	Jan 2007	Jan 2008	Jan 2009	Jan 2010	Jan 2011	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	1.58	1.58	1.58	100	113	116	120	124	127	131	134	2011
	Austria	0.86	0.87	0.86	100	109	111	114	116	118	119	123	2010/2011
	Belgium (Fl.)[2]	0.91	0.90	0.90	100	110	113	117	120	122	123	126	Jan. 2011
	Belgium (Fr.)[2]	0.91	0.90	0.90	100	110	113	117	120	122	123	126	2010/2011
	Canada	1.30	1.30	1.30	100	109	111	113	115	116	117	119	2010/2011
	Chile	370.16	373.60	371.88	100	117	121	126	133	139	141	145	2011
	Czech Republic	15.57	15.33	15.45	100	111	112	115	119	122	123	123	2010/2011
	Denmark	8.57	8.71	8.64	100	109	111	113	115	117	120	123	2010/2011
	England[3]	0.70	0.72	0.71	100	107	110	113	116	119	122	127	2010/2011
	Estonia	0.62	0.63	0.63	100	120	125	133	144	148	149	155	2010/2011
	Finland	1.00	1.02	1.01	100	107	108	110	113	116	118	121	2010/2011
	France	0.90	0.90	0.90	100	110	112	114	117	118	118	120	2010/2011
	Germany	0.85	0.84	0.85	100	107	109	110	112	113	114	116	2010/2011
	Greece	0.78	0.78	0.78	100	116	120	124	128	131	134	139	2011
	Hungary	145.01	146.45	145.73	100	137	141	149	158	165	172	179	2011
	Iceland	145.92	149.52	147.72	100	122	128	135	148	169	182	190	2010/2011
	Ireland	0.96	0.95	0.95	100	120	122	125	128	125	119	119	2010/2011
	Israel	4.47	4.50	4.48	100	108	110	111	115	119	122	126	2010/2011
	Italy	0.84	0.85	0.84	100	114	117	120	123	125	126	129	2010/2011
	Japan	121.37	117.19	119.28	100	95	95	94	94	93	91	90	2010/2011
	Korea	910.47	922.55	916.51	100	118	121	123	127	131	135	139	2011
	Luxembourg	0.99	1.00	1.00	100	111	114	117	120	123	124	127	2010/2011
	Mexico	8.95	9.08	9.02	100	137	142	148	155	166	175	182	2010/2011
	Netherlands	0.88	0.88	0.88	100	114	117	119	121	121	122	124	2010/2011
	New Zealand	1.61	1.62	1.61	100	109	112	115	118	122	124	127	2011
	Norway	9.81	9.88	9.84	100	110	112	113	116	119	122	124	2010/2011
	Poland	1.99	1.99	1.99	100	117	119	122	126	130	133	138	2010/2011
	Portugal	0.71	0.71	0.71	100	116	119	123	126	126	126	129	2010/2011
	Scotland[3]	0.70	0.72	0.71	100	107	110	113	116	119	122	127	2010/2011
	Slovak Republic	0.58	0.59	0.58	100	131	136	141	146	149	150	154	2010/2011
	Slovenia	0.71	0.70	0.70	100	131	134	138	145	150	151	154	2010/2011
	Spain	0.79	0.79	0.79	100	118	122	126	130	132	133	136	2010/2011
	Sweden	9.46	9.30	9.38	100	107	109	110	112	115	117	119	2011
	Switzerland	1.65	1.61	1.63	100	103	104	106	108	110	110	110	2011
	Turkey	1.15	1.22	1.18	100	359	392	423	460	496	529	575	2011
	United States	1.00	1.00	1.00	100	111	114	117	121	123	124	127	2010/2011
Other G20	Argentina[4]	1.72	1.87	1.79	m	m	m	m	m	m	m	m	2010
	Brazil	m	m	m	100	154	163	171	181	192	204	217	m
	China	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia[4]	5 285.50	5 467.13	5 376.31	100	164	185	211	240	261	275	291	2010
	Russian Federation	17.41	18.46	17.94	m	m	m	m	m	m	m	m	2011
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m

1. Data on PPPs for countries now in the Euro zone are shown in Euros.
2. Data on PPPs and deflators refer to Belgium.
3. Data on PPPs and deflators refer to the United Kingdom.
4. Year of reference 2010.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes *(www.oecd.org/edu/eag htm).*
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General notes

Definitions

Gross domestic product (GDP) refers to the producers' value of the gross outputs of resident producers, including distributive trades and transport, less the value of purchasers' intermediate consumption plus import duties. GDP is expressed in local money (in millions). For countries which provide this information for a reference year that is different from the calendar year (such as Australia and New Zealand), adjustments are made by linearly weighting their GDP between two adjacent national reference years to match the calendar year.

The **GDP deflator** is obtained by dividing the GDP expressed at current prices by the GDP expressed at constant prices. This provides an indication of the relative price level in a country.

GDP per capita is the gross domestic product (in equivalent USD converted using PPPs) divided by the population.

Purchasing power parity exchange rates (PPP) are the currency exchange rates that equalise the purchasing power of different currencies. This means that a given sum of money when converted into different currencies at the PPP rates will buy the same basket of goods and services in all countries. In other words, PPPs are the rates of currency conversion which eliminate the differences in price levels among countries. Thus, when expenditure on GDP for different countries is converted into a common currency by means of PPPs, it is, in effect, expressed at the same set of international prices so that comparisons between countries reflect only differences in the volume of goods and services purchased.

Total public expenditure as used for the calculation of the education indicators, corresponds to the non-repayable current and capital expenditure of all levels of government. Current expenditure includes final consumption expenditure (e.g. compensation of employees, consumption of intermediate goods and services, consumption of fixed capital, and military expenditure), property income paid, subsidies, and other current transfers paid (e.g. social security, social assistance, pensions and other welfare benefits). Capital expenditure is spending to acquire and/or improve fixed capital assets, land, intangible assets, government stocks, and non-military, non-financial assets, and spending to finance net capital transfers.

Sources

The 2013 edition of the *National Accounts of OECD Countries: Detailed Tables, Volume II.*

The theoretical framework underpinning national accounts has been provided for many years by the United Nations' publication *A System of National Accounts,* which was released in 1968. An updated version was released in 1993 (commonly referred to as SNA93).

OECD Analytical Database, January 2013.

Annex

3

Sources, Methods and Technical Notes

Annex 3 on sources and methods is available in electronic form only. It can be found at:
www.oecd.org/edu/eag.htm

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Many people have contributed to the development of this publication.
The following lists the names of the country representatives who have taken part to the INES meetings and to the preparatory work leading to the publication of *Education at a Glance 2013 – OECD Indicators*.
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