

Chapter 1

Off to a Good Start? Youth Labour Market Transitions in OECD Countries

The chapter first provides an overview of youth labour market performance over the past decade. It then presents evidence on the sensitivity of teen and young adult unemployment to the business cycle and the increased prominence of temporary and part-time jobs as modes of entry into work. Several indicators of the pace and modality of the school-to-work transition following completion of initial education are then presented and the quality of youth jobs is analysed, including the extent to which temporary and low-paid jobs serve as stepping stones to better jobs. Lastly, the chapter underlines the difficulty of moving out of non-employment for some school leavers – especially those who did not successfully complete secondary schooling – despite the overall fluidity of the youth labour market.

Introduction

This chapter provides a descriptive review of how youth are faring in OECD labour markets. It updates the analyses conducted in previous issues of the *OECD Employment Outlook* (OECD, 1996a, 1998) and in recent OECD work (Quintini and Martin, 2006). The chapter also addresses a number of new issues. In particular, it provides an internationally comparative analysis of the pace and modality of the school-to-work transition and how they have evolved during the past decade, making use of cross-sectional and longitudinal data for many countries.¹

There are two broad reasons why it is timely to assess the school-to-work transition process and how this process influences youth labour market outcomes. First, despite improvements in youth labour market conditions in many OECD countries over the past decade, there remain concerns about the ability of many youth to gain a secure foothold in the labour market and move up career ladders (OECD, 2006). The currently uncertain macroeconomic environment reinforces these concerns, because the historical pattern has been for the labour market prospects of youth to be particularly sensitive to business-cycle conditions. A second reason it is timely to assess school-to-work transitions is that youth may be disproportionately affected – either for better or the worse – by a number of demographic, economic and social trends which are reshaping OECD labour markets.

The chapter is organised as follows. Section 1 presents an overview of youth labour market performance over the past decade. The changing relative size and educational attainment of new cohorts reaching working age is examined, as well as the cyclical sensitivity of employment and unemployment rates for different age groups. The rest of the chapter examines the patterns of transition from school to work and the medium-term impact on labour market outcomes for youth of the initial transition. These transitions can be quick or protracted and they take very different forms across different youth groups and across OECD countries. Accordingly, the analyses focus on employment status and job quality according to *time passed since leaving school* (i.e. potential labour market experience), rather than age. Along with descriptive tabulations of labour market outcomes by experience, alternative estimates of the average duration of the school-to-work transition are presented in Section 2, emphasising both the multi-faceted nature of this concept and the statistical difficulties that must be confronted to make international comparisons. Finally, Section 3 analyses employment stability and the evolution of job quality for recent school leavers, as they settle into their working lives.²

Main findings

- The labour supply profile of school leavers has evolved during the past decade. In almost all OECD countries, the share of 15-24-year-olds in the total population has fallen, often quite sharply. If workers of different ages are imperfect substitutes in production, the relatively small size of the most recent cohorts of youth should be an advantage to them in the labour market. Another potential advantage to youth in the labour market today

is that they are better educated on average than preceding cohorts. Moreover, despite the rising educational attainment for youth, the education wage premia increased in the past decade in the majority of the OECD countries for which these data are available.

- The youth employment rate (15-24 years) fell in the majority of OECD countries during the past decade, but this reflects rising school enrolment rates rather than worsening labour market opportunities. Indeed, the unemployment rate for youth fell in the majority of countries, as did the more comprehensive NEET rate (*i.e.* the share of youth not in education, employment or training), suggesting that it became somewhat easier for young job seekers to find work over the past decade. This is also confirmed by the fact that fewer youth experience a protracted spell of unemployment in most OECD countries, both absolutely and relative to adults.
- In most OECD countries, the share of employed youth who are working part-time or in temporary jobs grew during the past decade. The expansion in temporary employment was similar to that observed for adult workers, but youth part-time work increased disproportionately. When working full time, the share of youth earning less than two-thirds of median earnings tended to fall during the past decade, both absolutely and relative to adults. However, this improvement should be placed in the context of rising part-time employment for youth.
- Youth unemployment rates are more sensitive to business-cycle conditions than the adult unemployment rate and this high-sensitivity tends to decline progressively with age. The relative sensitivity of youth employment rates to the cycle is less clear cut, probably reflecting difference in the way labour market conditions affect the decision to stay in education or enter the labour market across OECD countries.
- There is much variation, both across youth groups and across countries, in the pace of convergence of youth employment rates towards those of prime working age people (proxied here by ages 30-49 years). Employment opportunities are much lower for early school leavers, who have not finished upper secondary education, than for their better educated counterparts, and it takes longer for the employment rates of early school leavers to converge towards those of prime-age workers. This suggests that the absence of qualifications represents a barrier to obtaining job offers, especially in combination with little or no work experience. However, an age effect also depresses initial employment rates for early school leavers, many of whom are teenagers living with their parents who may delay entering the labour market for several years. Male and female school leavers have very similar employment rates in the first year out of school, but the male employment rate subsequently climbs more steeply and steadily than does the female rate. Indeed, female employment rates first climb for several years and then dip in a considerable number of OECD countries, as many young women exit the labour force when they become mothers.
- The average length of the school-to-work transition is an intuitively appealing measure of how easily youth integrate into employment, but raises difficult measurement issues in practice, especially when making international comparisons:
 - ❖ The most commonly used estimates are based on activity status by single year of age and can be calculated using standard labour force statistics. Typically, the duration of the school-to-work transition is calculated as the difference between the median job entry and school leaving ages (*i.e.* between the age at which the employment-population ratio reaches 50% and the age at which 50% of the cohort have finished

their initial schooling). This measure ranges from under one year in Austria and Switzerland to five years or more in Denmark, Finland and Sweden.

- ❖ While cohort-based measures provide a useful indication of the length of time during which many youth are making the transition from studying to working, they do not provide a reliable estimate of the average duration of the school-to-work transition at the individual level (i.e. the average time lapse between leaving school and starting the first job).
- ❖ Ideally, longitudinal data should be used to calculate individual transitions. Despite some upward bias, due to the difficulty of detecting jobs of short duration in the panel data analysed here, these individual-based estimates of average duration tend to be substantially lower than the cohort-level estimates and also imply a very different country ranking. For example, the estimated average duration in Finland is now less than one year, much lower than the cohort-based estimate and well below the EU15 average value. Panel data are not available for many countries, but (somewhat less accurate) individual-level estimates of the average duration of the school-to-work transition can also be made using more widely available, cross sectional data.
- Finding the first job is an important stepping-stone toward obtaining a permanent job for many youth, but there are significant differences across groups and countries. For those with low education in selected EU countries and Korea, finding permanent jobs takes longer than for better-educated youth, while transition patterns are similar for all educational levels in Australia. Young Korean women have greater difficulty than young men in accessing permanent jobs, while young women have as good a chance as young men to find a permanent job within five years of finding their first job in Australia and selected EU countries.
- Temporary employment has become a major mode of entry to the labour market for youth in many European countries, as well as in Canada and Japan, while part-time employment is more common among young workers in the Netherlands, the Nordic and English-speaking countries. In most cases, low-paid and temporary jobs serve as stepping stones to better paying and more stable jobs for young job starters. However, a minority of youth become trapped in low-paid and/or temporary jobs.
- Youth neither in school nor in employment may find it difficult to move into stable employment. Following them over time suggests that they spend more than three of the five years after education in non-employment in ten of the 13 countries for which such individuals could be followed using longitudinal data. Of the young NEETs followed over five years, 20% of those moving into employment in the second year experienced one or more repeat non-employment spells in the remaining four years in eight of the 13 countries analysed. Another indication of the importance of repeat spells of non-employment is that 60% of the young school leavers, who experienced an early spell as a NEET, experienced two or more such spells during the following four years.

1. Employment outcomes by age

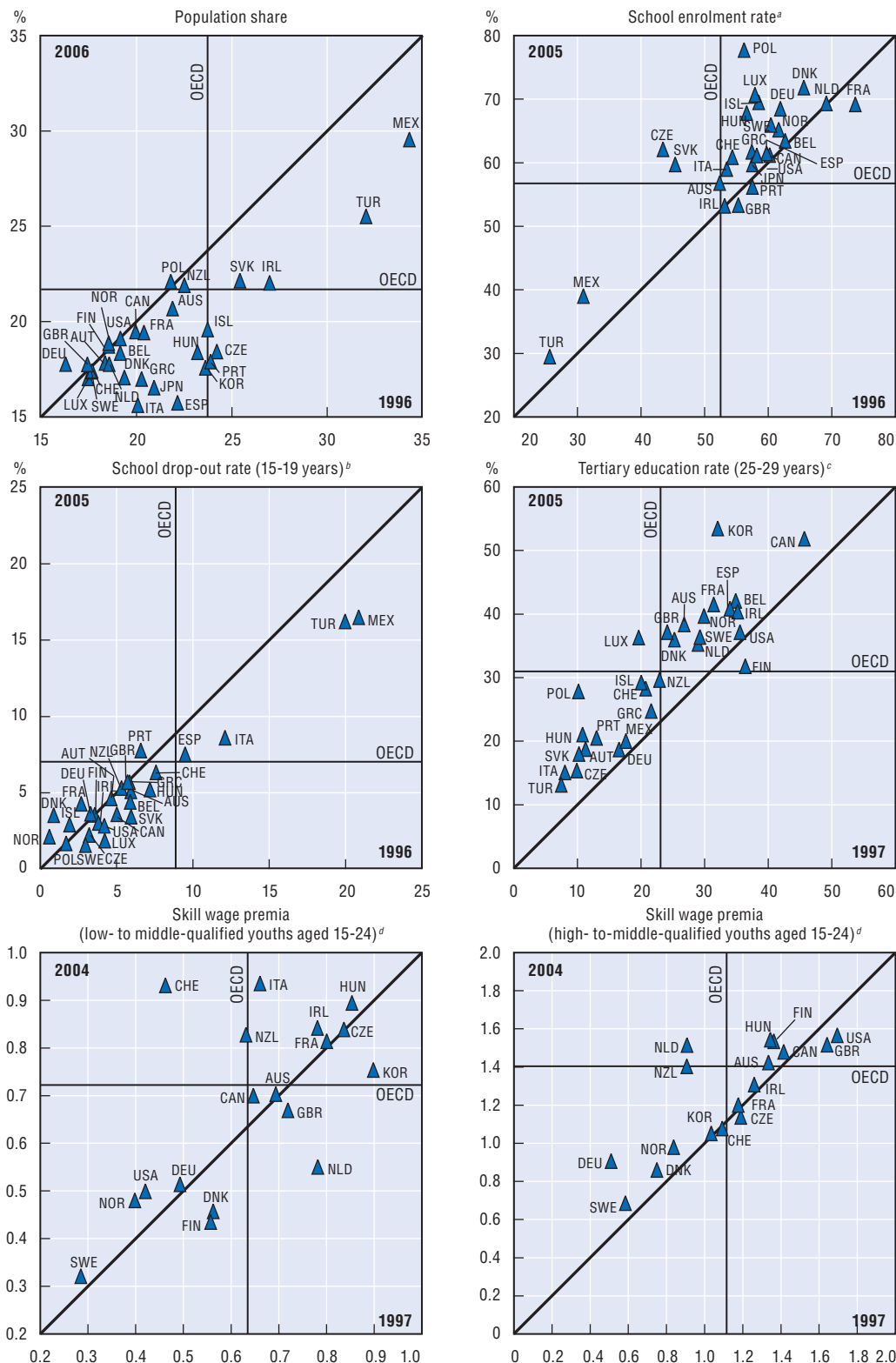
1.1. Changes in the situation of youth in the labour market during the past decade

Labour supply profile of youth

Figure 1.1, Panel A provides an overview of changes in the labour supply characteristics of youth during the past decade.³ In almost all OECD countries, the population share of the 15-24 years old group has fallen, often quite sharply. It is notable

Figure 1.1. **The situation of youth (15-24 years) in the labour market, 1996 and 2006**

Panel A. Indicators of youth labour supply




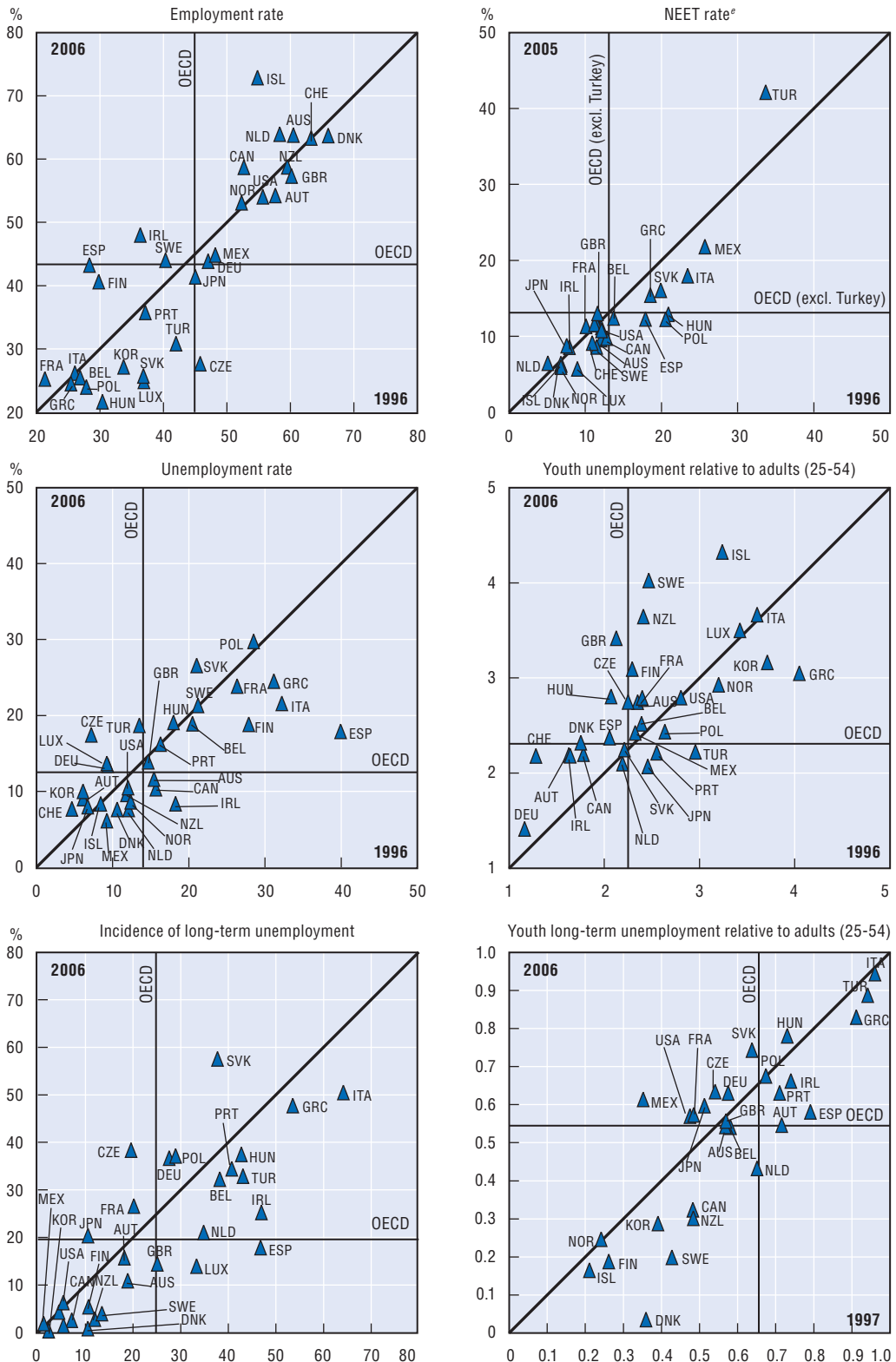
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Figure 1.1. **The situation of youth (15-24 years) in the labour market, 1996 and 2006 (cont.)**

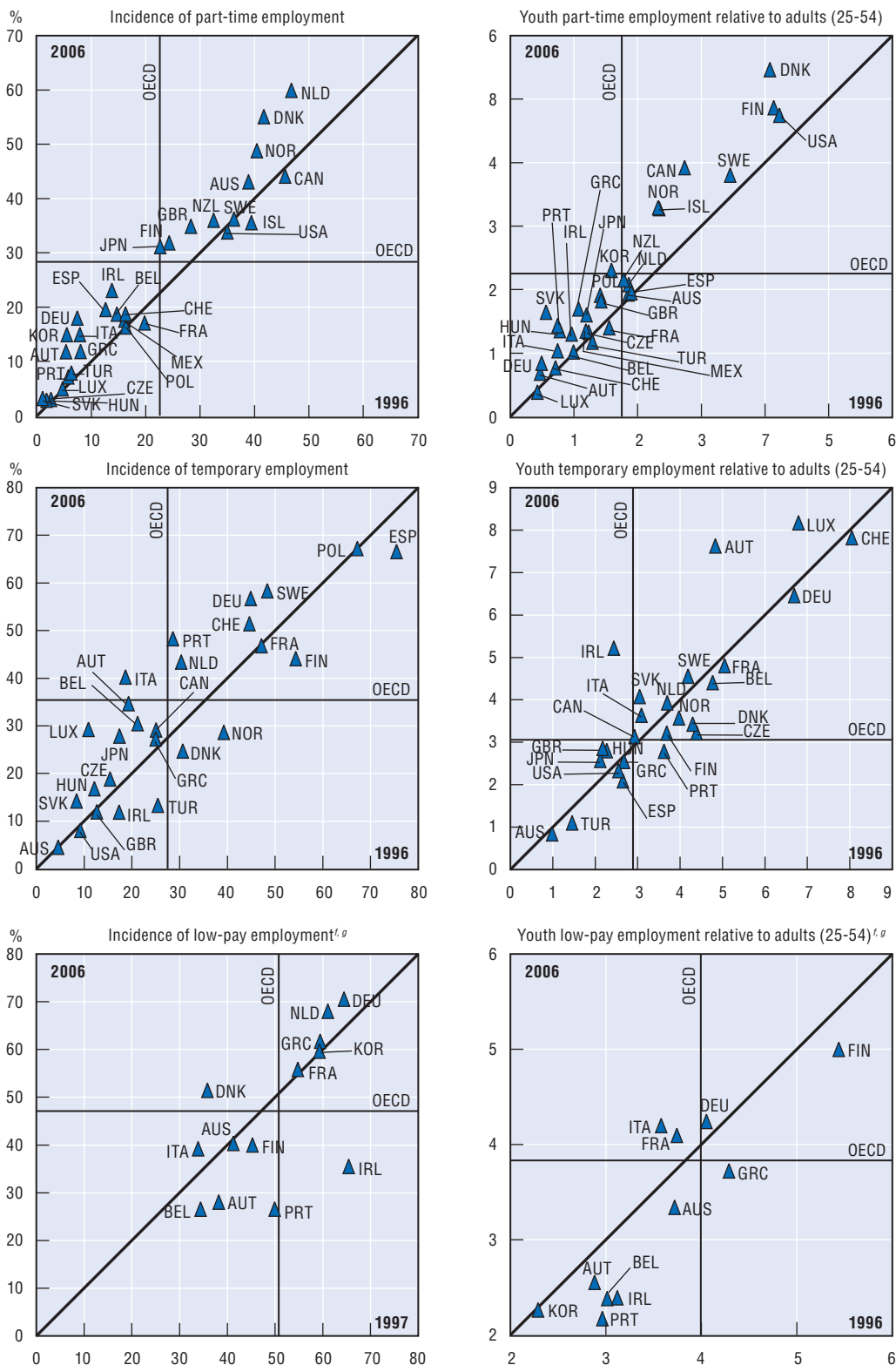
Panel B. Indicators of youth activity status



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Figure 1.1. The situation of youth (15-24 years) in the labour market, 1996 and 2006 (cont.)

Panel C. Indicators of youth job quality



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Figure 1.1. **The situation of youth (15-24 years) in the labour market, 1996 and 2006 (cont.)**

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- a) 1997 for Germany and the Netherlands; 1998 for Italy; 1999 for Ireland; 2000 for the United Kingdom; and 2004 for Mexico, instead of 1996.
- b) 1997 for Australia; 1998 for Italy; 1999 for Germany and Ireland; and 2004 for Mexico, instead of 1996.
- c) 1998-2005 for Denmark, Italy, the Netherlands and Portugal; and 1999-2005 for Luxembourg.
- d) Data on earnings by educational attainment refer to: 1996 in Finland and the Netherlands and 1998 in Italy and Korea, instead of 1997; and 2001 in Australia, 2002 in Ireland, Italy, Luxembourg and the Netherlands and 2003 in Belgium, Canada, Denmark, Finland, Norway and Sweden, instead of 2004.
- e) 1997 for the Netherlands; 1998 for Italy; 1999 for Germany and Ireland; and 2004 for Mexico, instead of 1996.
- f) Full-time workers only. Workers are considered to be in low-paid employment if they receive an hourly wage of less than two-thirds the median value of employees aged 25-54 in that country and year.
- g) 1995-2001 for Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal and Spain; 1996-2001 for Finland; 1998-2004 for Korea; and 2001-2005 for Australia.

Source: OECD Labour Force Statistics and OECD Education database. For low-pay employment (last two figures in Panel C), OECD estimates based on the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS), waves 3 to 7 (2000-2004) for Korea. For further details on country see Annex Tables 1.A1.1 and 1.A1.2.

that this decline also occurred in countries with relatively young age structures, such as Mexico and Turkey. If workers of different ages are imperfect substitutes in production, the relatively small size of the most recent cohorts of youth should be an advantage to them in the labour market.

Another potential advantage for youth entering the labour market today is that they are better educated than the cohort that preceded them. This is reflected in both increased enrolment rates for 15-24 year-olds and decreased drop-out rates for 15-19 year-olds, but also more strongly in the rising share of young adults with a tertiary education in most OECD countries (Figure 1.1, Panel A). The economic returns to schooling remained high, indeed, the wage premia for education increased between 1996 and 2006 in many OECD countries for which data are available. This is true whether the return to education is evaluated in terms of the payoff to completing upper secondary schooling or to completing a tertiary degree.

Employment and non-employment status of youth

Figure 1.1, Panel B shows that the youth employment rate fell in the majority of OECD countries during the past decade. This decline appears to reflect rising school enrolment rates rather than worsening labour market opportunities. Indeed, the youth unemployment rate fell in the majority of countries over the same period. The decline in youth unemployment was especially large in Spain, but also sizeable in Finland, Ireland and Italy.⁴ The more comprehensive NEET rate (i.e. the share of youth not in education, employment or training) also fell for this age group in most OECD countries during 1996-2006. One notable exception is Turkey, where the increased NEET rate for youth reflects a strong decrease in female participation rates at all ages.⁵

Although the reduction during the past decade in the overall unemployment rate for youth was modest on average in the OECD area, the incidence of long-term unemployment fell more sharply, both absolutely and relative to adults (aged 25-54 years). By contrast, the decline in overall youth unemployment tended to be similar to the decline registered for adults. On average for the OECD area, unemployed adults are now nearly twice as likely as unemployed youth to have been jobless for at least one year, even as the overall unemployment rate for youth continues to be more than double that for adults. Put

differently, the past decade has reinforced the historical pattern that unemployment is more common among young than prime-age workers, but also more transitory (Freeman and Wise, 1982; and Martin *et al.*, 1984).

Job quality for youth

During the past decade, the shares of employed youth who have part-time or temporary jobs grew in the majority of OECD countries (Figure 1.1, Panel C). On average in the OECD area, close to three out of ten young workers work part-time and more than one third have temporary jobs, increases of 6 and 8 percentage points, respectively, since 1996. The expansion in temporary employment was about equally strong for youth and adult workers, but many more youth than adults work part time. Part-time employment is particularly widespread among young workers in the Netherlands, the Nordic and English-speaking countries. By contrast, the part-time rate for youth is below 5% in the Czech Republic, Hungary, Luxembourg and the Slovak Republic. Temporary employment has become a major mode of entry to the labour market in many European countries and it now accounts for more than one quarter of youth employment in Canada and Japan.⁶ Two-thirds of all employed youth have temporary jobs in Poland and Spain (in the latter, dropping from even higher levels since the late 1990s), whereas few youth hold temporary jobs in Australia and the United States. There is however, much cross-country variation in the legal definition of temporary jobs (OECD, 2002b).

When working full-time, the share of youth earning less than two-thirds of median earnings tended to fall during the past decade in the smaller number of countries for which data on low-paid employment by age are available. The low-pay risk for young full-time workers also tended to fall relative to that for adults, but this improvement should be viewed in the context of rising part-time employment for youth.

1.2. Sensitivity of youth unemployment and employment rates to the business cycle

Figure 1.2 compares the cyclical sensitivity of unemployment and employment rates for youth (grouped into three five-year age bands, starting at age 15) with those for prime-age adult workers (aged 30 to 49 years).⁷ The results in Panel A confirm that youth unemployment rates continue to be more sensitive to business-cycle conditions than the adult unemployment rate, as many previous studies have shown (OECD, 1996a). Furthermore, sensitivity of youth unemployment to the cycle tends to decline progressively with age, being greater for teenagers (15 to 19 years) than young adults (20 to 24 years) in most countries.

The evidence concerning the relative sensitivity of youth employment rates to the cycle in Panel B of Figure 1.2 is more mixed. This probably reflects cross-country heterogeneity in the many ways school enrolment decisions and other choices related to labour force participation are affected by labour market conditions.⁸

1.3. Activity status by single year of age

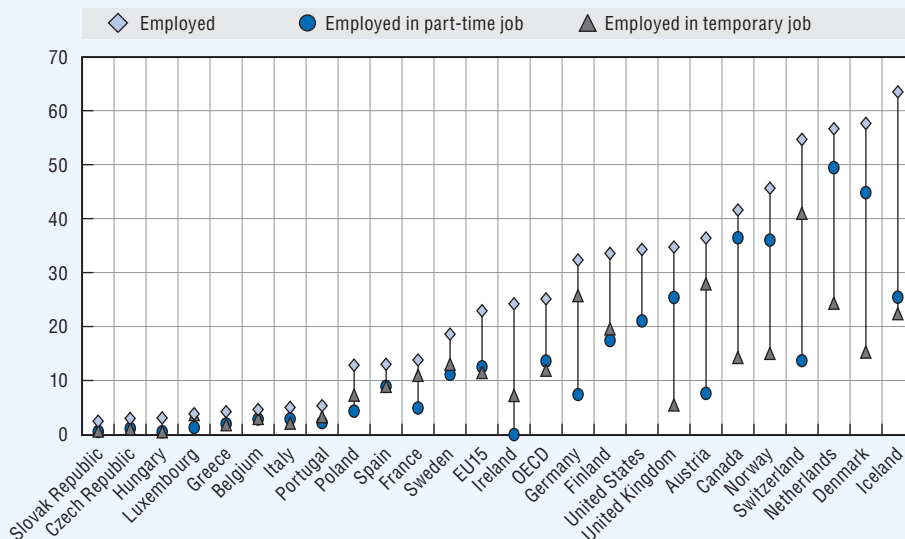
Figure 1.3 displays youth activity patterns by single year of age in 2006 in 20 European countries, Canada and the United States. In all countries, there is a cumulative shift away from schooling and toward employment as age rises from 15 to 29 years. However, there is also considerable cross-country heterogeneity in the distribution of school leaving ages – including how many youth opt to enrol in tertiary education and how long these studies tend to last – and whether the entry into work subsequent to school exit is more or less

Box 1.1. Student employment

This text box provides an overview of student employment patterns in OECD countries. As is shown in the figure below, student employment rates differ sharply across the 24 OECD countries for which data are available.^{*} More than half of students, aged 15 to 24 years, work in Denmark, Iceland, the Netherlands and Switzerland, and more than one third in Austria, Canada, Finland, Germany, Norway, the United Kingdom and the United States. By contrast, student employment rates are very low in some central and mediterranean European countries. When analysing the post-schooling experience of youth in the labour market, it is important to bear in mind that this group begins with almost no employment experience in some countries, but with considerable experience in others.

Employment rates for students, 2006

Percentage of youth aged 15-24 in education



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Countries ranked in ascending order by the share of youth (15-24 years) in education with jobs.

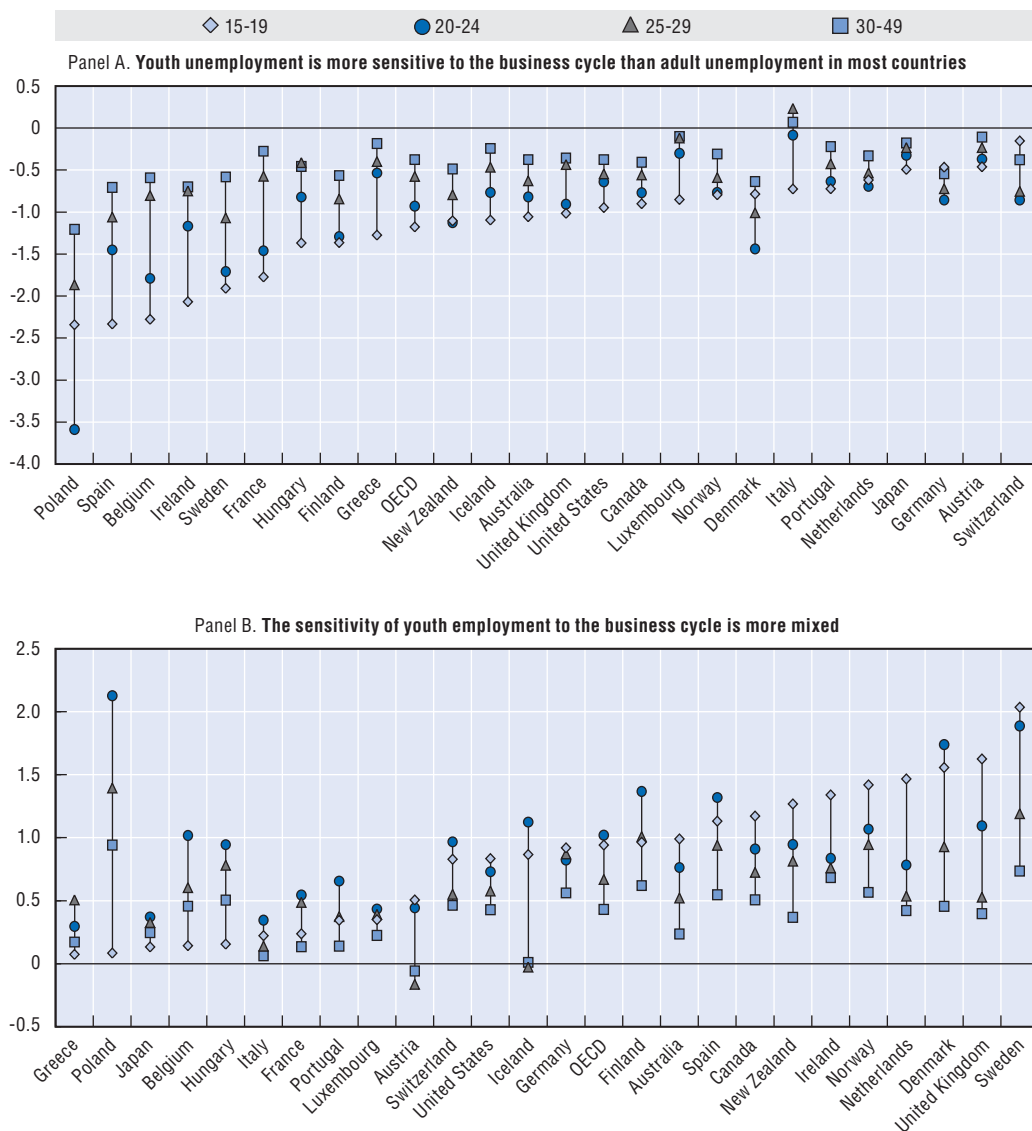
Source: OECD estimates based on the European Labour Force Survey (EULFS) and national labour force surveys for Canada and the United States.

When employed, students frequently hold part-time or temporary jobs. Focussing on countries where at least one-third of students work, it is clear that there is a close association between high incidences of these two types of jobs and students' motivations for working. In countries with a dual education system, such as Austria, Germany and Switzerland, student jobs are typically apprenticeships that are incorporated into the vocational track of upper secondary schooling. In these countries, most student jobs are thus temporary but full-time. By contrast, student jobs in other countries are primarily part-time jobs outside of school hours, which serve as a source of extra income, rather than being linked to a curriculum of study. This pattern is common in the Netherlands and Nordic and English-speaking countries.

Prior research suggests that student employment may be either a labour market advantage (e.g. by leading to an easier transition from school to work or more rapid career progression) or a handicap (e.g. by interfering with learning and school advancement). This important question lies outside of the scope of the chapter.

* This is also true for student unemployment rates. In 2006, student unemployment rates were particularly high in Finland (15%) and Sweden (8%) and also above 4% in Denmark, Iceland, the Netherlands, Poland, Spain and the United Kingdom. However, unemployment data for students are potentially misleading due to the difficulty of ascertaining their availability to start work immediately and the fact that many full-time students are probably seeking low hours jobs (OECD, 2002a).

Figure 1.2. **Sensitivity of youth labour market performance to the business cycle,^a 1980-2006**



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Ranking of countries based on the sensitivity of teenagers' employment and unemployment rates.

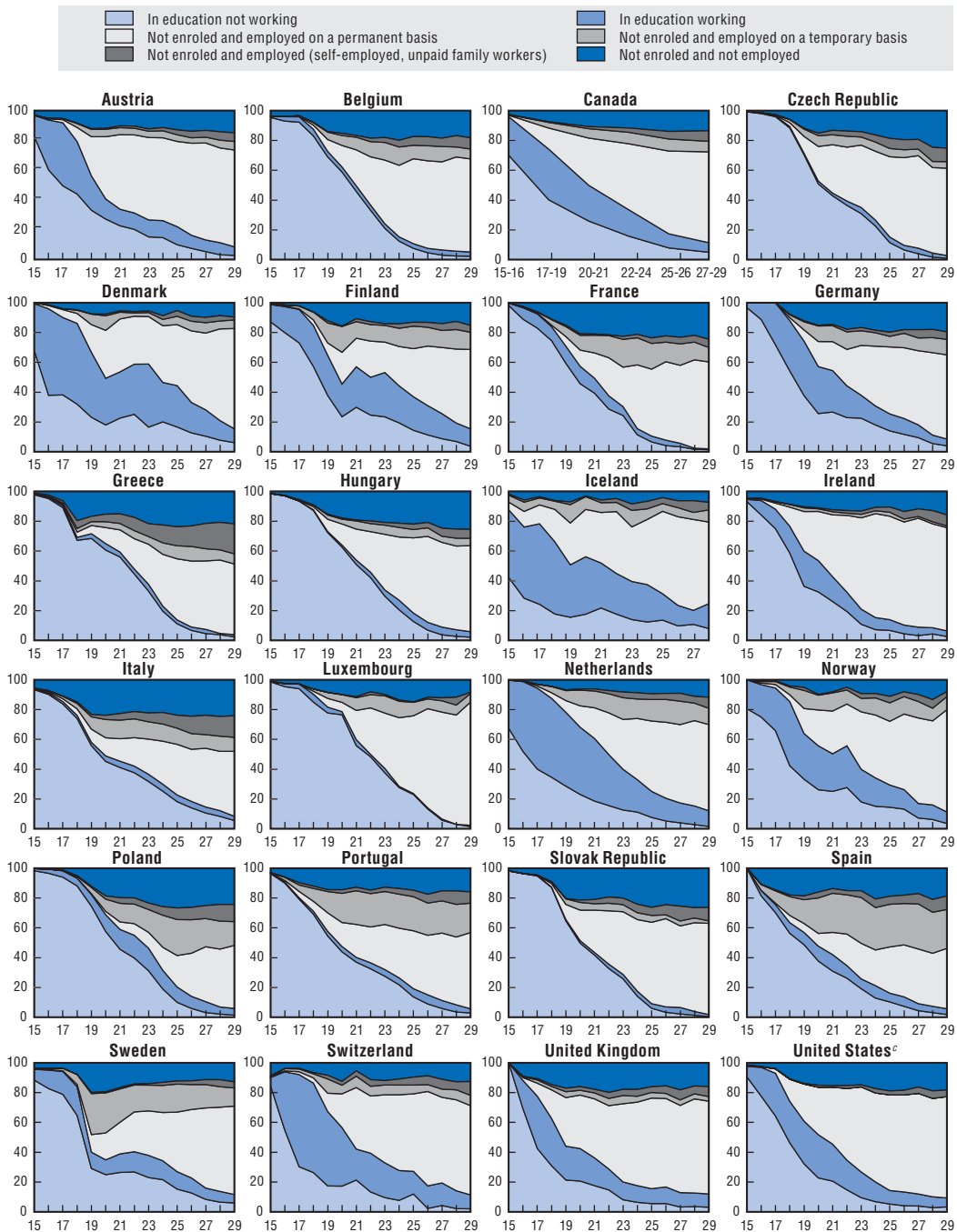
a) Each of the indicated variables was regressed on the output gap and linear and quadratic time trends in separate annual time-series regressions for each country. The OECD values are from a pooled regression model containing country dummies. The data charted are the OLS coefficients for the output gap.

Source: OECD Labour Force Statistics Database and OECD Economic Outlook Database for the output gap.

immediate or delayed. For example, enrolment rates remain quite high in the late 20s in the Nordic countries, while relatively high shares of school leavers move into non-employment (becoming "NEETs") in Greece and central European countries.

These data confirm that a substantial share of students work in some countries (cf. Box 1.1) and also that a substantial share of the school leavers who find jobs move into temporary employment in some European countries. In a few countries, notably Greece

Figure 1.3. Activity status by single year of age^a in OECD countries, 2006^b
Percentage



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a) Age in two and three year groups for Canada.

b) 2005 for the United States.

c) Category “Not enrolled and employed on a permanent basis” corresponds to all youths not enrolled and employed as employees without distinction between permanent or temporary contract.

Source: OECD Secretariat calculations based on the European Labour Force Survey (EULFS) for the European countries; Canadian Labour Force Survey for Canada; and, the Current Population Survey October Supplement (School Enrollment Supplement) for the United States.

and Italy, a considerable share of young adults move into self-employment (or become unpaid workers in a family business). Perhaps not surprisingly, few school leavers appear to move directly into self-employment. There is also considerable cross-country heterogeneity in the share of school leavers moving into NEET status, as in whether the initial increase in the NEET rate persists (*e.g.* Belgium, France, Greece, Italy and the central European countries) or partially reverses as initially non-employed school leavers gradually find jobs (*e.g.* Sweden).

2. The transition from school to work

2.1. Descriptive analysis of the school-to-work transition

Individual transitions from school to working life are complex. These transitions begin at different ages depending on how much initial schooling is acquired. Labour market entry may occur immediately after completing compulsory education or some time later, and it may proceed smoothly or only with considerable difficulty or delay. Moreover, completing initial education may not mark the definitive end of educational activities, as some young people may decide to pursue further education some years later, after gaining work experience, whether combining this additional education with work activities or not. Finally, the early years of work experience are often associated with significant changes in the types of jobs held and the wages received, as new entrants settle into the labour market: gaining new skills and discovering which jobs and employers best correspond to their interests and competencies.

In many respects, time since leaving school measured at the individual level (*i.e.* potential labour market experience) provides a more natural way to assess the school-to-work transition than do measures of activity status at different ages (*cf.* Figure 1.3, above). Accordingly, the rest of this chapter analyses a variety of labour market outcomes according to the time which has elapsed since leaving initial education.⁹ Doing so helps to focus attention on the nature of individual transitions between schooling and working life, but also raises difficult measurement and data availability issues:

- The ideal way to analyse such transitions is by using longitudinal survey data which make it possible to follow the same youth over time. This sub-section presents results based on longitudinal household surveys for a group of OECD countries: Ten European countries, Australia, Korea and the United States.¹⁰
- In practice, most longitudinal surveys have not been designed specifically to analyse the school-to-work transition and are often subject to important limitations when used for this purpose. For example, it is often the case that only a small number of new school leavers are available in the sample, implying high sampling variance.¹¹ Another difficulty is that many panel data sets do a relatively poor job of detecting brief job spells occurring between the annual survey interviews and such jobs can be an important component of the early stages of working life. A final limitation for the purpose of making international comparisons is that it is more difficult to assemble comparable panel data for multiple countries than to assemble comparable cross-sectional data, such as that from (partially) harmonised national labour force surveys.
- Labour force surveys (LFS) sometimes contain sufficient retrospective information to analyse employment outcomes according to time since leaving school.¹² For example, retrospective questions about the “highest completed level of education” and when it was obtained can be used to estimate potential labour market experience. Accordingly,

this sub-section also makes use of these LFS data to analyse labour market outcomes according to time since leaving school. It must be emphasized, however, that a number of approximations are required to piece together transitional histories from the typically very limited retrospective information that is available from this data source.¹³ Although typically not as severe as in the case of longitudinal data, the available samples of recent school leavers are often relatively small.¹⁴ Finally, it should be noted that LFS data organised by potential labour market experience do not refer to a single age cohort, followed through time, but rather to experience cohorts at a point in time, which contain a mix of persons of different ages.

- To the extent feasible, both the longitudinal and cross-sectional analysis of the school-to-work transition of youth aged 15 to 29 years are subdivided by gender and by broad educational attainment categories.¹⁵

Youth employment rates by time since leaving school

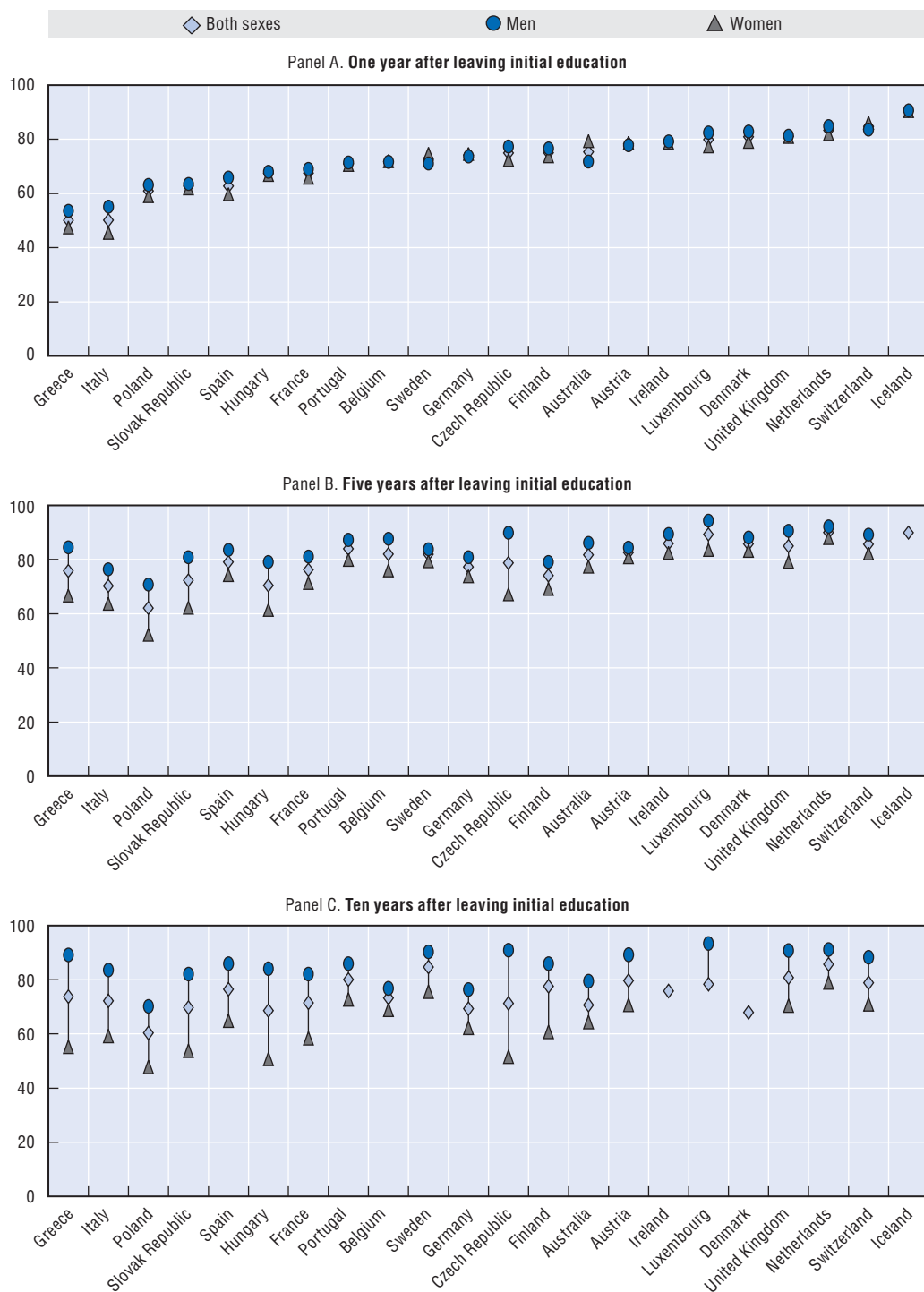
In general, young job starters may face difficult access to employment: they account for a large share of new entrants in the labour market and thus have to compete among themselves and with others who typically have already acquired some work experience (Martin *et al.*, 1984; Ryan, 2001a). It is therefore normal that many youth take some time to find their way into the labour market after leaving school, as they learn more about labour market opportunities, their work interests and motivations and potential employers become better able to gauge their productive potential.


One year after completing initial education, a significant share of youth are unemployed or inactive, rather than working, in Australia and 21 European countries for which data are available (Figure 1.4). Nonetheless, employment rates exceed 75% in nearly half of the countries covered (Australia, Austria, Denmark, Iceland, Ireland, Luxembourg, the Netherlands, Switzerland and the United Kingdom).¹⁶ Five years after leaving school, employment rates are markedly higher, particularly in the countries where employment was low in the first year. Employment rates are still below 70% only in Poland, while they exceed 85% in the seven best performing countries (Denmark, Iceland, Ireland, Luxembourg, the Netherlands, Switzerland and the United Kingdom).¹⁷ After five years, the overall youth employment performance nearly matches that of prime-age adult workers.

It is noticeable that employment performances of men and women are similar one year after school completion, but a gender employment gap emerges after that, as marriage and motherhood begin to depress relative participation rates for young women.¹⁸ However, there are large cross-country differences in the size of the gender employment gap and how rapidly it develops as time out of school increases.¹⁹

Youth with low qualifications have significantly lower employment rates one year after finishing initial education than do better qualified school leavers (Figure 1.5). In one-half of the 18 countries for which data are available, less than 50% of all youth leaving school without finishing upper secondary education were employed 12 months later, whereas this is never the case for school leavers with a tertiary degree. Better educated youth experienced a quicker transition to employment in all countries, but the importance of this advantage differs significantly across the countries analysed. Relatively strong educational effects on the speed of the school to work transition are found among the countries with the lowest overall employment rates for youth one year out of school (*e.g.* Poland), but also among countries with intermediate employment rates one year out

Figure 1.4. **Employment rates by gender of youth and young adults one, five and ten years after leaving initial education,^a 2004-2006^b**



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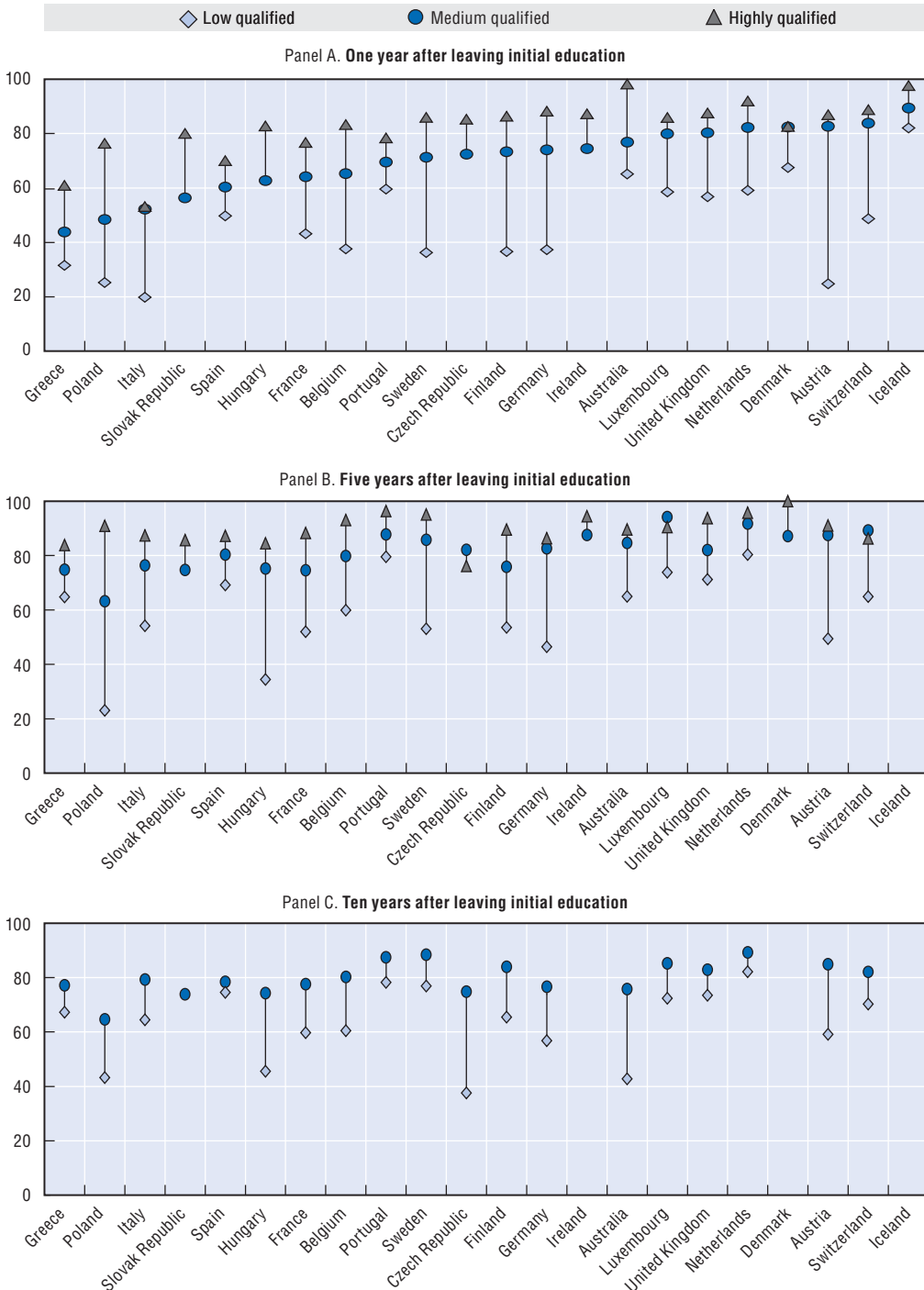
Ranking of countries based on ascending order of employment rates one year after leaving initial education.

a) Sample restricted to recent school leavers aged 15 to 29. Values not shown when insufficient observations are available.

b) Employment rates calculated on the basis of pooled data for the years 2004 to 2006.

Source: OECD Secretariat calculations based on the European Labour Force Survey (EULFS) for the European countries and the Household Income and Labour Dynamics (HILDA) for Australia.

Figure 1.5. **Employment rates by qualification of youth and young adults one, five and ten years after leaving initial education,^a 2004-2006^b**



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Ranking of countries based on ascending order of employment rates of medium qualified young workers one year after leaving initial education.

a) Sample restricted to recent school leavers aged 15 to 29. Values not shown when insufficient observations are available.

b) Employment rates calculated on the basis of pooled data for the years 2004 to 2006.

Source: OECD Secretariat calculations based on the European Labour Force Survey (EULFS) for the European countries and the Household Income and Labour Dynamics (HILDA) for Australia.

of school (e.g. Sweden, Finland and Germany). Most countries with a high overall employment rate for recent school leavers achieve relatively high employment rates for youth of all levels of qualifications.²⁰

Employment gaps by qualification level are somewhat lower five years after leaving school, but still large in many countries, especially in Austria, Germany, Hungary, Poland and Sweden.²¹ There is also considerable cross-country variation concerning whether the qualification gaps closed more rapidly between low and medium-skill youth (i.e. the employment advantage from completing upper secondary schooling) or between medium and high-skill youth (i.e. the employment advantage from completing tertiary education). The former gap closes further by ten years after leaving school, but a substantial gap remains for a majority of these 22 countries, suggesting that it could persist throughout the working lives of these cohorts.²² This is consistent with the historic pattern that labour force participation is higher for more educated persons.

These patterns confirm that low educational attainment represents an enduring barrier to employment, while showing it also appears to impede initial insertion into the labour market. However, an age effect probably also depresses initial employment rates for low-skill youth and is not controlled for in Figure 1.5: many early school leavers are still teenagers living with their parents and may delay entering the labour market for several years. A similar, but weaker effect is present for medium-skill youth. Box 1.2 uses simple multivariate methods to examine how time since leaving school and other factors influence employment status.

Box 1.2. A multivariate perspective on the factors influencing employment, unemployment and inactivity for out-of-school youth

The table below provides odds-ratio estimates from binomial logit models of the probability for young school leavers of being employed, unemployed, inactive or non-employed. These logit-models, albeit limited to European countries, help summarise and strengthen the findings in the descriptive overview of school-to-work transitions in the main body of the chapter, while also testing their robustness in a multivariate context.

In the logit models, current labour force status is assumed to be influenced by prior labour force status, time elapsed since leaving school (potential labour market experience) and educational attainment. The sample excludes youth in initial education and apprenticeship. The results refer to 2006 and are reported separately by gender, as men and women do not share the same patterns of work transitions with the passage of time (cf. Figures 1.4 and 1.6). The estimated odds-ratios were obtained from a pooled regression with fixed-country effects across 21 European countries for which data are available from the European Labour Force Survey. Values above (below) 1.0 indicate that the associated regressor increases (reduces) the probability of having the indicated work status, relative to the reference person.

Both for men and women, having been employed one year earlier, rather than having been inactive, increases markedly the probability of being currently employed. Unemployed women have a greater chance of getting into work one year later than inactive women, but no such difference emerges for men. Employment prospects for male school leavers increase with the passage of time, in the sense that transitions from inactivity to employment become more common. However, the opposite is true for young women, for whom inactivity becomes progressively more persistent. As reported in the main text, qualifications matter. The probability of moving from inactivity to employment rises steadily with the level of educational attainment for both men and women.

Box 1.2. A multivariate perspective on the factors influencing employment, unemployment and inactivity for out-of-school youth (cont.)

Factors influencing the work status of youth after leaving initial education in Europe, 2006

Odds-ratios from binomial logit regressions of the probability of being in a given work status by gender^{a, b}

	Relative probability of being: ^c							
	Employed		Unemployed		Inactive		Non-employed	
	Men	Women	Men	Women	Men	Women	Men	Women
Intercept	0.5**	0.5***	0.3***	0.2***	0.9	0.9	1.9**	2.2***
Reference person: inactive one year ago								
Employed one year ago	14.3***	20.0***	0.2***	0.4***	0.0***	0.0***	0.1***	0.0***
Unemployed one year ago	0.9	1.5***	3.0***	4.1***	0.3***	0.2***	1.2	0.7***
Reference person: one to three years since leaving initial education								
Four to five years	1.2	0.8**	0.8**	0.7***	1.1	1.8***	0.9	1.2**
Six to eight years	1.3***	0.8***	0.7***	0.6***	1.1	2.2***	0.8***	1.3***
Nine years or more	1.3***	0.7***	0.7***	0.5***	1.1	2.4***	0.7***	1.4***
Reference person: low qualified								
Medium qualified	2.0***	2.0***	0.6***	0.8***	0.6***	0.6***	0.5***	0.5***
Highly qualified	3.5***	4.1***	0.4***	0.5***	0.3***	0.3***	0.3***	0.2***
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Likelihood ratio ^d	2 433***	3 294***	1 217***	884***	1 261***	2 643***	2 433***	3 295***
Number of observations	5 594	6 234	5 594	6 234	5 594	6 234	5 594	6 234

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*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively (two-tailed test).

- a) The binomial logit models were estimated using maximum likelihood for a pooled sample of 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom.
- b) The sample includes out-of-school youth aged 15 to 29 years.
- c) For better readability, odds-ratios are reported taking the exponential of individual regression coefficients. A coefficient above one implies a higher probability than for the reference person to have the indicated work status. Thus, for example, the probability for an employed man of remaining employed one year later is more than 14 times higher than the probability for an inactive man of becoming employed. Conversely, a coefficient below one implies a lower probability than for the reference person to have the indicated work status. The reference person is a young job starter, having left initial education one to three years ago, who was inactive one year ago, and is low qualified.
- d) Indicators of statistical significance of the full model referring to the Chi-square test for the joint significance of all the predictors.

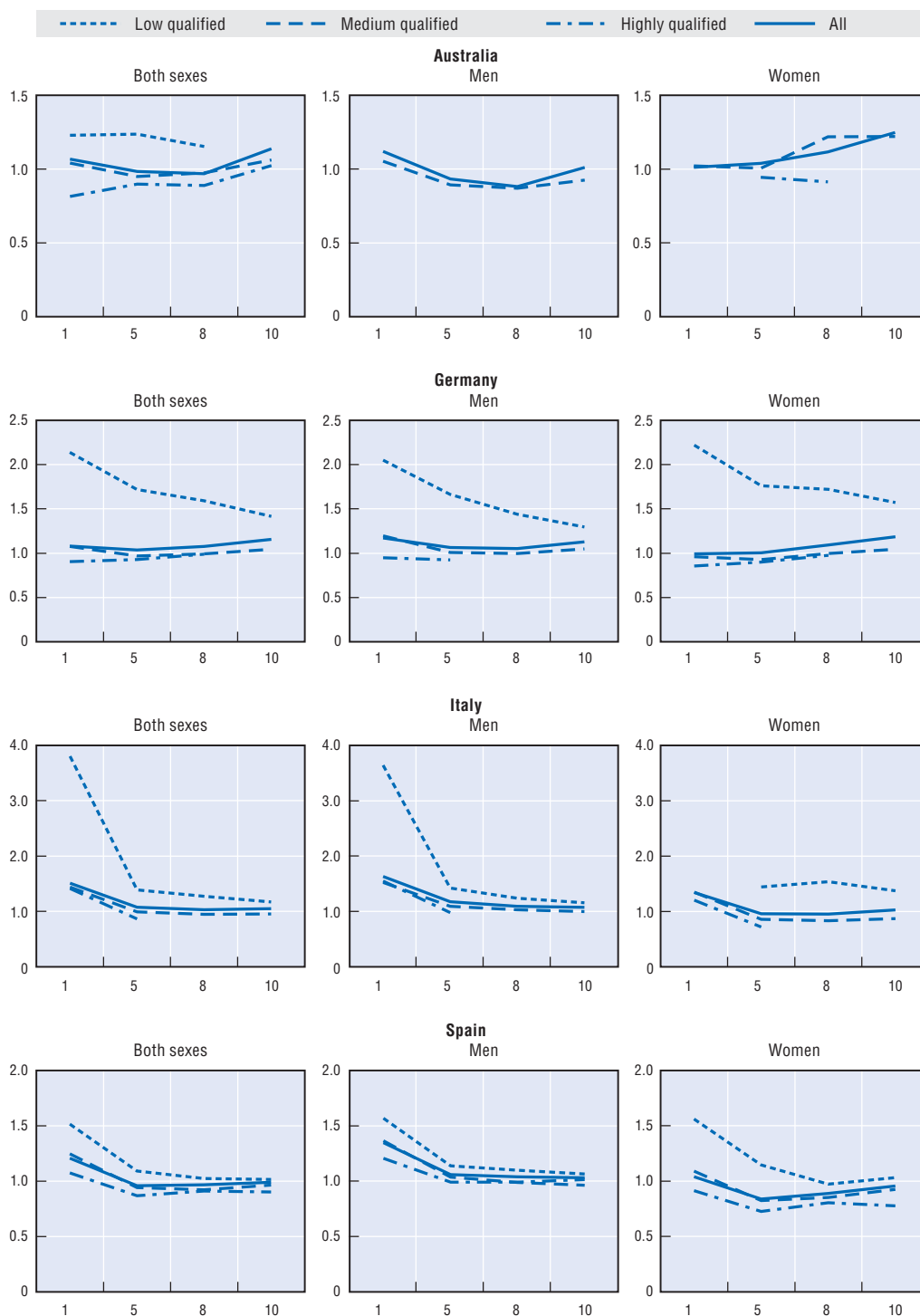
Source: OECD estimates based on the European Labour Force Survey (EULFS).


Convergence of youth to adult employment rates after leaving school

Figure 1.6 provides further insights into the speed of the convergence of youth employment rates to those of prime-age adults (aged 30 to 49 years), as potential experience increases. The 2004-2006 data shown in the figure trace out the time-path of the ratio of adult to youth employment rates, calculated one, five, eight and ten years after leaving initial education. Adult employment rates are substantially higher than those of the most recent school leavers (those who left school during the previous year), but this ratio declines toward 1.0 as youth employment rates approach those of adults. However, the speed of convergence – and whether it is fully achieved after ten years – varies considerably across the four countries included in Figure 1.6, as well as between men and

Figure 1.6. **Speed of transition to work of youth by educational attainment and gender: four country examples^a**

2004-2006^b ratios of adult (30-49 years) to youth (15-29 years) employment rates, one, five, eight and ten years after leaving initial education



StatLink  <http://dx.doi.org/10.1787/346522464541>

a) See Figure 1.A.1.1 for additional countries. Values not shown when insufficient observations are available.

b) Ratios calculated on the basis of pooled data for the years 2004 to 2006.

Source: OECD calculations based on the European Labour Force Survey (EULFS) for the European countries and the Household Income and Labour Dynamics (HILDA) for Australia.

women and the three levels of educational attainment. Annex Figure 1.A1.1 extends this analysis to all 18 countries for which data are available, documenting even greater heterogeneity in the speed of transition.

The 2004-2006 cross-section data suggest that most school leavers have integrated into the labour market within five years after leaving school, although the transition is slower in certain countries and for some sub-groups of youth. As has often been noted, young labour market entrants achieve a relatively smooth school-to-work transition in countries where the school-to-work transition is shaped by a dual educational system combining work and study for non-university bound youth, allowing them to gain work experience in apprenticeship while finishing their upper secondary schooling (*e.g.* Austria, Germany and Switzerland). In such systems, it is important that a significant share of employers demonstrate a strong commitment to taking on apprentices and retaining some of them as employees after they have completed their apprenticeships.²³ The school-to-work transition is also relatively quick and smooth in other countries with very different institutional settings. For example, employment rates of young labour market entrants converge to those of adult workers within five years of finishing initial schooling in the Netherlands, Portugal, Spain and the United Kingdom. Youth employment rates remain more than 10% lower than adult employment rates for recent labour market entrants in two out of 18 countries for which the data are reported.

In most OECD countries, recent cohorts of female school leavers have reduced the gaps with their male counterparts in terms of educational attainment and labour force participation. Nonetheless, important gender differences emerge in the speed of transition to work. Whereas convergence for men tends to be steady, this is not the case for women in some countries: employment rates of young women, in particular those with low educational attainment, diverge from those of adult women near the end of the ten-year time window for potential labour market experience analysed. This might be due to the fact that, by that time, a number of women withdraw from the labour market for family reasons (*i.e.* for child bearing and rearing). This divergence in employment rates occurs in the early years of labour market entry for young female school leavers in Australia.

Figure 1.6 and Annex Figure 1.A1.1 reveal that low-qualified youth are experiencing the greatest difficulties achieving convergence to adult employment rates. Their relative employment ratios remain above one after ten years from school completion, even in countries where overall youth employment rates converged to adult rates within five years (*e.g.* Austria, France, Germany and the United Kingdom). When they do converge, it takes longer on average for low-skilled youth, than for their better educated counterparts. However, the size of the low-qualified group ranges from as low as 3% in Switzerland and several central European countries to nearly 30% in Portugal and Spain.

The slow convergence of youth to employment rates for the least educated school leavers suggests that recent cohorts of dropouts may never attain the employment rate of earlier cohorts in some countries, perhaps due to the impact of rising job skill requirements in restricting employment opportunities for workers lacking a good basic education. Thus the importance of policies to further reduce drop-out rates (*cf.* Figure 1.1, Panel A). The pattern of relative youth employment rates by years of potential experience was quite stable between 2000 and 2006 in most of a sample of 18 European countries (data

not shown). However, this is probably too short a period to capture the cross-cohort effects affecting low-skilled workers.

2.2. The average duration of the school-to-work transition

The average length of the school-to-work transition is an intuitively appealing measure of how easily youth integrate into employment, but raises difficult measurement issues in practice, especially when making international comparisons. The most commonly-used estimates are based on main activity status by single year of age and can be calculated using cross-sectional data from labour force surveys (cf. Figure 1.3 above). Typically, the duration of the school-to-work transition is calculated as the difference between the median job entry and school-leaving ages (which is proxied as the gap between the age at which the employment-population ratio reaches 50% and the age at which 50% of the cohort have finished their initial schooling, see OECD 2007a), but other thresholds can be used to define the ages of job entry and school leaving (OECD, 1996b). While this type of cohort-based measure provides a useful indication of the length of time (i.e. range of ages) during which many youth are making the transition from studying to working, it does not provide a reliable estimate of the average duration of the school-to-work transition at the individual level (i.e. the average length of time between when a youth finishes initial schooling and when he/she starts their first job). For example, cohort-based estimates of average durations are strongly affected by the distribution of school leaving ages, while individual-based estimates need not be.²⁴ This sub-section compares the two types of measures for a substantial number of OECD countries.


Ideally, longitudinal data should be used to calculate individual durations, although it sometimes is possible to estimate individual-level estimates of the duration of the school-to-work transition using more widely available, cross-sectional data which contain retrospective information on schooling. This sub-section compares the results obtained using various combinations of either cohort or person-based duration measures calculated using either cross-sectional or longitudinal data.

Table 1.1 presents four alternative measures of the average duration of school-to-work transitions. The first two measures (denoted A and B for convenience) are cohort-level measures representing the difference between the age at which 50% of youth are employed and the age at which 50% have left school.²⁵ The third and fourth measures (denoted C and D) are individual-level measures that estimate the median duration between leaving school and starting the first (post-school) job for all recent school leavers. The first three measures were calculated using cross-sectional data from labour force surveys, while the fourth is calculated using longitudinal data for a smaller number of countries.²⁶ Measures A and D represent the purest implementations of cohort and individual-level measures, respectively, whereas Measures B and C are hybrids.²⁷

Measure A gives quite high values for the average duration of the school-to-work transition, ranging from under one year in Austria and Switzerland to five years or more in Denmark, Finland and Sweden. It must be emphasised, however, that this cohort-based duration measure captures other factors in addition to how long school leavers spend finding their first job. In particular, high durations can reflect the pattern of school enrolment by age, in particular, whether a substantial proportion of the 50% of youth still in school at the median school leaving age then stay in school for an extended period of time (e.g. follow a lengthy tertiary course), thereby retarding the age at which the employment rate reaches 50%.²⁸ Figure 1.7 confirms the link between school leaving

Table 1.1. **Alternative estimates of the average duration of the school-to-work transition, 2006^a**

	Estimates based on cross-sectional data			Estimates based on panel data
	Cohort-based estimates		Individual-based estimates	Individual-based estimates
	A	B	C	D
Australia	..	..	..	0.9
Austria	0.9	2.0	1.2	2.3
Belgium	1.4	2.9	1.7	1.4
Canada	1.8	..	..	..
Czech Republic	2.5	3.0	2.9	..
Denmark	5.0	2.8	1.3	1.8
Finland	5.2	4.3	2.6	0.9
France	2.3	2.8	1.5	..
Germany	2.4	1.5	0.1	0.4
Greece	1.9	4.4	3.2	3.1
Hungary	2.3	4.7	3.9	..
Iceland	1.3	4.0	2.4	..
Ireland	..	2.3	1.3	0.9
Italy	4.5	3.4	3.0	3.0
Korea	1.9	..	..	1.1
Luxembourg	1.0	2.6	1.1	..
Netherlands	0.8	2.0	1.0	..
New Zealand	3.6	..	..	..
Norway	2.0	..	..	..
Poland	2.1	3.4	2.0	..
Portugal	2.5	3.8	2.7	1.4
Slovak Republic	2.6	2.8	2.7	..
Spain	2.2	4.4	2.7	2.3
Sweden	5.2	2.8	2.0	..
Switzerland	0.5	2.0	0.7	..
United Kingdom	3.1	2.6	1.8	1.4
United States	1.7	0.9
EU15 (unweighted)	2.7	3.0	1.8	1.7

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.. Data not available.

A: Difference between the age at which 50% of youth are employed and the age at which 50% of youth are no longer enrolled in school, based on activity status by year of age.

B: Difference between the median age of young school leavers (15 to 29 years) who found a job and their median age when they left school, based on comparisons of retrospective information about school leavers and contemporaneous information about employment status and job tenure.

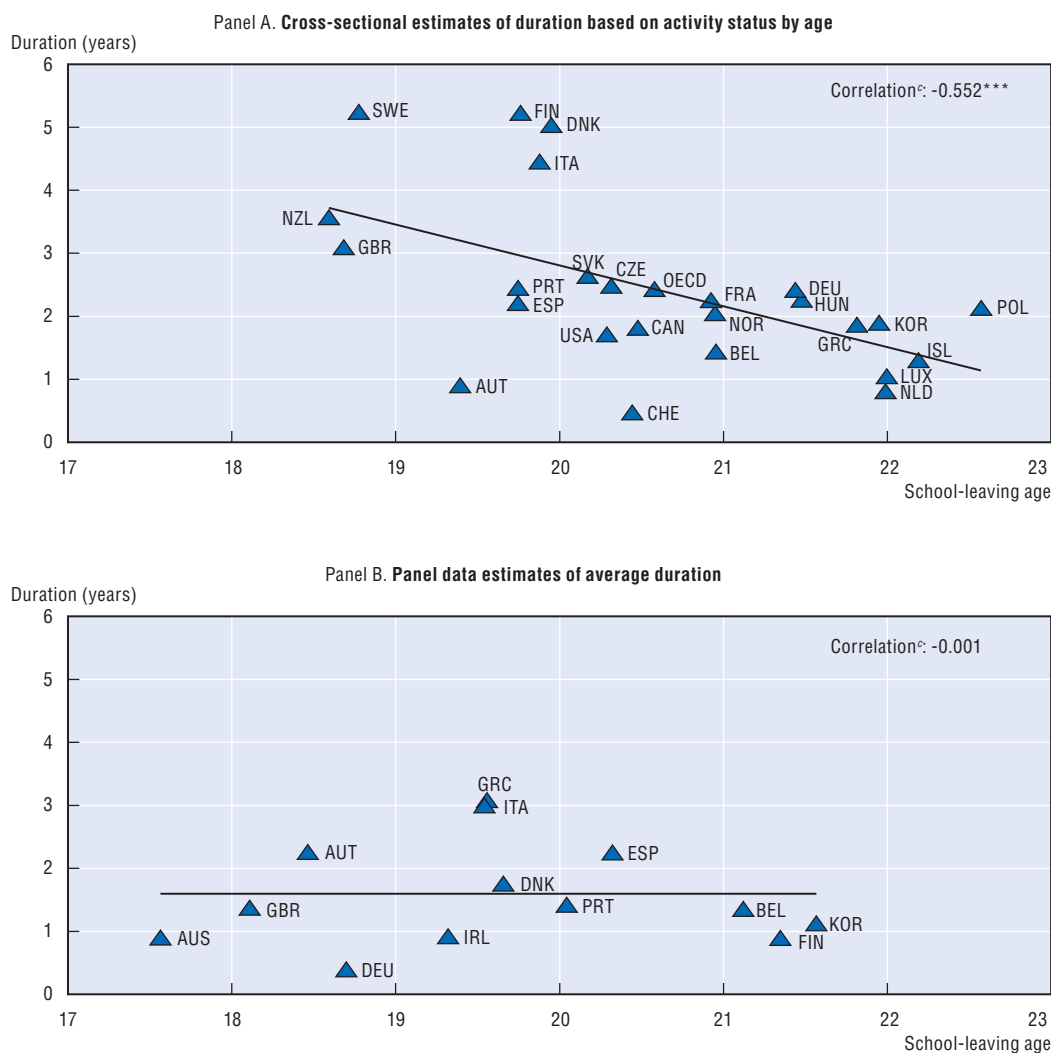
C: Median time between leaving school and starting work for young workers based on comparisons of retrospective information about when left school and contemporaneous information about employment status and job tenure.

D: Mean time between leaving school and starting work for young workers estimated from contemporaneous information on when left school and when first employed taken from different waves of the panel.

a) 2005 for the United States for the estimate A.

Source: OECD estimates based on national labour force surveys and the CPS School Enrollment October Supplement for the United States (Column A) and the European Labour Force Survey (EULFS) for the European countries (Columns A, B and C). Column D reports OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS), waves 3 to 7 (2000-2004), for Korea; except Yates (2005) for the United States.

Figure 1.7. **Average school-leaving age^a and two estimates of the duration of the school-to-work transition,^b 2006**



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*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively.

EU15: Unweighted average; OECD: Unweighted average.

- In Panel A, the school leaving age is defined as the age at which 50% of youth have finished their initial education. In Panel B, this corresponds to the median age when full-time education was completed.
- These average duration measures correspond to measures A and D, respectively, in Table 1.1. See the notes to that table for definitions of these measures.
- The correlation coefficients are -0.336 for Panel A and -0.197 for Panel B when the sample is restricted to the same countries.

Source: OECD calculations based on national labour force surveys for Panel A and various panel surveys for Panel B (see Table 1.1 for further details).

patterns and cohort-based estimates of the duration of the school-to-work transition: there is a strong negative association between the median age of school leaving and the Measure A duration (see Panel A), but no such association for Measure D (see Panel B). Since the individual-based estimates of average transition duration (i.e. Measures C and D) are designed to reflect only the job-finding time of school leavers, they tend to be substantially lower than the cohort-level estimates (i.e. Measures A or B). This difference

would probably be even larger if the individual-level measures were not biased upward, due to limitations in the available data analysed here, which mean that some short-lasting jobs are missed and hence the average time to find the first job can be overstated. The individual-level measures also imply a very different country ranking than the cohort-level measures. For example, the estimates of individual-level durations for Denmark, Finland and Sweden are considerably lower than estimates according to Measure A and are approximately equal to or slightly above the average for all of the countries analysed.

Pearson correlation coefficients between the four duration measures indicate increasingly strong and statistically significant associations between Measure D, the benchmark estimate for the time required by school leavers to find their first job, and Measures A to C. It is not surprising that Measure A is the least correlated with Measure D (a statistically insignificant and negative correlation of -0.12), differing as it does in terms of both concept and the type of data used. By contrast, Measure C has a moderately strong, positive correlation with benchmark Measure D (0.63). This suggests that individual duration measures based on retrospective questions in cross-sectional data sources, such as labour force surveys, can be reasonable proxies for measures based on longitudinal data.^{29, 30} Furthermore, the larger samples in labour force surveys mean that the Measure C estimates of the length of the school-to-work transition can be disaggregated by individual characteristics, such as gender and level of qualifications (see Annex Table 1.A1.3). At least in the European countries considered, young male workers take more time to find first jobs than young female workers and more qualified youth find employment more quickly than less qualified school leavers.

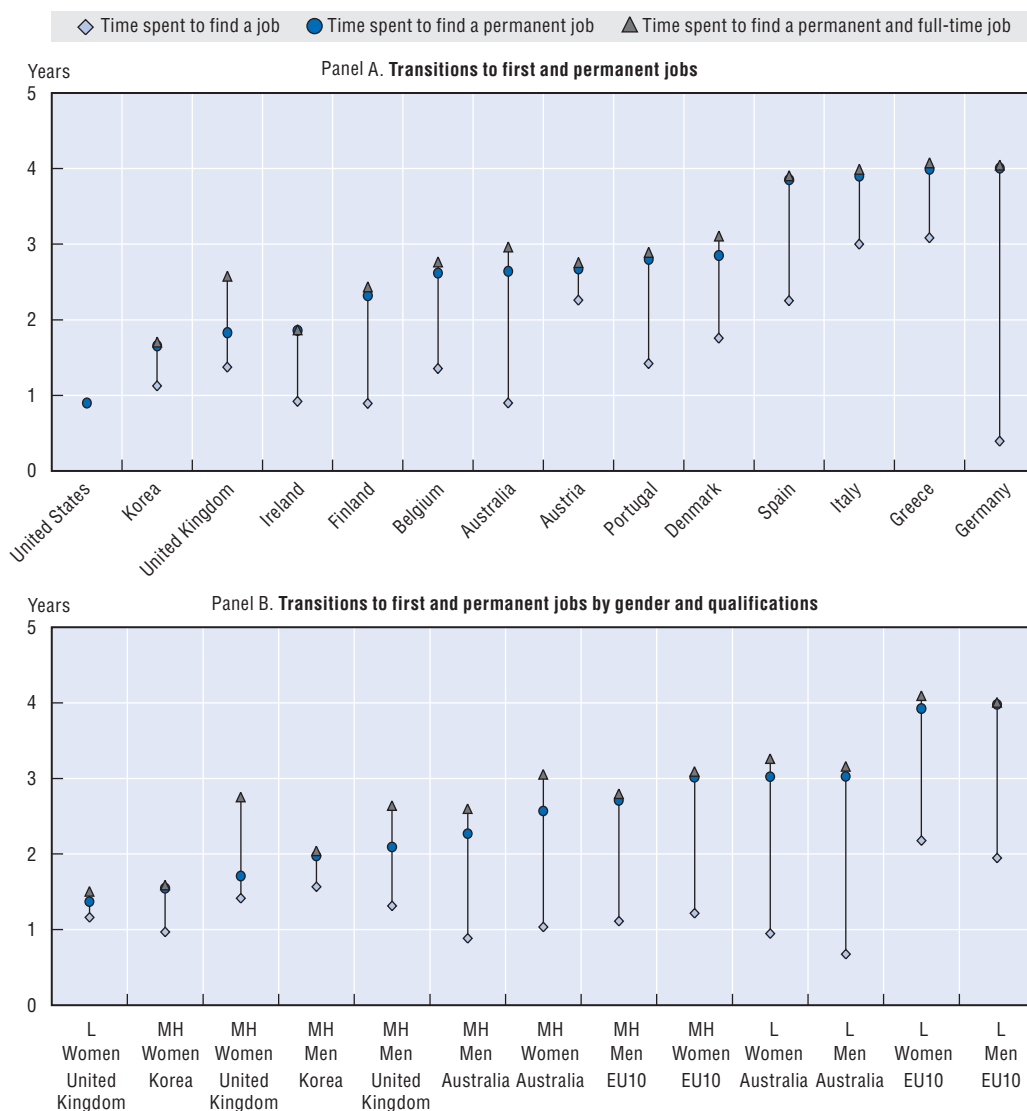
3. Job quality issues related to the school-to-work transition

3.1. How long does it take to find a stable job?

The techniques used above can also be used to estimate the time required to find *stable* jobs defined as jobs with a permanent contract. Panel A of Figure 1.8 juxtaposes the Measure D estimates from Table 1.1 of the average time to find the first job with estimates of the additional time to obtain a stable job and stable, full-time jobs (for some countries). The total time out of school which is typically required to obtain a stable job is lowest in the United States, Korea, the United Kingdom and Ireland, where it takes less than two years.³¹ By contrast, it requires approximately four years in Germany, Greece, Italy and Spain. Interestingly, Germany combines a short duration for finding a first job with very slow mobility into a permanent job. Indeed, there does not appear to be any strong association between how quickly a first job can be found and how quickly it is then possible to move into a stable job.

Japan experienced a marked increase in non-regular jobs during the economic recession of the 1990s, which has continued at a slower pace into the expansion that began in 2002 (OECD, 2008c). This trend has particularly affected youth. According to Labour Force Survey data, nearly half of young employees are now employed in non-regular jobs, including more than one third in part-time and temporary (“*arbeit*”) non-regular work contracts. Furthermore, it appears to be difficult for some Japanese youth in non-regular jobs to move into regular jobs, as is reflected in widespread concerns about so-called “*freeters*”, that is, youth stuck in temporary or part-time jobs. Box 1.3 discusses some of the evidence on these developments, including recent reforms intended to help school leavers integrate more smoothly into the labour market.

Figure 1.8. **Average duration of transitions to first and permanent^a jobs: panel data estimates^{b, c}**



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Ranking of countries based on ascending order of time spent to find permanent job. For the United States, the time spent to find permanent jobs refers to jobs lasting at least one year.

L: Low-qualified (ISCED 0/1/2); MH: Medium-High qualified (ISCED 3/4 and 5/6).

EU10: Population-weighted average of the following countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Italy, Portugal, and Spain.

- Permanent jobs correspond to persons employed in jobs lasting at least one year in the United States, while they correspond to specific types of employment contracts in the remaining countries. In Australia, the EU10 and the United Kingdom, permanent workers are persons employed on an on-going basis, as opposed to those employed on a fixed-term contract or in some other work arrangement (e.g. casual jobs), while in Korea permanent workers are those working in regular jobs.
- Sample restricted to the last five years of the survey and to persons aged 15-29 leaving initial education one year before this five-year period or during the first year. The analysis is conducted on an annual basis considering only the employment status at the time of interview. Since short employment spells between interviews are not considered, the estimated durations are potentially biased upward.
- Average time between leaving school and starting work for young workers estimated from contemporaneous information on when left school and when first employed from different waves of the panel.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea; and Yates (2005) only in Panel A for the United States.

Box 1.3. The school-to-work transition in Japan

The prolonged recession that characterised the 1990s in Japan led to a marked deterioration in aggregate labour market conditions which placed the traditional “orderly system of school-to-work transition” under severe strain. Under this system, schools and employers cooperated closely in placing new graduates directly into “life-time” jobs offering employment stability and continuous on-the-job vocational training. This form of recruitment declined during the 1990s recession, even as alternative pathways from school to working life expanded. These alternative pathways into employment often involved non-standard forms of employment and raise concerns that they may compromise the prospects of youths in these jobs eventually to move into stable jobs and climb career ladders.

Kosugi (2001) shows that Japanese companies have reduced direct recruitment of high school graduates and, to a lesser extent, university graduates into stable jobs offering structured pathways of career advancement since the economic recession of the 1990s. Consequently, the number of youth in casual, fixed-term and part-time work jobs – so-called, “freeters” – has increased markedly, as have NEET rates. Using Labour Force Survey data, the study estimates that 4.2 million youth aged 15 to 34 years were facing difficult transitions to work in 2002. Although changes in labour demand and recruitment practices appear to have been the primary driver of these changes in youth employment patterns, some observers believe that Japanese youth are less committed to developing their careers than were earlier cohorts of labour market entrants. Indeed, the term “freeters” also refers to purported changes in the attitude of youth towards work.

Genda and Kurosawa (2001) analyse the access of Japanese youth (aged 15-29 years) to full-time regular jobs after finishing their initial education and whether initial difficulties in obtaining standard employment compromise labour market prospects in the long run. Data from the 1997 Survey on Young Employees (*Jyaunenshya Shugyo Jittai Chosa*), including retrospective questions, are used to construct work histories for youth and young adults who left initial education and entered the labour market between 1982 and 1997. Experiencing unemployment immediately after leaving school is shown to have a long-lasting harmful effect on future employment prospects for Japanese youth. High aggregate unemployment rates at labour market entry reduce the probability of obtaining full-time regular jobs, the quality of job matches and job tenure. The impact of initial labour market conditions lasts even longer for female workers than for males. Highly educated female workers have no better chance of getting full-time regular jobs than do less-educated females.

Both Kosugi (2001) and Genda and Kurosawa (2001) provide somewhat dated evidence on the youth labour market in Japan, leaving open the possibility that the “orderly system” of recruitment of school leavers is reviving in response to improving economic conditions. Recent Labour Force Survey data indicate that the share of youth in temporary (“arbeit”) non-regular work has ceased to increase since the economic recovery began in 2002, fluctuating around 32%, but that other forms of non-standard employment have continued to rise. It also appears that older “freeters” are still encountering significant labour market difficulties. A 2004 employer survey, the Survey on Employment Management, suggests that the employment opportunities of “freeters” become more limited as they get older, because employers tend to stigmatise older “freeters” as having poor career potential. In this context, the Ministry of Health, Labour and Welfare has recently introduced a number of measures to promote an easier school-to-work transition. These include measures: i) to cultivate early awareness of the situation in the job market among youth, while they are still in school, including through “junior” internships; ii) to prevent youth from becoming “freeters” and facilitate the transition of older “freeters” (i.e. those aged 25 to 34 years) into regular jobs; iii) to provide additional support, including labour market counseling to youth in NEET status; and iv) to encourage enterprises to provide expanded job opportunities for youth. It will be important to monitor carefully the impacts of these measures – in combination with the improvement in overall labour market conditions – in addressing the problems that emerged in the Japanese youth labour market during the 1990s.

There is some tendency for the duration of transitions to stable jobs to be lower for more qualified workers, although this pattern does not apply to the United Kingdom (Figure 1.8, Panel B).³² No systematic pattern by gender emerges. Box 1.4 provides a multivariate perspective on factors influencing the access of youth to permanent and full-time jobs.

3.2. Mobility of youth in temporary and low paid-jobs

Non-standard forms of employment and low relative wages can help to increase labour market access for youth, especially those with lesser qualifications and little or no labour market experience. However, it is also important that these youth be able to build upon their early labour market experience to enhance their skills and career prospects. This section therefore analyses the extent to which out-of-school youth are able to move out of temporary, non-regular, and low-paid jobs, that is, the extent to which such jobs act as stepping stones to better jobs and career ladders.

*Flows into and out of temporary jobs*³³

In Australia, over 60% of recent school leavers who work initially find temporary jobs, whatever their level of education (Table 1.2). However, this share falls to just under 40% five

Box 1.4. A multivariate perspective on the type of job held by youth

The table below reports results from multivariate logit models – similar to the binary logit models discussed in Box 1.2 – analysing the determinants of job quality for employed youth, aged 15 to 29 years. Data for 2006 are used to estimate the probabilities for employed youth to be in permanent, temporary, full-time and part-time jobs. As in Box 1.2, separate models are estimated for men and women, but the estimation sample is different: excluding youth who are not employed, but including students who have a job or in apprenticeship and out-of-school youth in other forms of job-related training.

The estimation results for being in a temporary job are the most illuminating. The chances of being in a temporary job are lower for youth who were employed one year earlier, than for youth who were previously inactive. This pattern holds for both men and women. Temporary jobs are the main pathway from unemployment into work, whereas inactive youth more often move into permanent jobs. The likelihood of being a temporary worker diminishes with the time elapsed since completing the highest level of education and the level of qualifications. It is interesting to note that youth combining work and initial education (including those in apprenticeships) are very likely to hold temporary jobs. Symmetrically, the probability of finding a permanent job increases markedly with potential labour market experience and the level of qualifications. Similarly, the probability of finding permanent jobs improves markedly for those employed one year earlier.

The logit estimation results for finding a full-time job are comparable to those for finding a permanent job for men, but not for women. Being unemployed one year earlier increases the probability for women of getting a full-time job, compared with having been inactive, while, as mentioned above, these jobs are likely to be temporary in nature. However, the probability of finding a full-time job does not increase with the passage of time for women. Moreover, low and medium-qualified youth have greater probabilities of holding part-time jobs, than highly qualified youth. Those combining schooling and working are especially likely to work part-time (cf. Box 1.1).

Box 1.4. A multivariate perspective on the type of job held by youth (cont.)

Factors influencing the type of job held by employed youth in Europe, 2006

Odds-ratios from a binomial logit regression of the probability of being in a given job type by gender^{a, b}

	Relative probability of being in a: ^c							
	Full-time job		Part-time job		Permanent job		Temporary job	
	Men	Women	Men	Women	Men	Women	Men	Women
Intercept	13.2***	2.3**	0.1***	0.4**	1.1	1.2	0.6**	0.6**
Reference person: temporary job								
Permanent job	1.0	0.9	1.0	1.1*				
Reference person: part-time job								
Full-time job					0.9	0.9	1.5***	1.4***
Reference person: Inactive								
Employed one year ago	3.4***	2.4***	0.3***	0.4***	2.2***	2.4***	0.4***	0.4***
Unemployed one year ago	0.9	1.2	1.1	0.8	0.7***	0.6***	1.8***	2.0***
Reference person: one to three years since completing highest level of education								
Four to five years	1.1	1.1	0.9	1.0	1.6***	1.7***	0.6***	0.6***
Six to eight years	1.3**	0.9	0.8*	1.1	1.7***	2.0***	0.4***	0.4***
Nine years or more	1.4***	0.7***	0.7***	1.4***	1.9***	2.3***	0.3***	0.3***
Reference person: low qualified								
Medium qualified	0.7***	0.9	1.4***	1.1	1.6***	1.8***	0.5***	0.5***
Highly qualified	1.2	1.8***	0.9	0.6***	2.3***	2.0***	0.4***	0.4***
Reference person not in initial education or apprenticeship								
Initial education or apprenticeship	0.1***	0.4***	7.2***	2.8***	0.3***	0.4***	3.6***	2.7***
Reference person not in initial education or apprenticeship nor in job-related training								
Job-related training after initial education or apprenticeship	0.9	1.1	1.0	0.9	0.9	0.9	1.1	1.1
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Likelihood ratio ^d	1 604***	1 175***	1 480***	1 102***	1 595***	1 480***	1 946***	1 488***
Number of observations	5 860	6 369	7 018	7 464	5 860	6 369	7 018	7 464

StatLink  <http://dx.doi.org/10.1787/347178601501>

*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively (two-tailed test).

a) The binomial logit models were estimated using maximum likelihood for a pooled sample of 21 European countries: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom.

b) The sample is restricted to employed youths aged 15 to 29 years in 2006.

c) For better readability, odds-ratios are reported taking the exponential of individual regression coefficients. A coefficient above one implies a higher probability than for the reference person to have the indicated work status. Thus, for example, the probability for an employed man of remaining or moving into full-time employment one year later is more than three times higher than the probability for an inactive man of becoming employed in a full-time job. Conversely, a coefficient below one implies a lower probability than for the reference person to have the indicated work status. The reference person is a youth in a part-time or temporary job, having left initial education one to three years earlier, who was inactive one year earlier and is low qualified and not in initial education or apprenticeship nor in job-related training.


d) Indicators of statistical significance of the full model referring to the Chi-square test for the joint significance of all the predictors.

Source: OECD estimates based on the European Labour Force Survey (EULFS).

Table 1.2. **Share of workers in temporary and permanent jobs by gender, qualification and years since leaving school^a**

Percentages of employed persons

	Gender	Educational attainment	Share of permanent			Share of temporary		
			One year	Three years	Five years	One year	Three years	Five years
Australia	Both sexes	Low-skilled	37.8	50.6	60.6	62.2	49.4	39.4
		Medium-high-skilled	37.3	49.4	62.3	62.7	50.6	37.7
		Total education	37.5	49.6	62.0	62.5	50.4	38.0
	Men	Low-skilled	40.5	53.2	60.3	59.5	46.8	39.7
		Medium-high-skilled	41.6	53.1	62.2	58.4	46.9	37.8
		Total education	41.2	53.1	61.9	58.8	46.9	38.1
	Women	Low-skilled	34.1	46.1	61.2	65.9	53.9	38.8
		Medium-high-skilled	33.4	45.8	62.3	66.6	54.2	37.7
		Total education	33.6	45.8	62.2	66.4	54.2	37.8
EU10 ^b	Both sexes	Low-skilled	38.9	56.9	67.2	61.1	43.1	32.8
		Medium-high-skilled	53.0	69.9	75.5	47.0	30.1	24.5
		Total education	50.2	67.0	73.0	49.8	33.0	27.0
	Men	Low-skilled	41.3	62.1	66.7	58.7	37.9	33.3
		Medium-high-skilled	57.0	72.7	75.3	43.0	27.3	24.7
		Total education	53.5	69.7	72.3	46.5	30.3	27.7
	Women	Low-skilled	38.3	50.3	69.0	61.7	49.7	31.0
		Medium-high-skilled	49.0	67.1	74.6	51.0	32.9	25.4
		Total education	47.0	64.3	73.2	53.0	35.7	26.8
Korea	Both sexes	Low-skilled	–	–	–	–	–	–
		Medium-high-skilled	86.1	88.2	90.5	13.9	11.8	9.5
		Total education	86.1	87.8	90.2	13.9	12.2	9.8
	Men	Low-skilled	–	–	–	–	–	–
		Medium-high-skilled	85.5	86.4	91.7	14.5	13.6	8.3
		Total education	85.6	86.1	91.9	14.4	13.9	8.1
	Women	Low-skilled	–	–	–	–	–	–
		Medium-high-skilled	86.5	89.2	89.7	13.5	10.8	10.3
		Total education	86.5	88.8	89.0	13.5	11.2	11.0
United Kingdom	Both sexes	Low-skilled	71.4	91.8	89.2	28.6	8.2	10.8
		Medium-high-skilled	83.7	92.9	92.9	16.3	7.1	7.1
		Total education	80.6	92.6	92.1	19.4	7.4	7.9
	Men	Low-skilled	67.6	90.0	91.2	32.4	10.0	8.8
		Medium-high-skilled	80.3	91.9	94.2	19.7	8.1	5.8
		Total education	77.9	91.4	93.6	22.1	8.6	6.4
	Women	Low-skilled	73.7	93.3	87.8	26.3	6.7	12.2
		Medium-high-skilled	87.6	94.0	91.4	12.4	6.0	8.6
		Total education	83.3	93.7	90.4	16.7	6.3	9.6

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– Estimates not reported due to fewer than ten observations.

EU10: Population-weighted average of the following countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Italy, Portugal, and Spain.

a) Sample restricted to youths aged 15 to 29 years leaving initial education in the years immediately preceding the five year window of panel survey data used to analyse job type.

b) Employment corresponds to persons working at least 15 hours per week.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

years after leaving school. A similar pattern holds for the ten continental European countries (the EU10), where the temporary share falls from one-half one year out of school to slightly more than one-quarter five years later. By contrast, fewer school leavers pass

through temporary jobs in Korea and the United Kingdom (14% and 19%, respectively, in the first year out of school). Low-skilled youth are considerably more likely than their better educated counterparts to begin their working lives in temporary jobs in the EU10 and the United Kingdom, but this does not appear to be the case in Australia and there are too few low-skilled youth in Korea to assess how they fare in this regard. The temporary share begins moderately higher for employed female school leavers than their male counterparts in Australia (66% versus 59%) and the EU10 (53% versus 47%), but these differences tend to decrease with labour market experience. By contrast, employed male school leavers are somewhat more prone to hold temporary jobs than females the first year out of school in the United Kingdom and gender differences are very small in Korea.

The data reported in Table 1.2 are broadly consistent with temporary jobs serving as stepping-stones to permanent jobs for many youth, since the share of employed school leavers in temporary jobs declines quite strongly during the first five years out of school, particularly in the countries where this share is initially very high. Nonetheless, a considerable share of working youth are still in temporary jobs five years after finishing initial education in some countries, suggesting that these youth may have become trapped in temporary jobs. 2006 data from the European Labour Force Survey, which provides larger sample sizes for analysing differences across skill groups, suggest that early school leavers are particularly at risk of such traps: five years after leaving school, more than 40% of unqualified young workers are in temporary jobs in Germany, Poland, Portugal, Slovak Republic and Sweden, and more than half in Spain (data not shown).


The issue of traps is best assessed by following the same individual over time in panel data. Table 1.3 exploits the panel nature of the data analysed in Table 1.2 to provide information on movements into and out of temporary jobs for school leavers who work in each of the five years following the end of their studies. Of the school leavers ever holding a temporary job, a strong majority hold two or more such jobs in Australia and Korea, as do one-half in the EU10. Only in the United Kingdom, is it the case that more school leavers have one spell of temporary employment than have two or more spells. Repeat spells are most common in Australia, where more than one third of employed youth experience two or more spells in temporary jobs during the five-year period analysed. Even though one-third of school leavers never have a temporary job, average cumulative time in temporary jobs exceeds one year due in part to repeat spells. Repeat spells are significantly more common for low- than better skilled youth in the EU10, but not in the other countries analysed.

Mobility of low-paid youth

Relatively few youth in low-paid jobs at any particular date remain continuously low-paid for an extended period of time, but many experience more than one low-paid job. Analysing the same household panel surveys as for temporary workers, Figure 1.9 shows three measures of low-pay incidence over the five-year period following the end of initial education: the average low pay rate, the ever low pay rate and the always low pay rate. Low-pay incidence varies widely across the 13 countries covered in this analysis. The average point-in-time rate varies between 5% and 50% of young labour market entrants who occupied low-paid jobs over the five-year period analysed (Panel A). Even more dramatically, between 16% and 79% of youth occupied low-paid jobs at some time during the five-year period, meaning that a significant number of youth alternate low-pay spells with spells in better paying jobs. Fewer than 20% of young workers remained continuously low-paid

Table 1.3. Five-year experience of temporary jobs by out-of-school youth with some employment: average cumulative duration and number of spells^a

	Gender	Educational attainment	Number of observations	Average number of temporary jobs	Average duration of temporary jobs (months)	No temporary job (%)	One temporary job (%)	Two or more temporary jobs (%)
Australia	Both sexes	Low-skilled	(58)	1.45	12.7	31.6	32.0	36.4
		Medium-high-skilled	(371)	1.56	12.7	33.1	25.3	41.6
		Total education	(429)	1.55	12.7	32.9	26.3	40.9
	Men	Low-skilled	(39)	1.40	13.9	39.5	26.1	34.4
		Medium-high-skilled	(185)	1.42	10.5	35.5	27.6	36.9
		Total education	(224)	1.41	11.0	36.2	27.3	36.5
	Women	Low-skilled	(19)	1.55	10.3	15.8	43.7	40.5
		Medium-high-skilled	(186)	1.75	15.6	30.0	22.5	47.5
		Total education	(205)	1.73	15.0	28.5	24.8	46.7
EU10	Both sexes	Low-skilled	(730)	0.98	6.3	51.5	23.7	24.9
		Medium-high-skilled	(854)	0.75	5.1	60.0	22.1	17.9
		Total education	(1 728)	0.91	6.0	54.3	23.2	22.6
	Men	Low-skilled	(431)	0.96	5.6	51.6	25.4	23.0
		Medium-high-skilled	(447)	0.78	5.0	60.2	22.2	17.6
		Total education	(950)	0.92	5.7	55.1	22.7	22.1
	Women	Low-skilled	(299)	0.99	7.1	50.7	21.2	28.1
		Medium-high-skilled	(407)	0.68	5.1	61.1	22.4	16.5
		Total education	(778)	0.85	6.1	53.6	24.2	22.1
Korea	Both sexes	Low-skilled	(4)	–	–	–	–	–
		Medium-high-skilled	(88)	0.48	5.9	79.3	8.4	12.3
		Total education	(92)	0.55	6.8	77.9	8.1	14.0
	Men	Low-skilled	(3)	–	–	–	–	–
		Medium-high-skilled	(27)	0.71	9.2	64.7	12.3	22.9
		Total education	(30)	0.78	10.0	64.7	11.5	23.7
	Women	Low-skilled	(1)	–	–	–	–	–
		Medium-high-skilled	(61)	0.36	4.3	86.2	6.6	7.2
		Total education	(62)	0.44	5.2	84.4	6.4	9.1
United Kingdom	Both sexes	Low-skilled	(51)	0.18	0.4	85.9	10.3	3.9
		Medium-high-skilled	(194)	0.17	0.5	86.5	10.7	2.8
		Total education	(245)	0.17	0.5	86.4	10.6	3.0
	Men	Low-skilled	(21)	0.09	0.0	90.6	9.4	0.0
		Medium-high-skilled	(113)	0.19	0.5	86.0	10.9	3.2
		Total education	(134)	0.17	0.4	86.8	10.6	2.6
	Women	Low-skilled	(30)	0.25	0.7	82.1	11.0	6.9
		Medium-high-skilled	(81)	0.15	0.5	87.3	10.5	2.2
		Total education	(111)	0.18	0.5	85.8	10.6	3.6

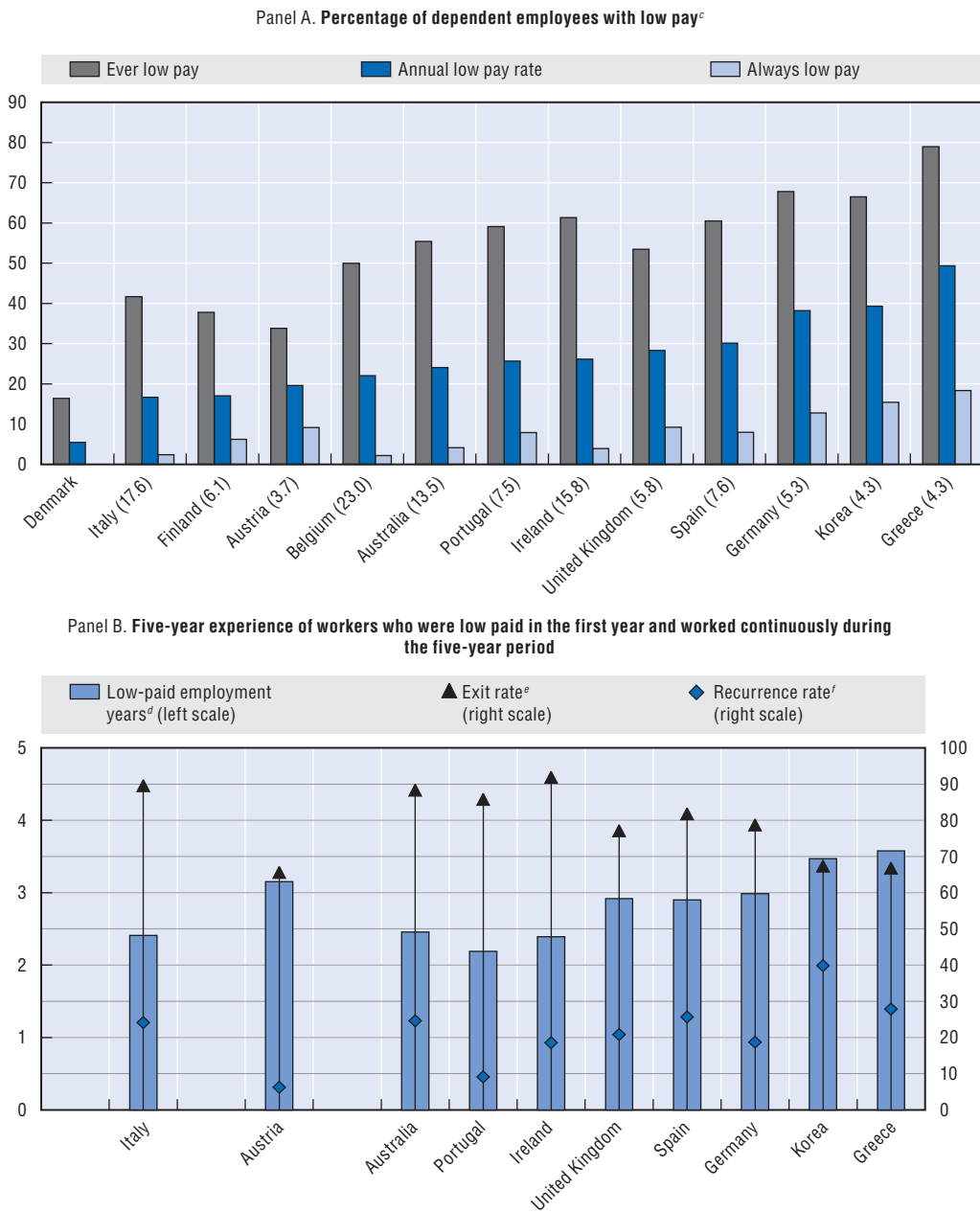
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– Estimates not reported due to fewer than ten observations. Estimates in italic font based on ten to 29 observations. EU10: Population-weighted average of the following countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Italy, Portugal, and Spain.

a) Sample restricted to the last five years of the survey and to persons continuously employed (working at least 15 hours per week for EU10) aged 15-29 leaving initial education one year before this five-year period or during the first year. The analysis is conducted on an annual basis considering only the employment contract at the time of interview. Since all short temporary jobs between interviews are not considered, the estimations are potentially biased downward.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

Figure 1.9. **Alternative measures of low-paid employment^a of youth, over five years^b**




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- a) Workers are considered to be in low-paid employment if they receive an hourly wage of less than two-thirds the median value of employees aged 25-54 in that country and year.
- b) Sample for calculations restricted to persons aged 15 to 29 years not in education who were continuously employed as dependent employees (working at least 15 hours per week for the European countries) during all five years analysed. Countries ranked by annual low pay rate.
- c) Values within parenthesis below the country labels in Panel A are the ratio of the ever to the always low paid (an index of turnover).
- d) Average years.
- e) Share low-paid persons in the first year who were high-paid in the following year.
- f) Share of low-paid persons in the first year exiting low pay in the following year but experiencing a repeat spell of low pay during the next three years.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

Table 1.4. **Five-year experience of low-paid employment by out-of-school youth: average cumulative duration and number of spells^{a, b}**

	Gender	Educational attainment	Number of observations	Average number of low pay spells	Average duration of low pay spell (months)	No spell (%)	One spell (%)	Two or more spells (%)
Australia	Both sexes	Low-skilled	(54)	1.54	16.2	34.5	22.5	43.1
		Medium-high-skilled	(342)	1.15	11.5	46.1	21.8	32.1
		Total education	(396)	1.20	12.1	44.5	21.9	33.6
	Men	Low-skilled	(37)	1.77	19.7	26.8	25.3	47.8
		Medium-high-skilled	(171)	1.33	13.6	38.5	25.3	36.2
		Total education	(208)	1.40	14.5	36.6	25.3	38.1
	Women	Low-skilled	(17)	1.03	8.7	51.2	16.2	32.7
		Medium-high-skilled	(171)	0.91	8.7	56.2	17.2	26.6
		Total education	(188)	0.92	8.7	55.7	17.1	27.2
EU10	Both sexes	Low-skilled	(648)	1.61	16.1	39.2	18.3	42.5
		Medium-high-skilled	(780)	1.10	11.4	51.4	18.6	30.0
		Total education	(1 552)	1.41	14.2	44.0	18.1	37.8
	Men	Low-skilled	(397)	1.42	12.3	43.3	20.0	36.6
		Medium-high-skilled	(414)	0.85	7.4	60.9	15.1	24.0
		Total education	(871)	1.17	10.3	51.3	17.0	31.7
	Women	Low-skilled	(251)	2.17	23.3	29.8	13.6	56.6
		Medium-high-skilled	(366)	1.44	17.0	39.8	21.9	38.4
		Total education	(681)	1.80	19.8	34.7	17.4	47.9
Korea	Both sexes	Low-skilled	(4)	–	–	–	–	–
		Medium-high-skilled	(87)	1.88	25.0	34.7	16.4	48.9
		Total education	(91)	1.97	26.1	33.5	15.8	50.7
	Men	Low-skilled	(3)	–	–	–	–	–
		Medium-high-skilled	(27)	1.34	18.5	37.9	26.8	35.4
		Total education	(30)	1.50	20.3	35.4	25.0	39.5
	Women	Low-skilled	(1)	–	–	–	–	–
		Medium-high-skilled	(60)	2.14	28.2	33.2	11.4	55.4
		Total education	(61)	2.20	29.1	32.5	11.2	56.3
United Kingdom	Both sexes	Low-skilled	(47)	0.48	2.2	71.0	14.5	14.5
		Medium-high-skilled	(188)	1.68	10.9	39.6	12.8	47.7
		Total education	(235)	1.41	9.0	46.5	13.1	40.3
	Men	Low-skilled	(21)	0.70	2.8	59.6	19.5	20.9
		Medium-high-skilled	(109)	1.54	9.9	43.0	9.3	47.7
		Total education	(130)	1.39	8.6	46.0	11.2	42.7
	Women	Low-skilled	(26)	0.28	1.7	80.8	10.2	9.1
		Medium-high-skilled	(79)	1.88	12.4	34.8	17.6	47.6
		Total education	(105)	1.45	9.5	47.2	15.6	37.3

StatLink  <http://dx.doi.org/10.1787/347052320358>

– Estimates not reported due to fewer than ten observations. Estimates in italic font based on ten to 29 observations. EU10: Population-weighted average of the following countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Italy, Portugal, and Spain.

- a) Workers are considered to be in low-paid employment if they receive an hourly wage of less than two-thirds the median value of employees aged 25-54 in that country and year.
- b) Sample restricted to the last five years of the survey and to persons continuously employed (working at least 15 hours per week for EU10) aged 15-29 leaving initial education one year before this five-year period or during the first year. The analysis is conducted on an annual basis considering only the employment at the time of interview. Since short employment spells between interviews are not considered, the estimations are potentially biased downward.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

during the entire five-year period in all of the countries analysed and in several countries essentially no youth did so. Figure 1.9, Panel B indicates that 60% or more of all school leavers who are low-paid in their first year in the labour market find better paid jobs one year later. However, 20-40% of the group escaping low-paid employment in their second year out of school experience one or more additional low-pay spells during the following three years in six of the ten countries for which data are available. These repeat low-pay spells help to explain why school leavers moving into a low-paid job accumulate between 2 and 3.5 years in low-paid employment, despite there being considerable mobility between low and better paying jobs.

In the EU10, 38% of young workers had two or more spells in low-paid jobs within the five-year period (Table 1.4). There were more repeaters among low-qualified and female school leavers (43% and 48% experienced two or more spells in low-paid jobs, respectively), than for their better qualified and male counterparts (30% and 32%, respectively). Similar patterns hold with the other countries, with the recurrence rates in low pay being highest in Korea (51%) and lowest in Australia (34%). One surprise is that low-skilled youth in the United Kingdom were less likely to experience two or more spells of low-paid employment than their better educated counterparts. In Korea, the share with two or more spells in low-paid jobs was significantly higher for women than for men (56% *versus* 40%). At the other extreme, between 34% and 47% of continuously employed school leavers were never low paid in the countries analysed.

3.3. Mobility of youth not in education, employment or training (NEETs)

NEET rates usually fall with years out-of-school, but there are exceptions

For out-of-school youth, NEET status corresponds to non-employment and thus provides a mirror image of the employment patterns of young labour market entrants discussed in Section 2. In countries where employment rates are low one year after school completion and only converge slowly to adult rates (*cf.* Figures 1.4 to 1.6), NEET rates will start high and only gradually decline with experience. Evidence for the late 1990s, based on the same household panel survey data analysed above, indicate that NEET rates one year after leaving school range from a low of 16% in Australia up to 70% in Greece (Table 1.5). NEET rates fall sharply over the next four years in many of these countries, including by 50% or more in Austria, Belgium, Germany, Greece and Portugal. In other countries, the decline is less marked and it is completely absent in Korea, because the strong decline for men is completely offset by a steep rise for women. Even five years after leaving school, NEET rates remain above 30% in Greece, Italy and Korea, with inactive women – probably related to family formation and motherhood – accounting for the bulk of the persistence of high rates of non-employment.

NEET status can be a trap for certain youth

There is concern that repeated NEET spells and longer duration in NEET status can be damaging to future career prospects (Quintini *et al.*, 2007; Genda and Kurosawa, 2001). Panel A of Figure 1.10 displays three measures of NEET incidence defined over the five-year period following the end of initial education – the always, ever and average NEET rates – which are calculated for 11 European countries, Australia and Korea using panel data to follow individual school leavers over a five-year period. The ever NEET rate ranges from 30% in Australia to 67% in Greece, indicating that a large share of school leavers spend some time non-employed, but also that this share differs substantially across these

Table 1.5. NEET status of youth one, three and five years after leaving school by gender
Percentage^a

	Time since end of initial education	Both sexes						Men			Women		
		Number of observations	NEET			Number of observations	NEET			Number of observations	NEET		
			All	Unemployed	Inactives		All	Unemployed	Inactives		All	Unemployed	Inactives
Australia	One year	(1 227)	16.2	12.6	3.6	(610)	16.4	13.7	2.7	(617)	16.1	11.5	4.5
	Three years	(1 008)	15.5	10.0	5.5	(502)	15.7	12.6	3.0	(506)	15.3	7.2	8.1
	Five or more years	(7 121)	19.1	5.9	13.2	(3 401)	10.5	6.8	3.7	(3 720)	27.7	5.1	22.7
Austria	One year	(611)	54.0	6.7	47.3	(296)	52.2	5.6	46.6	(315)	55.8	7.7	48.0
	Three years	(582)	37.9	4.8	33.1	(300)	32.0	4.1	27.9	(282)	44.0	5.5	38.5
	Five or more years	(3 008)	17.9	3.2	14.6	(1 532)	14.6	3.3	11.3	(1 476)	21.0	3.2	17.8
Belgium	One year	(355)	38.3	11.2	27.1	(169)	38.8	12.7	26.1	(186)	37.7	9.8	28.0
	Three years	(375)	15.5	6.6	8.9	(177)	12.2	6.4	5.7	(198)	18.9	6.8	12.1
	Five or more years	(1 291)	18.5	5.8	12.7	(565)	12.6	4.8	7.8	(726)	23.2	6.5	16.7
Denmark	One year	(440)	29.5	7.3	22.2	(196)	20.7	3.9	16.9	(244)	36.2	9.9	26.3
	Three years	(326)	42.6	5.4	37.2	(142)	37.5	1.1	36.4	(184)	46.9	9.1	37.9
	Five or more years	(1 480)	22.4	4.2	18.2	(825)	20.2	3.5	16.8	(655)	25.1	5.1	20.1
Finland	One year	(739)	34.9	7.9	27.0	(376)	38.4	7.5	30.9	(363)	30.7	8.2	22.5
	Three years	(495)	30.6	8.2	22.4	(267)	25.0	9.5	15.5	(228)	37.8	6.6	31.2
	Five or more years	(1 418)	28.8	12.8	16.0	(808)	17.9	13.0	4.9	(610)	40.9	12.6	28.3
Germany	One year	(1 558)	40.7	4.5	36.2	(784)	39.9	5.5	34.4	(774)	41.5	3.4	38.1
	Three years	(754)	8.7	4.0	4.7	(389)	9.3	6.3	3.0	(365)	8.0	1.6	6.4
	Five or more years	(4 976)	19.6	7.1	12.5	(2 250)	14.9	8.2	6.7	(2 726)	24.0	6.0	17.9
Greece	One year	(930)	69.6	12.0	57.6	(437)	74.0	8.4	65.6	(493)	66.2	14.7	51.5
	Three years	(958)	56.3	14.6	41.7	(494)	55.1	13.5	41.6	(464)	57.6	15.7	41.9
	Five or more years	(3 930)	33.6	11.7	21.8	(2 013)	19.8	10.4	9.4	(1 917)	47.6	13.1	34.5
Ireland	One year	(625)	29.5	10.2	19.4	(334)	27.8	7.5	20.3	(291)	31.5	13.1	18.4
	Three years	(505)	31.5	7.8	23.6	(272)	33.1	8.4	24.7	(233)	29.8	7.3	22.5
	Five or more years	(2 571)	25.2	5.8	19.4	(1 301)	19.0	7.8	11.2	(1 270)	31.4	3.9	27.5
Italy	One year	(1 084)	63.7	30.2	33.5	(531)	63.6	28.0	35.6	(553)	63.8	32.3	31.5
	Three years	(1 047)	47.6	23.8	23.7	(514)	43.8	22.9	20.9	(533)	51.4	24.8	26.6
	Five or more years	(6 032)	35.6	17.3	18.2	(3 146)	27.1	16.4	10.8	(2 886)	45.5	18.5	27.0
Korea	One year	(846)	36.8	3.5	33.2	(370)	43.0	4.7	38.3	(476)	32.0	2.6	29.3
	Three years	(657)	28.5	4.5	24.0	(231)	25.9	4.6	21.4	(426)	29.9	4.5	25.4
	Five or more years	(3 208)	36.8	3.3	33.5	(1 243)	19.2	6.2	13.0	(1 965)	48.7	1.3	47.4
Portugal	One year	(756)	30.7	12.3	18.4	(366)	28.5	11.0	17.5	(390)	32.5	13.4	19.1
	Three years	(729)	15.3	4.6	10.7	(348)	13.1	5.7	7.4	(381)	17.4	3.6	13.8
	Five or more years	(3 425)	12.0	4.3	7.7	(1 890)	10.9	5.1	5.7	(1 535)	13.4	3.4	9.9
Spain	One year	(1 417)	51.2	27.0	24.1	(698)	47.6	25.3	22.3	(719)	54.6	28.7	25.9
	Three years	(1 152)	36.3	17.3	19.0	(568)	31.4	14.0	17.4	(584)	40.9	20.4	20.4
	Five or more years	(5 002)	31.0	17.0	14.0	(2 756)	22.0	14.4	7.6	(2 246)	43.8	20.6	23.2
United Kingdom	One year	(947)	30.6	15.0	15.6	(427)	27.6	16.5	11.1	(520)	33.4	13.7	19.7
	Three years	(755)	22.9	7.7	15.2	(339)	19.4	10.1	9.3	(416)	26.2	5.5	20.7
	Five or more years	(4 130)	19.8	6.2	13.6	(2 000)	12.1	8.5	3.6	(2 130)	28.0	3.7	24.3

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NEET: youth not in education, employment or training.

a) Sample restricted to youths aged 15 to 29 years leaving initial education in the years immediately preceding the five year window of panel survey data used to analyse NEET status.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

countries. Country ranking are quite similar for the average and always NEET rates, but these rates are much lower due to considerable movement into and out of employment. Greece and Italy stand out for the fact that nearly one-quarter of school leavers are

continuously non-employed during the five years following the end of schooling, whereas this rate ranges from 4% to 14% in the other 11 countries analysed.

The data presented in Panel B of Figure 1.10 provide further insights into the fluidity of the youth labour market, as reflected in transitions between employment and non-employment. In all of the countries analysed, more than one-half of school leavers who are not employed the first year exit NEET status the following year. But repeat NEET spells are common and, depending on the country, between 22% and 63% of this group experience one or more additional spells of non-employment in the following three years. Youth who were NEET the first year after leaving school accumulate approximately three years of non-employment over the 5-year window in all of the countries analysed. Many NEET spells are short, but a considerable number of youth accumulate multiple years of non-employment, in large part because multiple NEET spells are so common.

Table 1.6 confirms the importance of multiple spells of non-employment in the five years following the end of initial education. The share of job leavers reporting one spell in NEET is quite low and uniform across the countries analysed, ranging from 12% to 17%. Larger shares of school leavers were either never NEET or experienced two or more spells of NEET, suggesting that youth tend to bifurcate into two groups: those who experience steady employment (even if they change jobs) and those alternating multiple times between employment and non-employment. In Australia and the EU10, low skilled youth are especially likely to be in the latter group, but this does not appear to be the case in the United Kingdom.

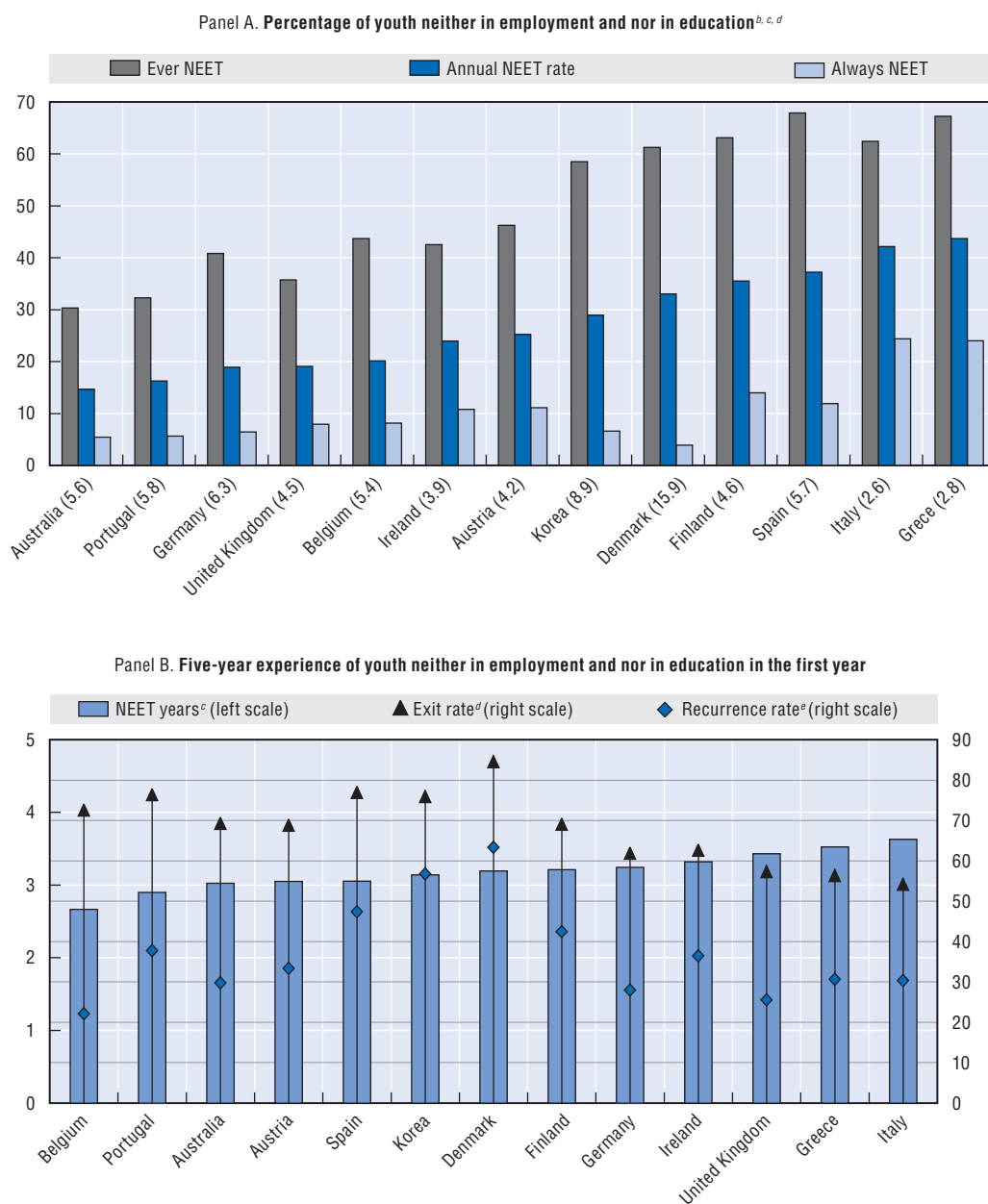
Conclusion

This chapter provides a descriptive analysis of youth labour market conditions and, in particular, the pace and modalities of transitions from school to work. While policy options for helping youth to get off to a good start in the labour market have not been analysed here, some of its empirical findings have interesting policy implications. Three of these findings are discussed here.

A first broad finding is that, while youth have generally shared in the overall improvements in labour market performance observed in a number of OECD countries since the mid-1990s, major differences in employment outcomes persist across groups of youth differentiated by their level of education, early experiences in the labour market and local labour market conditions. On the one hand, this confirms that strong overall growth is an important precondition for improving the labour market opportunities for most young people. On the other hand, other factors also matter. In particular, initial education matters a lot, as do early interventions to prevent school dropouts and youth drifting into inactivity or repeated spells of unemployment and temporary employment that do not allow them to build gradually a pathway to more stable and rewarding jobs.

The fluid nature of the youth labour market is a second broad lesson that emerges. The school-to-work transition often involves a series of relatively brief job spells and periods on non-employment, before a more stable position is obtained. Moreover, the demarcation line between school and work has become more blurred in a number of countries, as many youth gain some work experience while still in education, through part-time or seasonal jobs and, in dual system countries, apprenticeships. In the context of high rates of job mobility, the main concern is not necessarily whether many youth are employed in low-paid or non-standard jobs. Instead, the policy focus should be on whether

Figure 1.10. **Alternative incidence measures of NEET status of youth, over five years^a**



StatLink  <http://dx.doi.org/10.1787/346722632664>


NEET: youth not in education, employment or training.

- Sample for calculations restricted to persons aged 15 to 29 years not in education during all five years analysed. Countries ranked by annual NEET rate in Panel A, and by NEET years in Panel B.
- Values within parenthesis below the country labels in Panel A are the ratio of the ever to always NEET rates (an index of turnover in status).
- Annual average.
- Share of NEET persons in the first year who were employed in the following year.
- Share of NEET persons in the first year who were employed in the following year but experienced a repeat spell of NEET during the next three years.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

Table 1.6. **Five-year experience of NEET status by out of school youth^a**

	Gender	Educational attainment	Number of observations	Average number of spells in NEET	Average number of spells in inactivity	Average number of spells in unemployment	No spell (%)	One spell (%)	Two or more spells (%)
Australia	Both sexes	Low-skilled	(161)	1.7	1.0	0.7	43.4	15.9	40.7
		Medium-high-skilled	(544)	0.4	0.3	0.1	77.7	12.7	9.6
		Total education	(705)	0.7	0.5	0.3	69.7	13.5	16.8
	Men	Low-skilled	(78)	1.0	0.3	0.7	58.2	13.0	28.8
		Medium-high-skilled	(248)	0.2	0.1	0.1	86.6	8.5	4.9
		Total education	(326)	0.4	0.1	0.3	79.8	9.6	10.7
	Women	Low-skilled	(83)	2.5	1.9	0.6	26.4	19.2	54.4
		Medium-high-skilled	(296)	0.7	0.5	0.2	68.4	17.1	14.5
		Total education	(379)	1.1	0.8	0.3	59.0	17.6	23.4
EU10	Both sexes	Low-skilled	(2 183)	1.8	1.0	0.8	39.9	17.4	42.7
		Medium-high-skilled	(1 908)	1.2	0.6	0.5	56.8	13.3	29.9
		Total education	(4 457)	1.5	0.9	0.7	46.3	16.1	37.6
	Men	Low-skilled	(1 218)	1.4	0.7	0.7	43.6	20.7	35.8
		Medium-high-skilled	(895)	0.9	0.5	0.4	61.9	13.3	24.8
		Total education	(2 310)	1.3	0.7	0.6	49.4	18.4	32.2
	Women	Low-skilled	(965)	2.2	1.4	0.8	34.0	13.5	52.5
		Medium-high-skilled	(1 013)	1.4	0.8	0.6	51.2	13.5	35.3
		Total education	(2 147)	1.8	1.1	0.7	41.8	13.7	44.5
Korea	Both sexes	Low-skilled	(7)	–	–	–	–	–	–
		Medium-high-skilled	(213)	1.5	1.3	0.2	40.9	17.7	41.4
		Total education	(221)	1.4	1.2	0.2	41.5	17.2	41.3
	Men	Low-skilled	(4)	–	–	–	–	–	–
		Medium-high-skilled	(65)	1.2	0.7	0.5	43.5	17.5	39.0
		Total education	(69)	1.2	0.7	0.4	45.6	16.9	37.5
	Women	Low-skilled	(3)	–	–	–	–	–	–
		Medium-high-skilled	(148)	1.6	1.5	0.1	39.6	17.8	42.6
		Total education	(152)	1.6	1.5	0.1	39.4	17.3	43.3
United Kingdom	Both sexes	Low-skilled	(67)	0.3	0.2	0.2	83.2	8.6	8.1
		Medium-high-skilled	(344)	1.1	0.8	0.3	60.0	13.0	26.9
		Total education	(411)	1.0	0.7	0.3	64.2	12.3	23.6
	Men	Low-skilled	(30)	0.3	0.1	0.2	81.1	12.1	6.8
		Medium-high-skilled	(170)	0.6	0.2	0.4	72.0	14.3	13.7
		Total education	(200)	0.6	0.2	0.4	73.5	13.9	12.5
	Women	Low-skilled	(37)	0.3	0.2	0.1	85.0	5.6	9.4
		Medium-high-skilled	(174)	1.6	1.3	0.3	48.3	11.8	39.9
		Total education	(211)	1.3	1.1	0.2	55.2	10.6	34.2

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NEET: youth not in education, employment or training.

– Estimates not reported due to fewer than ten observations.

EU10: Population-weighted average of the following countries: Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Italy, Portugal, and Spain.

a) Sample restricted to the last five years of the survey and to youth aged 15-29 leaving initial education one year before this five-year period or during the first year. The analysis is conducted on an annual basis considering only the non-employment status at the time of interview. Since short non-employment spells between interviews are not considered, the estimations are potentially biased downward.

Source: OECD estimates based on the British Household Panel Survey (BHPS), 2001-2005 for the United Kingdom; the European Community Household Panel (ECHP), waves 4 to 8 (1997-2001), for the European countries; the Household, Income and Labour Dynamics in Australia (HILDA), waves 1 to 5 (2001-2005) for Australia; and the Korean Labour and Income Panel Survey (KLIPS) waves 3 to 7 (2000-2004) for Korea.

these jobs are stepping-stones to better ones or not and on removing barriers to upward mobility to better jobs in terms of pay and job stability. In particular, excessive segmentation of the labour market between stable career jobs and non-standard jobs can increase the risk that many youth will become trapped, cycling for years between marginal jobs and non-employment.

A third finding is that the least qualified youth have the greatest difficulties in getting a foothold in the labour market in all countries. The lack of qualifications combined with very young school leaving ages means that this group is poorly equipped to integrate into the labour market. Special measures may be required for at-risk youth, beginning with supports to prevent academic failure and early exits from schooling. However, the chapter's analysis suggests that the transition from school to working life also raises difficulties and is protracted for a minority of more qualified school leavers.

Beyond these general patterns, there are significant cross-country differences in labour market outcomes for youth and the school-to-work transition. This suggests that policy priorities and strategies need to reflect national specificities, including the institutional structure of schooling and vocational training systems and the character of any demand side barriers to youth searching for a first job or attempting to secure access to career ladders. The OECD is conducting a series of country reviews intended to identify policy recommendations for helping youth get a better start on their working lives (see OECD, 2007a-d and 2008a, b).

Notes

1. The OECD is also conducting a multi-year thematic review, *Jobs for Youth*, which involves in-depth assessments of youth labour market outcomes and policy priorities in 16 countries. Six country reports have already been published (Belgium, Korea, Netherlands, New Zealand, Slovak Republic and Spain) (see OECD, 2007a-d and 2008 a, b). These two strands of work are intended to provide the basis for a comprehensive re-assessment of the youth labour market and good practice policies for helping youth to get off to a good start on their working lives.
2. The transition analysis in Sections 2 and 3 focuses on labour market outcomes in the years immediately following the end of initial education and takes no account of student employment. Student employment is discussed in Section 1, as part of the analysis of labour market status by age. However, the analysis of the school-to-work transition in the following two sections makes no attempt to assess how employment experience, while still in school, affects labour market outcomes after leaving school. Nor are the possible effects of overall labour market conditions on the length and modalities of school-to-work transitions analysed, even though these effects could be important. Indeed, young people anticipating labour market difficulties may delay their entry into the labour market by prolonging their initial education. In such instances, the average durations of school-to-work transitions, as measured here, arguably understate the time it takes youth, who are ready to leave school, to integrate into the labour market.
3. Tables 1.A1.1 and 1.A1.2 in the annex provide much of the data underlying the scatter plots displayed in Figure 1.1.
4. The slight increase in youth unemployment rate in Sweden between 1996 and 2006 is due to a break in series between 2004 and 2005 following a change in the operational definition of unemployment. The work availability criteria had been extended to two weeks after the survey reference week, instead of the survey reference week, to be consistent with the definition of unemployment in other EU countries. This change has led to an increase in the number of students classified as being unemployed. The subsequent increase in youth unemployment explains the sharp rise in youth unemployment relative to adult unemployment, while the opposite is true for long-term unemployment (Figure 1.1, Panel B).
5. The very high NEET rate for Turkey may also reflect a tendency for the labour force survey to classify some youth in informal jobs as being non-employed. The rate of informal employment is quite high in Turkey and youth are significantly more likely to work on informal jobs than prime-

age adults (see Chapter 2 of this publication). To the extent that some aspects of informal employment are not adequately captured in the labour force survey, this might have a disproportionate effect on youth.

6. Data reported for Japan in Figure 1.1 and Table 1.A1.2 refer to temporary employment lasting less than one year and part-time employment of less than 35 hours worked per week. These definitions are the closest available in Japanese national sources to the concepts used for other OECD countries. The discussion in Box 1.3 on school-to-work transition in Japan refers to youth in non-regular jobs according to national definitions of part-time and temporary work contracts and other types of non-regular work contracts.
7. The data reported are OLS coefficients obtained by regressing the indicated variables on the output gap and linear and quadratic time trends in separate annual time-series regressions for each country for 1980-2006.
8. Ryan (2001b) identifies a number of reasons why out-of-school youth may not participate in the labour market ranging from family formation, delayed departure from parental residence (*e.g.* the so-called “parasite single” syndrome in Japan), lifestyle choices (*e.g.* leisure and travel), institutional factors (*e.g.* compulsory military service) or the availability of public programmes (*e.g.* entitlements to public benefits may encourage young people to prolong school enrolment).
9. Brunet (2004) and Ryan (2001b) argue for such an approach.
10. OECD estimates based on the European Community Household Panel (ECHP) survey, wages 4-8 (1997-2001); Household income and labour dynamics (HILDA) survey – waves 1-5 (2001-2005) – for Australia and Korean labour and income panel survey (KLIPS) – waves 1-7 (1997-2004) – for Korea. Data shown for the United States are taken from Yates (2005) and are based on the National longitudinal survey of youth 1979 (NLSY79). The sample covers youth aged 14 to 22 years in 1979. Yates (2005) follows them between the inception of the study in 1979 and 2000 when the youngest sample cohort was 35 years old. Work histories are available throughout the study.
11. Beyond reporting a few results from Yates (2005) for the United States, no use is made here of country-specific youth transition surveys. These are a valuable source of information on the school-to-work transition, but are difficult to use for internationally comparative analysis because they are conducted on infrequent basis and the results often do not lend themselves to making cross-country comparisons, due to differences in questionnaire design.
12. An *ad hoc* module to the European labour force survey on the transition from school to working life was conducted in 2000 which mainly relied on retrospective questions pertaining to the labour market experience of young people since leaving initial education. Some of these questions were subsequently integrated into the core questionnaire of the European labour force survey. Kogan and Schubert (2003) use these survey results to describe transition patterns, by relating labour market indicators to “the time individuals have already spent on the labour market.” This approach is also used in this chapter.
13. In order to focus on stable changes from one activity state to another, being out of school for at least a full year since having completed the highest level of education is adopted here as the criterion to identify samples of recent school leavers. This restriction might bias upward the estimated average duration of the transition from school-to-work for youth who begin (or continue) working immediately after completing initial education.
14. Due to small sample sizes, time durations since leaving initial education are smoothed using a three-year centred moving average – and limited to eight to ten years (Brunet, 2004; Fondeur and Minni, 2004).
15. Educational attainment is grouped by low, medium and highly qualified, corresponding to youth having achieved respectively less than upper secondary level, upper secondary/some post-secondary levels and tertiary qualifications.
16. There is a high overlap between these countries and the countries where student employment rates are relatively high (see Box 1.1).
17. Yates (2005) reports that close to 90% of youth find jobs within five years of leaving school in the United States. However, the NLSY79 data that she analyses are not strictly comparable with those used here.
18. Yates (2005) shows that this same gender employment pattern characterises the experience of youth in the United States.
19. Chapter 3 in this publication examines gender employment gaps in more detail, including the role of labour market discrimination in accounting for these differences.

20. Austria is an outlier in this regard.
21. During the first three years after leaving school, 85% of low-qualified youth in the United States had held at least one job (Yates, 2005). Nonetheless, the employment-rate gaps between high and low-(medium) qualified youth were more than (less than) 10 percentage points at the end of this period. These gaps nearly vanished five years later.
22. Figure 1.5 does not show data for highly qualified youth ten years after leaving school because many persons in this group would be older than 29 years of age, the upper age limit for youth cohorts retained in this chapter.
23. Youth may also undertake training activities after the end of formal education, regardless of whether a dual educational system is in place. In 2006, in Europe close to 20% of youth participated in training programmes one year after leaving initial education with above average participation, albeit at varying degree, in Austria, Belgium, Denmark, Finland, France, Germany, the Netherlands, Poland, Sweden and Switzerland. Training participation declines overtime to reach 8% five years after leaving school and there is less cross-country variation. There are indications that highly qualified youth participate more in job-related training than medium qualified youth during the first five years after leaving school – i.e. 87% versus 55% on average in Europe –, while training participation of low qualified youth is more evenly spread since the time they left initial education.
24. Ryan (2001b) recommends using summary measures of transition durations that are unaffected by the distribution of school leaving ages, unlike OECD measures based on activity status by year of age (OECD, 1996b; OECD, 2000). He suggests developing an average duration measure, within a particular age cohort, defined in terms of “the length between leaving full-time schooling (or passing a statutory minimum leaving age), marking the end of formal education, and attaining specified length of service in a regular job” for individual school leavers. Several measures of this type are presented later in this chapter.
25. Indicators A and B measure the time elapsed since the age when leaving school and the age of entry into work (see Table 1.1, footnotes A and B). However, the median age measures in the case of Indicator A are based on two different distributions of youth population – youth enrolled in school, on the one hand, and those working, on the other hand. This may give a distorted picture of youth transitions. In the case of indicator B, the median ages of exit from school and entry into work are based on the same distribution of young workers, but the difference in the median ages does not coincide with indicator C, which reports the median of the distribution of the duration of the school-to-work transition at the individual level.
26. The explanatory notes to the table provide more details concerning data definitions and sources.
27. The comparison between Measures A and B reflects two different methods of identifying the median ages of school leaving and job entry, both calculated with the cross-sectional data from labour force surveys (see Table 1.1, footnotes A and B).
28. Since student employment is not taken into account, substantially more than 50% of an age cohort needs to have left school, in order for an age-cohort to obtain an employment rate of 50%.
29. Higher duration estimates according to Measure C, in Finland, Portugal and Spain, compared to Measure D, may be explained by high churning of young workers in short-term – temporary – jobs in these countries, which is better picked up by D than by C.
30. The underlying Labour Force Survey data used for estimating Measure C indicate that countries where the duration of school-to-work transition is short are also countries where a large number of school leavers were employed immediately after finishing initial education. This is particularly common in countries with a dual schooling system and probably reflects, in part, the fact that some apprentices become regular employees at the firm where they received their training. In 2006, 50% of school leavers in Germany and nearly 40% of them in Switzerland were employed immediately after completing initial schooling or apprenticeship. Across the 21 countries analysed, there is a strong negative correlation between the share of youth employed immediately upon finishing school and the Measure C duration estimates (rank correlation coefficient of -0.83).
31. Definitions of permanent and temporary employment vary between countries (see note 34).
32. Yates (2005) reports that low qualified young women took a longer time to settle into stable jobs than their male counterparts. There is evidence that the least qualified youth experience a sizeable amount of job churning: low-qualified youth hold five jobs on average before getting a job lasting three years or more, as opposed to one-two jobs on average for highly qualified youth.
33. It should be borne in mind that temporary jobs refer to different legal arrangements and/or statistical definitions in the different countries analysed here. In Australia and Korea, temporary

jobs refer to non-regular jobs which are associated with reduced entitlements to holiday and health coverage in Australia and low levels of job protection in Korea, besides the fact that these jobs are generally of limited duration. In Europe, temporary jobs are jobs with a definite date of termination specified in the labour contract. These can be of different types, including fixed-term contracts, contract work, temporary-help-agency work, on-call jobs, and trial/probationary periods on regular jobs and apprenticeships.

ANNEX 1.A1


Supplementary Tables and Figures

Table 1.A1.1. The situation of youth in the labour market, 1996 and 2006

	Population share (15-24)		Labour force participation rates		Employment rates		Unemployment rates		Incidence of long-term unemployment		Relative to adult (25-54) incidence of long-term unemployment		NEET rates		Low-skilled NEET		School drop-out rates of teenagers (15-19)		School enrolment rates (15-24)	
	2006	1996-2006	2006	1996-2006	2006	1996-2006	2006	1996-2006	2006	1996-2006			2005	1996-2005 ^a	2005	1996-2005 ^b	2005	1996-2005 ^c	2005	1995-2005 ^d
	%	Percentage change	%	Percentage change	%	Percentage change	%	Percentage change	%	Percentage change	2006	1996	%	Percentage change	%	Percentage change	%	Percentage change	%	Percentage change
Australia	20.7	-1.2	71.2	-0.5	63.8	3.3	10.4	-5.3	10.9	-7.9	0.5	0.6	9.6	-2.5	58.2	-8.9	5.1	-0.8	26.2	-1.2
Austria	17.8	-0.5	59.4	0.1	54.0	-1.6	9.1	2.9	15.8	-2.4	0.5	0.7	9.7	..	44.7	..	4.6	..	38.0	..
Belgium	18.4	-0.8	32.3	-0.5	26.2	0.1	18.9	-1.6	32.3	-5.9	0.5	0.6	12.4	-1.3	47.4	-4.7	4.4	-1.5	59.5	-0.4
Canada	19.5	-0.5	66.4	4.2	58.7	6.0	11.6	-3.8	2.6	-4.5	0.3	0.4	9.8	-3.1	39.5	-3.4	3.6	-1.4	36.5	-1.7
Czech Republic	18.4	-5.8	33.5	-15.8	27.7	-18.1	17.5	10.3	38.4	18.8	0.6	0.5	11.2	-0.9	27.3	1.6	2.2	-1.0	61.5	..
Denmark	17.1	-2.3	69.0	-4.8	63.7	-2.2	7.6	-3.0	0.9	-9.6	0.0	0.4	6.2	-0.7	62.0	..	3.5	2.7	32.0	5.3
Finland	18.7	0.2	50.1	8.8	40.6	10.8	18.8	-9.0	5.5	-5.2	0.2	0.3	9.3	..	41.4	..	3.6	..	56.0	..
France	19.4	-1.0	33.2	4.2	25.3	3.9	23.9	-2.5	26.6	6.5	0.6	0.5	11.3	1.2	48.7	..	4.3	1.6	60.5	-6.2
Germany	17.8	1.5	50.7	-1.2	43.9	-3.2	13.5	4.1	36.7	9.1	0.6	0.6	11.6	0.0	52.3	7.7	3.6	0.3	47.4	..
Greece	17.0	-3.3	32.5	-4.5	24.5	-0.9	24.5	-6.6	47.7	-5.8	0.8	0.9	15.4	-3.1	37.8	-4.1	5.7	-0.1	59.3	2.9
Hungary	18.4	-4.8	26.8	-10.3	21.7	-8.7	19.1	1.1	37.5	-5.3	0.8	0.7	12.9	-8.0	50.9	3.8	5.2	-2.0	64.9	10.5
Iceland	19.6	-4.1	79.5	19.7	72.9	18.1	8.4	-0.1	1.5	-3.9	0.2	0.2	6.4	-0.4	73.5	..	2.9	1.0	38.0	6.6
Ireland	22.0	-4.9	52.4	7.9	48.0	11.7	8.4	-9.9	25.3	-21.7	0.7	0.7	8.6	0.6	48.1	-11.5	3.0	-0.8	45.1	..
Italy	15.6	-4.4	32.5	-7.1	25.5	-1.4	21.6	-10.6	50.5	-13.7	0.9	1.0	18.0	-5.5	54.9	-2.8	8.6	-3.5	56.6	5.0
Japan	16.5	-4.4	45.0	-3.3	41.4	-3.6	8.0	1.3	20.4	9.9	0.6	0.5	8.8	1.2	74.6	55.5	..	..	46.2	0.9
Korea	17.6	-6.0	30.2	-5.7	27.2	-6.6	10.0	3.9	0.4	-1.9	0.3	0.5	..	..	..	..	..	..	..	..
Luxembourg	17.0	-0.4	28.8	-11.8	24.9	-12.0	13.7	4.5	14.0	-19.3	0.5	1.3	5.7	-3.3	56.9	..	1.9	-2.3	69.4	16.2
Mexico	29.6	-4.7	47.8	-5.3	44.8	-3.3	6.2	-3.1	1.9	0.7	0.6	0.4	21.8	-3.9	91.3	1.5	16.5	-4.3	33.0	-25.4
Netherlands	17.8	-0.8	69.2	2.9	63.9	5.6	7.6	-4.5	21.1	-13.8	0.4	0.7	6.5	1.4	59.2	-5.7	2.8	2.8	31.7	-1.9
New Zealand	21.9	-0.6	65.0	-2.5	58.8	-0.7	9.6	-2.2	2.8	-9.1	0.3	0.5	12.4	..	55.0	..	5.3	..	30.9	..
Norway	18.9	0.3	58.1	-1.6	53.1	0.8	8.6	-3.7	4.3	-0.1	0.2	0.2	5.9	-0.9	66.5	3.5	2.1	1.5	46.5	-5.4
Poland	22.1	0.3	34.2	-4.8	24.0	-3.9	29.8	1.3	37.2	8.2	0.7	0.7	12.2	-8.3	62.2	4.8	1.7	..	69.6	14.6
Portugal	17.9	-6.0	42.7	-1.6	35.8	-1.4	16.2	0.0	34.5	-6.3	0.6	0.7	11.6	0.4	78.7	0.9	7.8	1.2	52.5	-0.7
Slovak Republic	22.2	-3.3	35.1	-11.6	25.7	-11.1	26.6	5.6	57.6	19.8	0.7	0.6	16.1	-3.9	28.8	2.8	3.4	-2.5	58.4	23.6
Spain	15.7	-6.4	52.7	5.5	43.3	14.9	17.9	-22.0	17.9	-28.9	0.6	0.8	12.3	-5.6	70.4	1.4	7.5	-2.0	52.5	-4.4
Sweden	17.4	-0.3	56.0	4.8	44.0	3.7	21.3	0.1	4.0	-9.4	0.2	0.4	8.6	-2.9	28.3	2.2	1.6	-1.4	57.1	6.7
Switzerland	17.4	-0.3	68.6	2.3	63.3	0.1	7.7	3.1	..	..	..	..	9.1	-1.8	57.6	2.1	6.3	-1.2	28.9	3.2
Turkey	25.5	-6.5	37.9	-10.6	30.8	-11.1	18.7	5.2	32.9	-10.2	0.9	0.9	42.2	8.5	53.7	-10.8	16.2	-3.7	26.5	2.7
United Kingdom	17.8	0.3	66.6	-3.9	57.3	-2.9	13.9	-0.7	14.5	-10.6	0.6	0.6	13.0	..	55.9	-0.7	5.7	..	35.4	..

Table 1.A1.1. **The situation of youth in the labour market, 1996 and 2006 (cont.)**

Population share (15-24)		Labour force participation rates		Employment rates		Unemployment rates		Incidence of long-term unemployment		Relative to adult (25-54) incidence of long-term unemployment		NEET rates		Low-skilled NEET		School drop-out rates of teenagers (15-19)		School enrolment rates (15-24)		
2006	1996-2006	2006	1996-2006	2006	1996-2006	2006	1996-2006	2006	1996-2006			2005	1996-2005 ^a	2005	1996-2005 ^b	2005	1996-2005 ^c	2005	1995-2005 ^d	
%	Percentage change	%	Percentage change	%	Percentage change	%	Percentage change	%	Percentage change	2006	1996	%	Percentage change	%	Percentage change	%	Percentage change	%	Percentage change	
United States	19.1	0.0	60.6	-4.9	54.2	-3.4	10.5	-1.5	6.3	1.0	0.6	0.5	10.8	-1.4	35.0	0.4	2.9	-1.3	39.6	4.2
EU15	19.1	-1.5	47.9	0.3	40.2	2.4	16.1	-4.6	27.0	-13.2	0.6	0.8	11.5	-0.6	58.1	1.3	5.3	-0.5	48.9	0.5
OECD	21.7	-2.0	49.5	-2.7	43.3	-1.6	12.5	-1.5	19.6	-5.2	0.5	0.7	15.6	-0.3	57.3	-0.2	7.0	-1.8	42.2	2.6

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.. Data not available.

a) 1997 for the Netherlands; 1998 for Italy; 1999 for Germany and Ireland; and 2004 for Mexico.

b) 1997 for Australia, Japan and the Netherlands; 1998 for Italy; 1999 for Germany, Iceland, Ireland and Luxembourg; 2000 for the United Kingdom; and 2004 for Mexico.

c) 1997 for Australia; 1998 for Italy; 1999 for Germany and Ireland; and 2004 for Mexico.

d) 1997 for the Netherlands; 1998 for Japan; 1999 for Greece and Italy; 2000 for the United Kingdom; and 2004 for Mexico.

Source: OECD Labour Force Statistics and Education Databases.

Table 1.A1.2. **Employment and earnings of young workers compared to those of adult workers, 1996 and 2006**

	Incidence of part-time		Relative to adult (25-54) incidence of part-time		Incidence of temporary employment		Relative to adult (25-54) incidence of temporary employment		Youth (20-24) earnings relative to adult earnings		Youth (15-24) earnings relative to adult earnings		Youth (15-24) earnings relative to adult earnings in 2004			Youth earnings by level of education relative to those with upper secondary education (middle qualified) ^a			
	2006	1996-2006	2006	1996	2006	1996-2006	2006	1996	2006	1996	2006	1996	Low qualified	Middle qualified	Highly qualified	Low qualified		Highly qualified	
	%	Percentage change			%	Percentage change										2004	1997	2004	1997
																	2004	1997	2004	1997
Australia	43.1	4.2	1.9	1.9	4.5	0.0	0.8	1.0	0.73	0.74	0.66	0.68	0.48	0.53	0.56	0.70	0.69	1.42	1.33
Austria	11.8	6.5	0.7	0.5	34.7	15.4	7.6	4.8	0.67	..	..	..	..	..	..	..	..	..	..
Belgium	18.7	4.0	1.0	1.0	30.5	9.3	4.4	4.8	..	..	..	..	0.80	0.82	0.72	0.87	..	1.14	..
Canada	44.1	-1.5	3.8	3.5	29.2	4.1	3.1	2.9	0.64	0.62	0.60	0.59	0.28	0.32	0.34	0.70	0.65	1.48	1.41
Czech Republic	3.0	0.4	1.3	1.2	18.9	3.5	3.2	4.4	..	0.82	..	0.79	0.91	0.80	0.50	0.84	0.84	1.14	1.19
Denmark	55.1	13.4	5.5	4.1	24.8	-5.9	3.4	4.3	0.65	0.72	0.64	0.71	0.25	0.45	0.31	0.46	0.56	0.86	0.75
Finland	31.8	7.5	4.9	4.1	44.2	-10.2	3.2	3.7	0.68	0.70	0.68	0.69	0.19	0.42	0.45	0.43	0.56	1.54	1.36
France	17.1	-2.7	1.4	1.6	46.9	-0.3	4.8	5.0	..	0.64	..	..	0.62	0.66	0.55	0.81	0.80	1.20	1.18
Germany	18.0	10.6	0.8	0.5	56.8	11.9	6.5	6.7	0.61	0.62	0.61	0.62	0.30	0.51	0.30	0.51	0.49	0.91	0.51
Greece	11.8	3.8	1.7	1.1	27.3	2.3	2.5	2.7	..	..	..	..	..	..	..	..	..	..	..
Hungary	2.8	1.1	1.4	0.8	16.8	4.7	2.8	2.3	..	0.69	..	0.67	0.88	0.73	0.53	0.89	0.85	1.54	1.34
Iceland	35.6	-3.9	3.3	2.3	..	..	..	3.2	..	..	..	..	..	..	..	..	..	..	..
Ireland	23.1	9.3	1.3	1.0	11.9	-5.4	5.2	2.4	0.67	0.61	0.63	0.59	0.50	0.46	0.42	0.84	0.78	1.31	1.26
Italy	14.9	7.1	1.0	0.7	40.3	21.6	3.6	3.1	..	..	..	..	0.58	0.50	1.65	0.94	0.66	4.92	1.25
Japan	31.1	8.5	1.6	1.2	27.9	10.5	2.6	2.1	0.60	0.62	0.58	0.60	..	..	..	..	..	..	..
Korea	14.9	9.5	2.3	1.6	..	..	..	..	0.58	0.63	0.58	0.61	0.55	0.52	0.40	0.75	0.90	1.05	1.03
Luxembourg	4.9	0.3	0.4	0.4	29.3	18.4	8.2	6.8	..	..	..	..	0.69	0.59	0.54	0.92	..	1.31	..
Mexico	17.6	1.5	1.3	1.2	..	..	..	1.5	..	..	..	..	..	..	..	..	..	..	..
Netherlands	59.9	13.1	2.1	1.9	43.4	13.1	3.9	3.7	..	0.56	..	0.53	0.32	0.50	0.51	0.55	0.78	1.52	0.91
New Zealand	36.0	3.5	2.2	1.8	..	..	..	..	0.75	0.75	..	..	0.57	0.52	0.56	0.83	0.63	1.40	0.91
Norway	48.8	8.4	3.3	2.3	28.7	-10.6	3.6	4.0	..	..	0.73	..	0.21	0.38	0.28	0.48	0.4	0.98	0.84
Poland	16.3	0.0	1.9	1.4	67.3	..	2.9	..	0.63	0.71	0.62	0.70	0.76	0.65	0.48	0.92	..	1.18	..
Portugal	7.1	1.4	1.4	0.7	48.3	19.7	2.8	3.6	..	..	..	..	..	..	..	..	..	..	..
Slovak Republic	3.2	2.2	1.6	0.6	14.3	5.9	4.1	3.0	..	..	..	..	..	..	..	..	..	..	..
Spain	19.6	7.0	1.9	1.9	66.6	-8.9	2.1	2.7	0.61	..	..	..	0.75	0.64	0.57	1.00	..	1.16	..
Sweden	36.2	0.0	3.9	2.7	58.4	10.0	4.6	4.2	0.68	0.73	..	..	0.18	0.47	0.26	0.32	0.29	0.69	0.58
Switzerland	18.7	2.5	0.8	0.7	51.5	6.8	7.8	8.0	..	..	0.58	0.59	0.66	0.71	0.59	0.71	0.72	1.17	..
Turkey	7.9	1.6	1.2	1.3	13.4	-12.1	1.1	1.5	..	..	..	..	..	..	..	..	..	..	..

Table 1.A1.2. **Employment and earnings of young workers compared to those of adult workers, 1996 and 2006 (cont.)**

	Incidence of part-time		Relative to adult (25-54) incidence of part-time		Incidence of temporary employment		Relative to adult (25-54) incidence of temporary employment		Youth (20-24) earnings relative to adult earnings		Youth (15-24) earnings relative to adult earnings			Youth earnings by level of education relative to those with upper secondary education (middle qualified) ^a					
	2006	1996-2006	2006	1996	2006	1996-2006	2006	1996	2006	1996	2006	1996	relative to adult earnings in 2004			Low qualified		Highly qualified	
	%	Percentage change			%	Percentage change							Low qualified	Middle qualified	Highly qualified	2004	1997	2004	1997
United Kingdom	34.9	6.6	1.8	1.4	12.0	-0.7	2.9	2.2	0.60	0.68	..	0.64	0.50	0.52	0.50	0.67	0.72	1.52	1.64
United States	33.8	-1.2	4.7	4.2	8.1	-1.1	2.3	2.5	0.57	0.58	0.55	0.6	0.32	0.41	0.38	0.50	0.42	1.57	1.70
EU15	25.5	7.7	1.6	1.3
OECD	28.3	5.7	2.3	1.7	35.4	7.9	3.1	2.9	0.64	0.67	0.62	0.64	0.52	0.55	0.52	0.71	0.65	1.41	1.12

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.. Data not available.

a) Data on earnings by educational attainment refer to 1996 in Finland and the Netherlands and 1998 in Italy and Korea. Data refer to 2001 in Australia, 2002 in Ireland, Italy, Luxembourg and the Netherlands and 2003 in Belgium, Canada, Denmark, Finland, Norway and Sweden.

Source: OECD Labour Force Statistics Database; OECD Distribution of Gross earnings of Full-time Workers and OECD Education Databases.

Table 1.A1.3. **Average duration of school-to-work transition by gender in selected European countries, 2006**

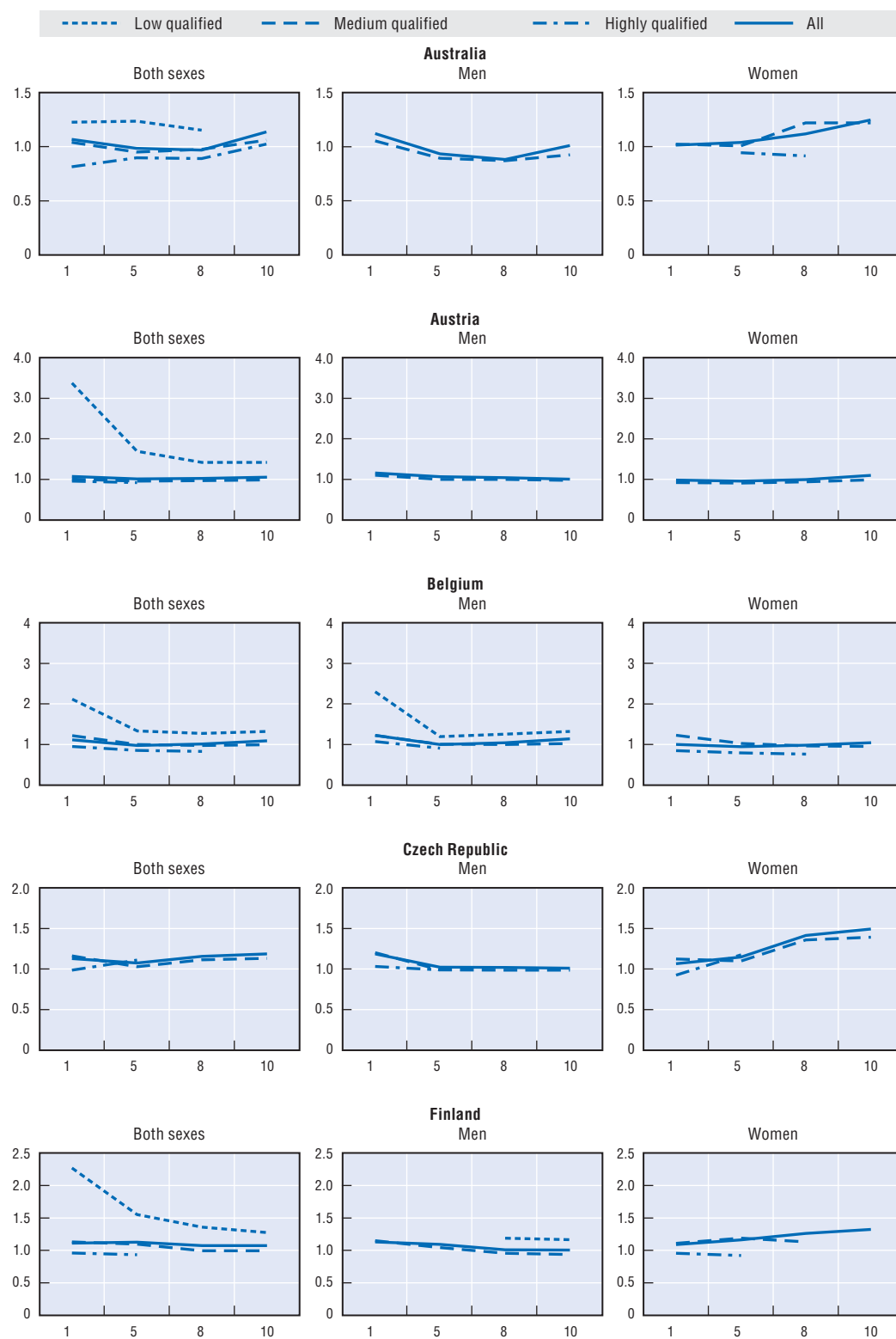
	School leaving age ^a			Age of entry into work ^b			Length of school-to-work transition ^c		
	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes
Austria	18.0	18.0	18.0	19.2	18.8	19.2	1.2	0.8	1.2
Belgium	18.2	20.4	18.7	19.9	21.5	20.4	1.8	1.1	1.7
Czech Republic	18.0	18.0	18.0	20.9	20.1	20.9	2.9	2.1	2.9
Denmark	20.0	21.1	20.1	21.9	21.8	21.4	1.9	0.7	1.3
Finland	18.0	19.7	18.0	21.0	20.5	20.6	3.0	0.8	2.6
France	18.9	20.2	19.4	20.7	21.3	20.9	1.8	1.1	1.5
Germany	19.0	19.2	19.1	19.8	19.3	19.1	0.8	0.0	0.0
Greece	17.1	18.6	17.4	20.4	20.6	20.6	3.3	2.0	3.2
Hungary	17.0	17.5	17.0	20.9	20.5	21.0	3.9	3.0	3.9
Iceland	17.0	19.8	18.5	19.5	20.6	20.9	2.5	0.9	2.4
Ireland	18.6	20.4	20.1	19.9	21.6	21.3	1.3	1.2	1.3
Italy	18.0	18.0	18.0	21.0	21.1	21.0	3.0	3.1	3.0
Luxembourg	19.1	19.8	19.4	20.3	20.7	20.5	1.2	0.9	1.1
Netherlands	18.7	19.7	19.0	20.1	20.3	20.1	1.4	0.6	1.0
Poland	18.0	22.3	18.7	20.8	22.6	20.7	2.7	0.4	2.0
Portugal	16.0	17.5	16.5	19.0	19.6	19.2	3.0	2.1	2.7
Slovak Republic	18.0	18.0	18.0	20.7	20.5	20.7	2.7	2.5	2.7
Spain	17.8	19.5	18.3	20.7	21.5	21.0	2.9	2.0	2.7
Sweden	18.3	18.5	18.3	20.4	19.5	20.3	2.1	1.0	2.0
Switzerland	19.0	18.6	19.0	19.7	19.2	19.7	0.7	0.6	0.7
United Kingdom	18.0	19.6	19.1	19.8	21.0	20.8	1.8	1.4	1.8
EU15 (unweighted)	18.2	19.3	18.6	20.3	20.6	20.4	2.0	1.3	1.8

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- a) Median age of young school leavers aged 15 to 29 years calculated as the median of the difference between current age and time since leaving initial education or apprenticeship.
- b) Median age of young school leavers aged 15 to 29 years finding a job calculated by adding the median age of young school leavers and the median time taken by youth to engage in current jobs since leaving school as defined in Table 1.1, Measure C.
- c) See Table 1.1, Measure C.

Source: OECD calculations based on the European Labour Force Survey (EULFS).

Figure 1.A1.1. **Speed of transition to work of youth^a by educational attainment and gender**
 2004-2006^b ratios of adult (30-49 years) to youth (15-29 years) employment rates, one, five, eight and ten years after leaving initial education




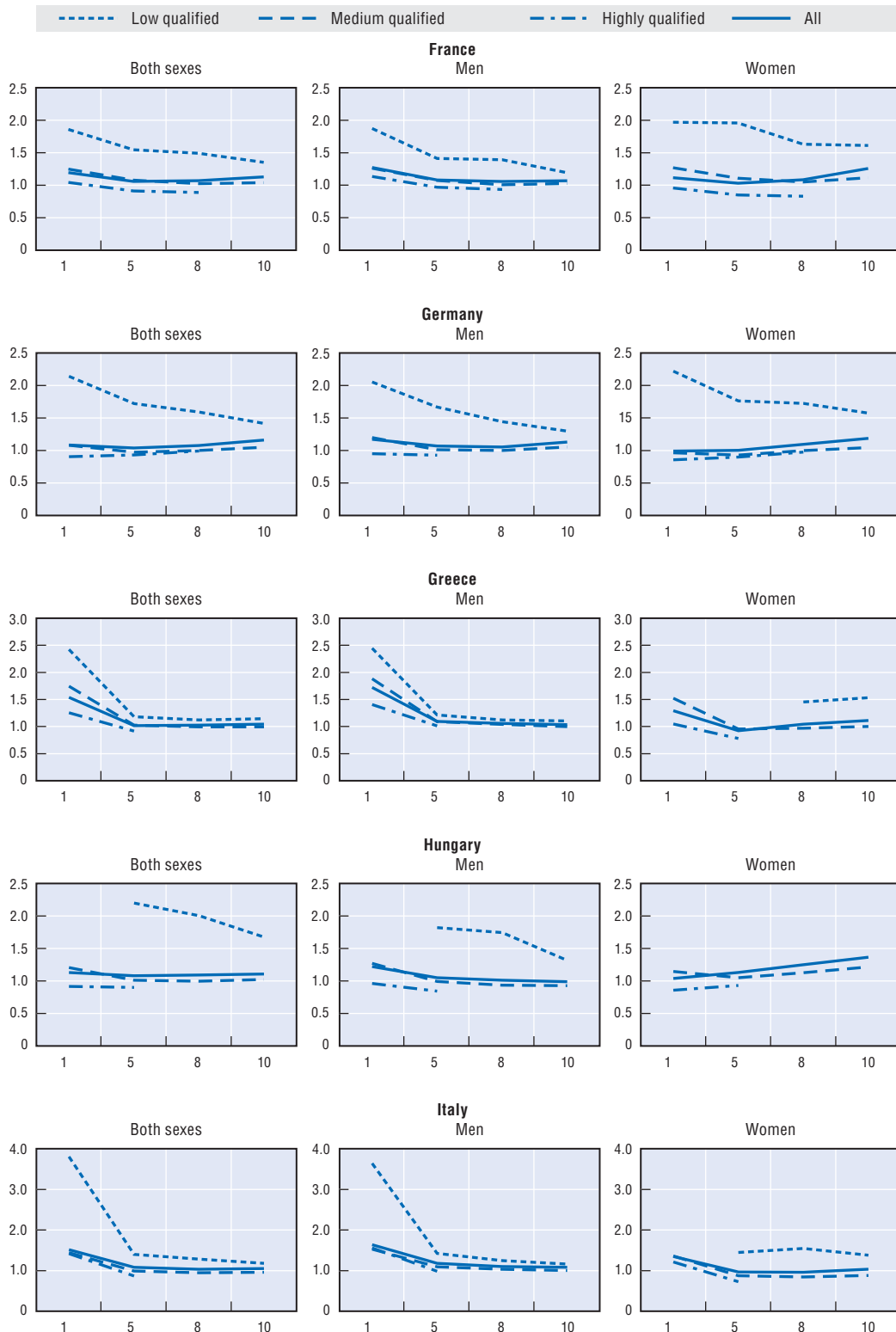
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Figure 1.A1.1. **Speed of transition to work of youth^a by educational attainment and gender**
(cont.)

2004-2006^b ratios of adult (30-49 years) to youth (15-29 years) employment rates, one, five, eight and ten years after leaving initial education




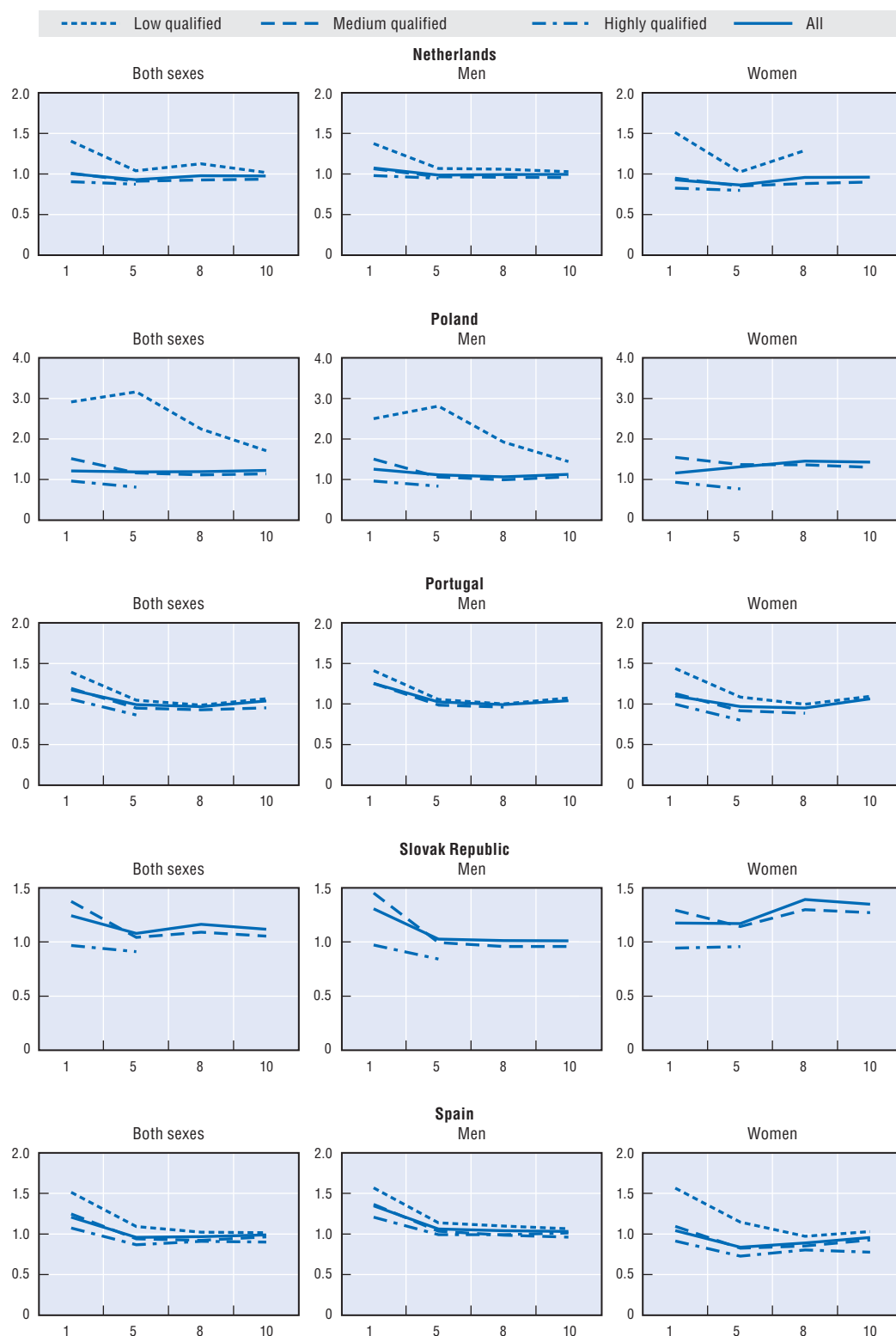
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Figure 1.A1.1. **Speed of transition to work of youth^a by educational attainment and gender**
(cont.)

2004-2006^b ratios of adult (30-49 years) to youth (15-29 years) employment rates, one, five, eight and ten years after leaving initial education




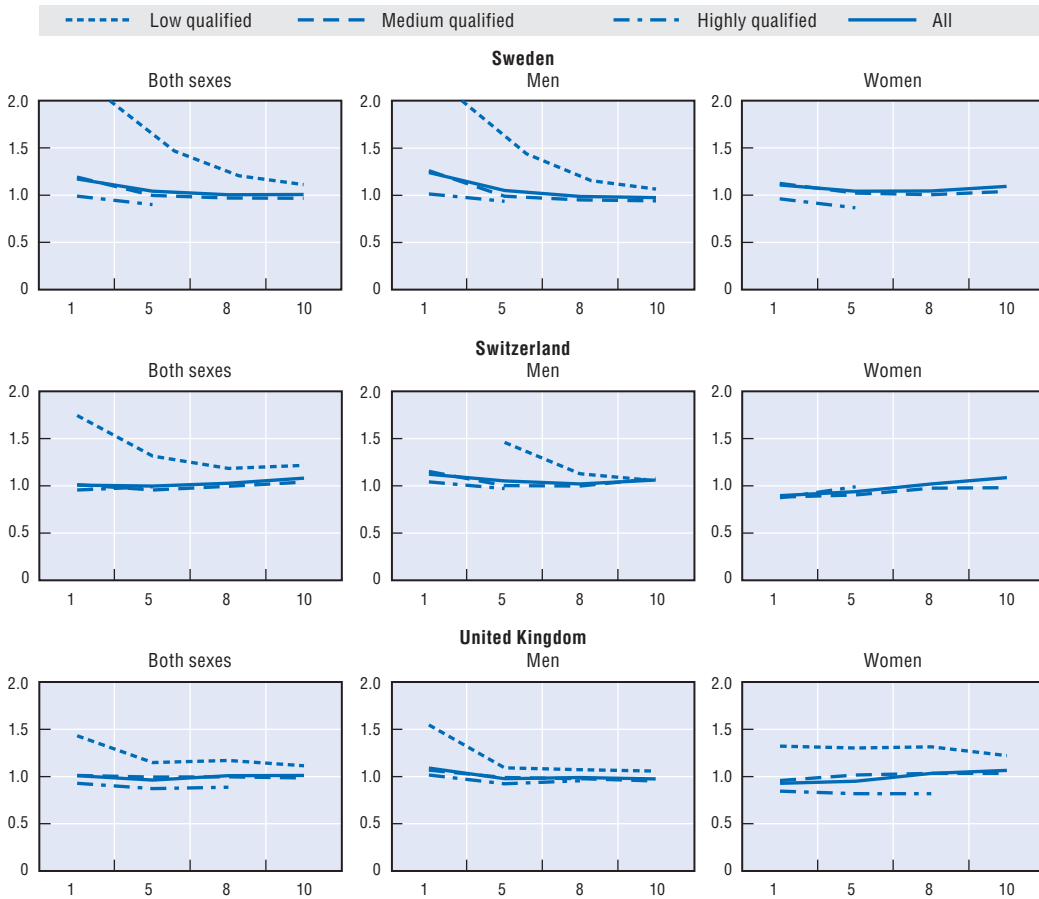

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Figure 1.A1.1. **Speed of transition to work of youth^a by educational attainment and gender**
(cont.)

2004-2006^b ratios of adult (30-49 years) to youth (15-29 years) employment rates, one, five, eight and ten years after leaving initial education



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a) Values not shown when insufficient observations are available.

b) Ratios calculated on the basis of pooled data for the years 2004 to 2006.

Source: OECD calculations based on the European Labour Force Survey (EULFS) for European countries and the Household Income and Labour Dynamics (HILDA) for Australia.

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