



Economic Policy Reforms

Going for Growth

2010



Economic Policy Reforms 2010

GOING FOR GROWTH



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

ISBN 978-92-64-07996-0 (print)
ISBN 978-92-64-07997-7 (PDF)
DOI 10.1787/growth-2010-en

Also available in French: *Réformes économiques : Objectif croissance 2010*

Corrigenda to OECD publications may be found on line at: www.oecd.org/publishing/corrigenda.

© OECD 2010

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

Going for Growth was launched in 2005 as a new form of structural surveillance complementing the OECD's long-standing country and sector-specific surveys. In line with the OECD's 1960 founding Convention, the aim is to help promote vigorous sustainable economic growth and improve the well-being of OECD citizens.

This surveillance is based on a systematic and in-depth analysis of structural policies and their outcomes across OECD members, relying on a set of internationally comparable and regularly updated indicators with a well-established link to performance. Using these indicators, alongside the expertise of OECD committees and staff, policy priorities and recommendations are derived for each member. From one issue to the next, Going for Growth follows up on these recommendations and priorities evolve, not least as a result of governments taking action on the identified policy priorities.

Underpinning this type of benchmarking is the observation that drawing lessons from mutual success and failure is a powerful avenue for progress. While allowance should be made for genuine differences in social preferences across OECD members, the uniqueness of national circumstances should not serve to justify inefficient policies.

In gauging performance, the focus is on GDP per capita, productivity and employment. As highlighted in the past and again in this issue, this leaves out some important dimensions of well-being. For instance, while a high GDP per capita tends to make for better health and education outcomes, it is not sufficient to ensure social cohesion, even if higher employment helps. However, for economic policy purposes, GDP per capita and employment measure well-being better than any other available indicators.

Going for Growth is the fruit of a joint effort across a large number of OECD Departments.

www.oecd.org/economics/goingforgrowth

Editorial

Shifting gears

OECD countries seem poised for a modest, uneasy, yet much-welcome recovery. This prospect was far from granted a year ago, and owes a great deal to the exceptional monetary, fiscal and financial policies that policymakers across the OECD and beyond have implemented over the past 18 months. However, the recession has left deep scars that will be visible for many years to come. The crisis has lowered living standards and employment on a durable basis, and at the same time, endangered the sustainability of public finances in many OECD countries. Yet there is still time to minimise these scars through appropriate policy action.

A more positive economic outlook means policymakers should increasingly phase out some of the exceptional policy initiatives that they took in a crisis context, while at the same time maintaining or reinforcing other measures, launching new reforms and resisting protectionist and Malthusian temptations in international trade and labour markets. Candidates for gradual removal include the exceptional government support to automotive and other industries, public funding for new infrastructure projects, and crisis-related increases in unemployment benefits where these were already fairly high. By contrast, areas where reform efforts could be strengthened include reductions in anti-competitive product market regulations to boost activity and job creation, increased use of price instruments in green growth policies, and active labour market policies, which will need to cope with the sizeable recent and prospective rise in unemployment better than they did in past downturns. It also makes sense to maintain recent tax support to private R&D and targeted labour tax cuts as long-term growth support measures, but only where these can be financed. Indeed restoring fiscal sustainability will be a daunting task for most OECD governments in the years ahead. Fulfilling this task, while protecting long-term growth, will require reaping efficiency gains on spending, especially in the areas of education and health, and avoiding large increases in harmful labour and capital taxes. These areas have been addressed in previous volumes of *Going for Growth*.

So far, so good. OECD countries have avoided the major structural policy mistakes of certain past crises, such as the protectionist spiral of the 1930s or the misguided labour market policies of the 1970s. In fact, the lead chapter of this year's edition of *Going for Growth* finds that in line with last year's recommendations, many of the measures taken in the areas of R&D, infrastructure, labour taxes and active labour market policies will help to contain the long term damage of the crisis for welfare.

There is no room for complacency, however. Our in-depth assessment of reform progress over the past five years across the OECD (Chapter 2) shows that reforms are more incremental than radical in nature and they infrequently address the thorniest issues. It is not at all clear that structural reform has accelerated since the start of the crisis, as policymakers have understandably focused on the most pressing macroeconomic issues. But with the nadir of the crisis now behind us,

the time has come to move away from crisis management mode towards speeding up the recovery and laying the ground for a more sustainable and fairer economic future. In this spirit, the country notes in this year's edition of *Going for Growth* (Chapter 3) highlight for each OECD country those policy priorities which we think would be most urgent to address at the current juncture.

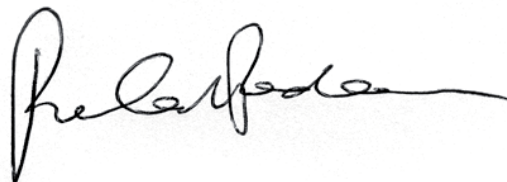
Structural reform in financial, product and labour markets has to be part of the cure. This is fairly obvious for financial market regulation, whose past deficiencies have been a major force behind this crisis and where the crisis response has left new challenges in the form of moral hazard and weak competition. It may seem less obvious at first glance for product and labour market reforms. Indeed, with this crisis having shaken our thinking on financial market regulation, one might naturally wonder whether longstanding policy prescriptions in these other areas should be revisited as well. The broad qualified answer has to be No. As dramatic as they have been, recent events have not radically altered the large income per capita gaps that prevail across the OECD, which a wealth of empirical evidence traces back to cross-country differences in education systems, labour market institutions, product market regulations or the design of tax and welfare systems, among a broad range of factors. In fact, the damage of the crisis on income levels and public budgets, and to some extent the need to address global current account imbalances, have if anything strengthened the case for reform. This of course does not imply that there is a single road to Rome, and indeed different countries can, and often do, opt for different but still efficient trade-offs between growth, risk and equity objectives.

Given the centrality of financial markets to the origins of the crisis, regulators across the OECD need to step up ongoing efforts to strengthen financial market regulation. On this front, our recent analysis summed up in Chapter 6 brings some good news: outside a few specific areas of regulation, there is no evidence of any conflict between banking sector stability and competition objectives. It should thus be possible to strengthen regulatory frameworks while preserving the benefits from competition, in terms of access to and price of financial services. This is a very encouraging message and a call for action, at a time when reform efforts may risk being watered down or even stalled.

With the crisis having revealed the disproportionate gains that high-income households have enjoyed in recent years, income distribution and equity issues, which were already a major policy concern, have moved to centre stage. One key dimension of equity within our societies is intergenerational social mobility, which promotes equal opportunity for individuals and enhances growth by putting all of society's human resources to their best use. OECD work points to major cross-country differences in this regard, and links them to education and income distribution policies (Chapter 5). In a number of OECD countries, there appears to be quite some room for enhancing intergenerational mobility at no cost or even at a benefit through education reform, including by increasing enrolment in early childhood education, avoiding early tracking of students and improving the social mix within schools.

Finally, this year's edition of *Going for Growth* looks for the first time at the long-term prospects and challenges for Brazil, China, India, Indonesia and South Africa to catch up to OECD living standards (Chapter 7). Taken together, the "BIICS" – with which the OECD has established a relationship of "enhanced engagement" – have been an important engine for world growth through this crisis, and they account for a growing share of global output. At the same time, notwithstanding major improvements in human capital that bode well for future productivity trends, our analysis highlights a number of policy areas where reform will be needed to sustain strong growth going forward. With some differences across the BIICS, challenges include moving towards more competition-friendly product market regulation, strengthening property rights and contract enforcement, deepening financial markets and adopting multi-faceted strategies to reduce the size of

informal sectors. Our Going for Growth exercise is an evolving process, and this chapter is a stepping stone towards mainstreaming the “enhanced engagement” countries in future editions, along with the incorporation of OECD accession countries.

A handwritten signature in black ink, appearing to read 'Pier Carlo Padoa-Schioppa', with a long horizontal flourish extending to the right.

Pier Carlo Padoa
Deputy Secretary-General and
Chief Economist, OECD

Table of Contents

Executive Summary	11
--------------------------------	----

Part I

Taking Stock of Structural Policies in OECD Countries

Chapter 1. Responding to the Crisis while Protecting Long-term Growth	17
Growth-enhancing structural policy responses to the crisis	21
Sustainable growth after the crisis	40
Notes	44
Bibliography	45
Chapter 2. Responding to the Going for Growth Policy Priorities: an Overview of Progress since 2005	49
Introduction	50
Notes	78
Bibliography	78
Annex 2.A1. Constructing Qualitative Indicators of Reform Action	79
Annex 2.A2. Incorporating Terms-of-Trade Gains and Losses into International Income Comparisons	82
Chapter 3. Country Notes	89
Chapter 4. Structural Policy Indicators	155

Part II

Thematic Studies

Chapter 5. A Family Affair: Intergenerational Social Mobility across OECD Countries ..	181
Intergenerational social mobility reflects equality of opportunities	182
Assessing intergenerational social mobility and its channels	184
Cross-country patterns in intergenerational social mobility	184
How do policies and institutions affect intergenerational social mobility?	190
Concluding remarks	196
Notes	196
Bibliography	197

Chapter 6. Getting it Right: Prudential Regulation and Competition in Banking	199
Introduction and main findings.	200
Prudential banking regulation	201
Prudential regulation and competition in banking.	201
Notes	206
Bibliography	207
Chapter 7. Going For Growth in Brazil, China, India, Indonesia and South Africa	209
Introduction	210
Overview of performance differences among the BIICS and vis-à-vis OECD countries	213
Applying the <i>Going for Growth</i> framework to the BIICS	223
Other policy reforms to speed up convergence.	236
Notes	241
Bibliography	242

This book has...



StatLinks 

**A service that delivers Excel® files
from the printed page!**

Look for the *StatLinks* at the bottom right-hand corner of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the <http://dx.doi.org> prefix. If you're reading the PDF e-book edition, and your PC is connected to the Internet, simply click on the link. You'll find *StatLinks* appearing in more OECD books.

The codes for country names and currencies used in this volume are those attributed to them by the International Organization for Standardization (ISO). These are listed below in alphabetical order by country code.

ISO country code	Country name	ISO currency code
AUS	Australia	AUD
AUT	Austria	EUR
BEL	Belgium	EUR
CAN	Canada	CAD
CHE	Switzerland	CHF
CZE	Czech Republic	CZK
DEU	Germany	EUR
DNK	Denmark	DKK
ESP	Spain	EUR
EU	European Union (the EU15 refers to members prior to the 2004 enlargement)	n.a.
FIN	Finland	EUR
FRA	France	EUR
GBR	United Kingdom	GBP
GRC	Greece	EUR
HUN	Hungary	HUF
IRL	Ireland	EUR
ISL	Iceland	ISK
ITA	Italy	EUR
JPN	Japan	JPY
KOR	Republic of Korea	KRW
LUX	Luxembourg	EUR
MEX	Mexico	MXN
NLD	Netherlands	EUR
NOR	Norway	NOK
NZL	New Zealand	NZD
POL	Poland	PLN
PRT	Portugal	EUR
SVK	Slovak Republic	SKK
SWE	Sweden	SEK
TUR	Turkey	TRL
USA	United States	USD

Executive Summary

The OECD countries experienced a major financial crisis that led to the deepest recession since the Great Depression. Governments and central banks swiftly took unprecedented steps to save the financial system, and a wide range of policy measures were undertaken that overall seem to have set the stage for a gradual recovery.

As the recovery takes hold, the swift actions that were taken in response to the crisis will need to be reassessed as to whether they help support sustainable growth going forward. In last year's report, principles were enounced for policies that could support demand in the short term, while at the same time help to ensure robust long-term growth. The lead chapter ("Responding to the Crisis", Chapter 1) examines in detail the actual policy responses in all OECD countries. Three main conclusions stand out:

- OECD countries have so far avoided the major structural policy mistakes of some past crises, such as imposing severe protectionist measures or highly damaging labour market policies like early retirement schemes. Other measures were taken that will help to contain the long-term damage of the crisis for material living standards and welfare, such as in the areas of R&D, infrastructure, labour taxes and active labour market policies.
- Going forward, significant risks remain, however. With unemployment likely to remain high for some time, governments will face pressures to maintain or introduce labour market measures which, if entrenched, could durably reduce labour utilisation. Likewise, depending on the magnitude and composition of adjustment in taxes and spending, the much-needed consolidation of public finances could affect long-term income levels.
- The urgency of structural reform has in general been reinforced by the crisis. This especially holds for the need to revamp financial regulation. Reforms are also needed in other areas, such as labour and product markets, where they could speed up the recovery, help consolidate public finances in a way that protects long-term growth and, in some cases, contribute to reducing current account imbalances.

Against the background of a strong need for reform in the wake of the crisis, the overview of reforms (Chapter 2) assesses the progress that each country has made over the past five years in a broad range of structural policy areas where government action could boost long-term growth. The country notes (Chapter 3) in this year's edition also highlight those priorities that seem most urgent to address during the recovery. Despite the depth and extended nature of the crisis, differences in per capita GDP have not changed much, and can to a large extent be explained by structural policy factors that are the basis on which structural policy priorities are identified in *Going for Growth*. The main reform

patterns that emerge from the stocktaking exercise carried out over the period 2005-2009 are the following:

- OECD countries have followed up on *Going for Growth* policy priorities since 2005. Two-thirds of them took some legislative action in at least one of their priority areas each year.
- At the same time, reforms have been typically incremental rather than radical in nature, and most have not been ambitious enough to warrant a removal of corresponding *Going for Growth* priorities. Furthermore, the pace of structural reform seems to have slowed recently.
- There is broad variation among the countries that have been most active in structural reform since 2005 in terms of geography, size and income levels, although a majority are small OECD economies.
- Experience with past reforms reviewed in this chapter confirms that they are easier to undertake where they entail only benefits and little or no short-term cost, and harder to carry out where they may hurt the short-term interests of specific groups, such as incumbent investors, farmers or labour market “insiders”.

This issue of *Going for Growth* also contains special topical chapters on intergenerational social mobility, prudential regulation and competition in banking, as well as an application of the *Going for Growth* methodology to Brazil, China, India, Indonesia and South Africa.

The chapter on intergenerational social mobility (“A Family Affair”, Chapter 5) examines how policy reforms can remove obstacles to social mobility and thereby promote equality of opportunities across individuals. Such reforms can both improve equity and enhance economic growth by facilitating the allocation of human resources to their best use. The following main conclusions emerge from the analysis of recent cross-country patterns in intergenerational social mobility and their links to public policies:

- Parental or socio-economic background influences descendants’ educational, earnings and wage outcomes in practically all countries for which evidence is available, but cross-country differences are wide. Mobility in earnings across pairs of fathers and sons is particularly low in France, Italy, the United Kingdom, and the United States, while mobility is higher in the Nordic countries, Australia and Canada.
- The substantial wage premium associated with growing up in a better-educated family, and the corresponding penalty from growing up in a less-educated family, also vary across European OECD countries. They are particularly large in Southern European countries as well as in the United Kingdom.
- The influence of parental socio-economic status on students’ achievement in secondary education is particularly strong in Belgium, France and the United States, while it is weaker in some Nordic countries, as well as in Canada and Korea.
- Inequalities in secondary education are likely to translate into inequalities in tertiary education and subsequent wage inequality.

Education policies, such as promoting early childhood education and social mixity in schools, or avoiding early tracking of students found to play a key role in explaining observed differences in intergenerational social mobility across countries. Redistributive and income support policies are also associated with greater intergenerational social mobility.

The chapter on prudential regulation and competition in banking (“Getting it Right”, Chapter 6) explores the existence of possible tradeoffs between stability and competition in the financial sector. The recent financial crisis has illustrated the importance of banking sector stability, while potential gains from competition are well established. In the current proposals and actions to strengthen prudential regulation, attention needs to be paid not only to stability but also to preserving the well-established benefits from financial market competition. The main findings are as follows:

- Relationships between the indicators of prudential regulation and summary measures of competition in banking do not point to prudential regulation as having adverse effects on the strength of competition. There may thus be no general trade-off between financial sector stability and competition objectives.
- Some areas of prudential regulation, most notably the strength of the banking supervisor, even appear to have been associated with greater competition in banking, possibly because strong supervision helps to level the playing field across all competitors.
- Only in a few specific areas, such as entry and ownership restrictions, do measures to strengthen prudential regulation appear to weaken competition.
- The effect of prudential regulations on competition in banking seems to depend on the strength of supervision. For example, it seems that strong supervisors mitigate the anti-competitive effects of stringent entry and ownership regulations.

A final chapter (Chapter 7) applies the OECD’s *Going for Growth* framework to Brazil, China, India, Indonesia, and South Africa – collectively referred to here as the “BIICS” – which are the largest economies in their respective regions. The focus of the chapter is on how to achieve or sustain high growth rates and thereby ensure a catch-up in living standards relative to the OECD area over the long term. The analysis in the Chapter suggests a number of common areas for ongoing reform across the BIICS:

- Rapid improvements in access to education have resulted in secondary school attainment rates that are similar to OECD countries for younger cohorts (though less so for India), which bodes well for sustained productivity growth over the coming decades. In contrast, most aspects of product market regulation are less conducive to competition in the BIICS compared with the upper half of OECD countries.
- The persistence of large informal sectors in most of the BIICS and extremely low labour utilisation in South Africa justifies a multifaceted strategy with emphasis on facilitating formal sector employment. Important policy reforms in this regard include enhancing human capital and labour market flexibility, simplifying the tax system and reducing burdensome product market regulation.
- Property rights and legal institutions could be strengthened in the BIICS, especially in China and Indonesia. There is also considerable room for strengthening the framework for policy enforcement in these two countries as well as in Brazil and Indonesia.
- Financial markets are typically shallower in the BIICS than in the upper half of OECD countries, implying low levels of financial inclusion and a more limited role for financial intermediation. Policies directed at financial deepening, including improved regulation, could boost firm size, capital accumulation and productivity.

The application of the *Going for Growth* framework to the BIICS is more difficult than for OECD countries since the full range of policy and performance indicators are currently not

available across all of these countries. In addition, with their extensive differences *vis-à-vis* some of the OECD economies, the BIICS's incorporation into *Going for Growth* increases the heterogeneity of country coverage. Nevertheless, the exercise illustrates the flexibility and robustness of the *Going for Growth* framework, that will be refined as part of the full integration of new countries into the exercise in subsequent years.

PART I

Taking Stock of Structural Policies in OECD Countries

PART I

Chapter 1

Responding to the Crisis while Protecting Long-term Growth

OECD countries have taken a wide range of measures in response to the crisis, notably in the areas of infrastructure investment, taxes, the labour market, regulatory reforms and trade policy. This chapter assesses the expected effects of these measures on long-run income levels, and examines structural policy challenges to deliver strong and sustainable growth going forward. The main conclusions are that OECD countries have so far avoided major mistakes – in particular concerning trade and labour market policies – but some risks remain. The crisis has in general reinforced the need for structural reforms. These reforms could help to speed up the ongoing recovery, strengthen public finances while protecting long-term growth and, in some cases, contribute to the resolution of global current account imbalances.

The OECD experienced a major financial crisis that led to the deepest recession since the Great Depression. GDP fell by four percentage points during 2009, industrial production and global trade shrank drastically before starting to recover from depressed levels in the second half of the year, and unemployment has risen into double digits in many OECD countries. Fortunately, governments and central banks swiftly took unprecedented steps to save the financial system, and thus avoid a complete economic collapse as in the 1930s. In addition, most governments adopted major fiscal stimulus packages, and the operation of automatic stabilisers also offered support. A wide range of other policy measures were undertaken that overall seem to have set the stage for a gradual recovery.

Although the worst may have been avoided, past experience with financial crises indicates that GDP and income levels are unlikely to return any time soon to their initially projected path. Recent OECD estimates put the permanent GDP loss at about three percentage points on average across the OECD, because of a long-lasting elevation of risk premia that will raise the cost of capital, as well as persistently higher structural unemployment (OECD, 2009b). There is a considerable amount of country-specific heterogeneity, mostly on the unemployment side (see Box 1.1), as well as large

Box 1.1. The effect of the crisis on potential output over the long term

Recent OECD analysis estimates that even as economies eventually recover, the crisis could well reduce medium-term potential output by about 3% in the OECD area compared with levels that would have prevailed otherwise, with much of the reduction occurring already by 2010 (see OECD, 2009b). As shown in the table below, there is a large cross-country variation in the expected impact of the crisis on potential output, reflecting partly differences in the size of the shock as well as structural policies. While the crisis will leave OECD countries poorer than they would otherwise have been, *growth* may not be affected by the crisis in the long term. It is nevertheless expected to slow (from the 2-2¼ per cent per annum achieved over the seven years preceding the crisis to around 1¾ per cent per annum on average in the long term) owing to unrelated reasons, not least slower growth in potential employment due to ageing populations.

Overall, two-thirds of the OECD-wide decrease in potential output is projected to come from a permanently higher cost of capital with the remainder coming from lower potential employment. Sharp falls in investment and higher capital costs – reflecting in part a permanent return to the higher levels of risk aversion that prevailed before the credit boom of the 2000s – have led to weak or negative growth in capital services in many countries. Among the G7 countries, growth in capital services over 2009-10 period is, for instance, about 2-3 percentage points per annum less than the average post-2000 growth rate.

Long-term unemployment and its associated “hysteresis” effects are expected to lower potential employment, particularly in European countries where response of long-term unemployment to poor economic conditions has traditionally been larger than in most other OECD regions. The expected decrease, based on historical relationships is, however,

Box 1.1. The effect of the crisis on potential output over the long term (cont.)**Steady-state effects of the crisis on potential output¹**

Countries	Employment effect	Cost of capital effect	Total effect of the crisis
Australia	-0.5	-2.1	-2.6
Austria	-0.9	-1.7	-2.6
Belgium	-1.8	-1.9	-3.7
Canada	-0.5	-1.9	-2.4
Denmark	-0.7	-2.0	-2.7
Finland	-0.8	-1.9	-2.8
France	-0.9	-1.9	-2.8
Germany	-1.7	-2.2	-3.9
Greece	-1.0	-2.6	-3.6
Ireland ²	-9.8	-2.0	-11.8
Italy	-1.9	-2.1	-4.1
Japan	-0.4	-1.7	-2.1
Netherlands	-1.8	-2.0	-3.7
New Zealand	0.0	-2.4	-2.4
Poland	-2.0	-2.5	-4.5
Portugal	-1.2	-1.4	-2.7
Spain ²	-8.4	-2.1	-10.6
Sweden	-1.1	-1.9	-3.0
United Kingdom	-1.1	-1.8	-2.9
United States	-0.4	-2.0	-2.4
Simple average	-1.8	-2.0	-3.9
Weighted average	-1.1	-2.0	-3.1

1. The effects of the crisis on potential output are calculated through two distinct channels (see OECD, 2009b for further details): i) a fall in potential employment, which is mainly due to a rise in structural unemployment as a result of hysteresis-type effects; ii) the negative effect of a permanently higher cost of capital through higher risk *prima* on the long-term capital-labour ratio and thereby on productivity. The calculation of the effect of lower potential employment on potential output includes a “scaling” effect as other factors of production (capital) are reduced by the same proportion, so that an x% fall in potential employment also reduces capital inputs – and thereby potential output – by x%. Some OECD countries are excluded from the table as a full breakdown of the components of potential output is lacking, usually because data for capital services are not available.
2. For Ireland and Spain, the negative effect of the crisis on potential employment includes a substantial reduction in the labour force mainly resulting from a reversal of net immigration flows.

Source: 2009 OECD estimates.

surrounded by considerable uncertainty: it may be overestimated, as many countries have implemented important labour and product market reforms in the recent past that may belie historical relationships, but it could also be higher given the size of the shock. For Ireland and Spain, there is an additional negative impact on potential employment from a reduction in the labour force mainly due to a reversal of net immigration flows.

In addition, impacts on potential output via total factor productivity (TFP) and labour participation can also affect potential output, although they may be partially offsetting since both participation rates and total factor productivity are affected by opposing forces during downturns.^{*} The overall effect of the crisis is therefore very uncertain, and the final impact on output will notably depend on structural policy responses.

* The long-term unemployed may cease actively searching for employment due to discouragement; conversely a loss of family income may induce those previously outside the labour force to seek employment. Likewise, productivity may rise in the aftermath of recessions as a result of the shutdown of the least efficient activities, of a reallocation of resources towards more productive uses, or because job losers may improve their human capital by seeking further education or training. It may also decline because of a loss of skills of long-term unemployed or a cut in R&D expenditures that could prematurely terminate promising research or cause a loss of project-specific human capital.

uncertainties regarding the estimates, particularly insofar as the response to the crisis has included a range of structural policy measures that could either amplify or mitigate expected long-term output losses.

Against this unprecedented cyclical background, which affected different countries to varying degrees, it is important to emphasise that the pre-existing differences in per capita GDP changed only little and that the differences remain very large. For instance, the average GDP per capita for the lower half of OECD countries is 37% below that of the average of the upper half (see Figure 2.1 in the Chapter 2). And for some countries, the gaps are much larger – around 60% for the five lowest-income OECD countries. Much of these differences in income can be explained by structural policy factors that have been explored in past OECD studies and previous editions of this annual benchmarking report. Those factors are the basis on which structural policy priorities are identified in *Going for Growth*. As a consequence, despite the seriousness of the crisis, most of the policy priorities previously identified in the *Going for Growth* exercise remain highly relevant. The relevance of the structural policy priorities in the context of large adverse economic shocks is further discussed in Box 1.2 of this chapter, as well as in the introduction to the country notes featured in Chapter 3.

Nevertheless, the crisis has deeply affected policy thinking in a range of areas, two of which are especially important in the context of *Going for Growth*: i) the role that regulation plays in financial markets, which has long been identified as a missing area of coverage in this exercise, but has not been fully explored so far for lack of data and empirical analysis;¹ and, ii) the issue of whether the effects of the structural reforms advocated in *Going for Growth* – and hence, their importance – may vary under the new economic environment created by the crisis.

As the recovery takes hold, the swift actions that were taken in response to the crisis will need to be reassessed as to whether they help support sustainable growth going forward. In last year's report, principles were enounced for policies that could give support to demand in the short term, while at the same time help to ensure sustainable long-term growth. This chapter examines the actual policy responses. Three main conclusions stand out:

- OECD countries have so far avoided the major structural policy mistakes of some past crises, such as the protectionist response of the 1930s or the Malthusian labour market policies of the 1970s. Many of the measures taken to stimulate R&D, boost infrastructure spending, lower the tax burden on low-income earners, scale up and strengthen active labour market policies and promote green growth, will help to contain the long-term damage of the crisis for material living standards and welfare.
- Going forward, some risks remain, however. With unemployment likely to remain high for some time, governments will face pressures to maintain or introduce labour market measures which, if entrenched, could permanently reduce labour utilisation. Likewise, depending on the magnitude and composition of adjustment in taxes and spending, the much-needed consolidation of public finances could affect long-term income levels.
- The urgency of structural reform has in general been reinforced by the crisis. This especially holds for the need to revamp financial regulation, which will require international co-ordination. But reforms are also needed in other areas where they could speed up the recovery, help consolidate public finances in a way that protects long-term growth and, in some cases, contribute to reduce current account imbalances. Such

reforms include, for instance, relaxing anti-competitive regulations in product markets, enhancing the efficiency of health and education spending, strengthening the job-search incentives and skills of the long-term unemployed through active labour market policies and unemployment benefit system reform, and reducing access to *de facto* early retirement pathways.

Last year, action in four broad policies was suggested, for which follow-up is reviewed: infrastructure investment, tax reforms, active labour market policies and regulatory reforms. Priorities for revamping the financial market regulation that contributed to the financial crisis are taken up first. Governments also took action in a number of other policy areas which either seems to have been inappropriate (*e.g.* trade barriers), or may have provided short-term economic stability but will need to be unwound going forward as the economy recovers (*e.g.* state ownership in banks). These policies are reviewed in the first half of the chapter.² The second half discusses the potential impact of the policies, the looming challenge of how to return to fiscal sustainability in a way that does not harm long-run growth and living standards, as well as the extent to which structural reforms could help address current account imbalances going forward.

Growth-enhancing structural policy responses to the crisis

Financial market measures

Financial systems provide an important role in facilitating the efficient allocation of capital, monitoring investments, diversifying risk, mobilising savings, and easing market transactions. To this extent, they promote better economic performance. However, with the growing complexity and sophistication of financial markets, the appropriate set of competitive regulations is not easy to identify. The recent financial crisis has revealed major weaknesses in the operation of financial regulatory and supervisory frameworks including ones that contributed to the build-up of leverage and risk appetite, and ultimately contributed to the recession (OECD, 2009a).

Emergency interventions were necessary and appropriate to stem the spread of systemic damage during the crisis, and to help restore normal functioning of financial markets. Virtually all OECD countries engaged in expansions of deposit insurance, guarantees of bank debt and injections of capital (Table 1.1). The gross value of this financial intervention amounted to over 50% of GDP for four countries (Ireland, Sweden, United Kingdom and the United States) and more than 10% of GDP for about half of the OECD countries (OECD, 2009b). While some of these measures do not necessarily imply actual spending and the net value of this intervention has been low so far, the long-term cost can be substantial for many countries. Some countries went so far as to *de facto* nationalise some banking activities, including Iceland,³ Ireland, the Netherlands, Portugal, the United Kingdom, and the United States. Moves to purchase and/or ring-fence toxic assets were undertaken or announced by Germany, Ireland, Korea, Switzerland, the United Kingdom and the United States. The rapid response to financial market distress has helped minimise the costs of the crisis in terms of lost output, since delays could have resulted in further deterioration of asset quality and an even larger recession.

Yet such interventions have also come with downsides, since durable state direct involvement in financial markets could harm competition, distort pricing of risk and delay required re-structuring, and thereby reduce longer-term growth. Therefore, the elaboration of exit strategies and the clarification of the longer-term regulatory framework are

Table 1.1. **Financial market measures taken**

Country	Government financial support for the financial sector	Increase deposit insurance	Nationalised banking activities	Plan to purchase toxic assets	Ban or restrict short-selling
Australia	X	X			X
Austria	X	X			X
Belgium	X	X			X
Canada	X				X
Czech Republic					
Denmark		X			X
Finland		X			X
France	X	Already high			X
Germany	X	X		X	X
Greece	X	X			
Hungary	X	X			
Iceland		X	X		X
Ireland	X	X	X	X	
Italy	X	X			X
Japan	X				X
Korea	X			X	
Luxembourg	X	X			
Mexico					
Netherlands	X	X	X		X
New Zealand		X			
Norway	X	Already high			X
Poland	X	X			
Portugal	X	X	X		X
Slovak Republic		X			
Spain	X	X			X
Sweden	X	X			
Switzerland	X	X		X	
Turkey	X				
United Kingdom	X	X	X		X
United States	X	X	X	X	X

Source: OECD (2009), *Economic Outlook No. 86* and OECD (2009i).

essential, although implementation of certain elements will have to follow the restoration of the banking sector to health. Moreover, the removal of financial support to the sector and the implementation of better regulations should be co-ordinated across countries to ensure a smooth exit and minimise regulatory arbitrage.

While many decisions are still to be made, the contour of the coming regulatory landscape is emerging as a variety of prudential regulatory reform proposals that have been put forward to strengthen financial stability without *a priori* stifling competition, from national governments, the Financial Stability Board (FSB), the IMF, the BIS and the EC. The overall consensus of these plans focuses on a broad set of principles that are needed to ensure that the precursors to the recent crisis do not re-emerge. These measures include (see in particular FSB, 2009 and OECD, 2009i, 2009n):

- *Strengthening the global capital framework.* New rules are needed that require a step-up in the amount and quality of capital that the financial system as a whole needs to carry, so that banks holding minimum required capital levels will be more viable in a future crisis, and confidence in the system as a whole will be maintained. This includes revising the

Basel II capital framework to specify, on a cyclical basis, the type and level of capital that financial institutions are required to maintain, so that larger buffers are available to cushion downturns.⁴ Since holding capital is costly, some cross-country co-ordination will ultimately be needed at least for internationally active firms. In the short term however, the implementation of new stricter rules may have to be differentiated across countries to ensure a smooth provision of credit.

- *Making global liquidity more robust.* Just as a strong capital base is a necessary condition for banking system soundness, so too is a strong liquidity base. Banks' resilience to system-wide liquidity shocks needs to be significantly increased and management of this risk strengthened. At the international level, new minimum global liquidity coverage ratios set by the Basel Committee could be applied by supervisors to global banks to ensure that cross-border liquidity problems do not reappear.
- *Reducing moral hazard posed by systemically important institutions.* Special measures should be taken to strengthen requirements on firms that raise greater systemic risks which are therefore more susceptible to moral hazard. Institutions need to be mandated to internalise the impact of risk-taking behaviour such as maturity timing mismatches on the overall stability of the financial system, through the use of additional charges such as greater capital and liquidity requirements and higher deposit insurance premiums. A requirement that such institutions provide plans as to how their complex financial structures will be resolved in the event of default, as well as transparent procedures for an orderly wind-down of systemically important non-depositary financial institutions, would also mitigate systemic risks. Though difficult, outright limitations on firm size may also be used.
- *Expanding oversight of the financial system.* All systemically important activity should be subject to appropriate supervisory oversight and co-ordinated for internationally active firms. Initiatives to expand the perimeter of regulation need to be effectively and consistently implemented across all key jurisdictions. International co-operation is also helpful on issues such as cost sharing in the resolution of international banks' failures and the resolution of disputes.
- *Strengthening the robustness of the derivatives market.* Efforts need to be made to reduce systemic risks in the over-the-counter (OTC) derivatives market. These include strengthening capital requirements to reflect the risks of OTC derivatives, sharing information, and co-ordinating legal and standardisation efforts to move toward more centrally cleared contracts and collateralisation.
- *Strengthening accounting standards.* The International and US Financial Accounting Standards Boards have been considering approaches to improve and simplify financial instruments accounting, provisioning and impairment recognition, and off-balance sheet standards. These standards have not yet converged but they need to agree on simpler and more comparable rules that use a broad range of credit information, so as to recognise credit losses in loan portfolios at an earlier stage while mitigating pro-cyclicality of losses. This would also facilitate the development of comparable capital requirements across major jurisdictions.
- *Improving compensation practices.* Action should be taken to ensure that financial firms structure their compensation schemes in a way that does not incentivise excessive risk taking, including ensuring that the governance of compensation is effective, and that

payout schedules are in line with the time horizon of risks. Principles that have been issued by the FSB offer such guidelines.

Other forms of government intervention in financial markets, such as bans or restrictions on short-selling, have also been undertaken in about half of OECD countries. Where still in place, these measures need to be gradually withdrawn in order to allow for financial market's pricing mechanisms to work effectively, and resume their normal role in promoting efficient allocation of capital. Financing assistance such as broad credit guarantees to firms has also been introduced in a majority of OECD countries. Countries should re-evaluate such specialised lending measures as they exit from the crisis, starting at least with large firms which benefit most initially from the improvement in credit conditions. While such interventions may have been justifiable during the crisis given the very severe credit constraints that arose, they will need to be reviewed as credit conditions normalise and be scrapped unless they deal with previously unaddressed market failures.

Infrastructure measures

Last year's *Going for Growth* volume recommended introducing infrastructure projects that could be brought on stream quickly as a response to the crisis, and more broadly to improve the quality of existing capital structures, in areas that can enhance growth or welfare, such as education, health and "green" investments. Government expenditure on physical investment, much of which is carried out by local governments, has considerable potential to support short-term economic growth. Recent analysis suggests that short-run fiscal multipliers for investment are strong, possibly exceeding 1, and likely exceed those for most other types of fiscal stimuli (OECD, 2009a).

The impact on long-term growth is more uncertain, and depends on the appropriateness of the investment, which in turn depends on the amount of infrastructure already in place and the quality of the regulatory framework. In the past, the efficiency of infrastructure investment has varied widely. For example, for those OECD countries which had comparatively poorly developed energy and telecommunications networks in earlier periods, the efficiency impact in these areas has been high. Yet infrastructure provision levels are relatively high in nearly all OECD countries at present, meaning that there may be far fewer opportunities to obtain as large an impact as observed in the past (see *Going for Growth* 2009). Systematic cost-benefit analysis to screen projects, though time-consuming, helps deliver good returns and reduces the chance of waste. As well, countries with policies that support a competitive environment, bolstered by greater independence of regulators and transparent decision making, have been found to realise more efficient infrastructure investment.

Virtually all countries have increased infrastructure investment in the context of the crisis. As an indication, public investment in the typical OECD country has increased by about 1/3 per cent of GDP compared with its recent average (Table 1.2).⁵ These figures include infrastructure and other public investment introduced as a part of stimulus packages as well as what was introduced outside of packages. A few countries were however forced to substantially cut infrastructure investment because of the severity of the crisis and the resulting lack of fiscal space.

Several types of infrastructure measures were implemented by OECD countries (Table 1.3):

- Transportation infrastructure measures were introduced by virtually all countries. Such projects include high-speed rail links, airports, ports, waterways and major efforts to

Table 1.2. **Government investment as a share of GDP**

Country	Government investment as a share of GDP (%)					Gap from 2000-07 average (percentage points)			
	2000-07	2008	2009	2010	2011	2008	2009	2010	2011
Australia	2.4	2.7	2.9	3.3	3.4	0.4	0.5	1.0	1.1
Austria	1.2	1.1	1.2	1.2	1.2	-0.1	0.0	0.0	0.0
Belgium	1.7	1.7	1.8	1.8	1.9	0.0	0.1	0.1	0.2
Canada	2.5	3.3	3.9	4.0	3.9	0.7	1.3	1.5	1.4
Czech Republic	4.4	5.0	5.4	5.5	5.4	0.6	1.1	1.1	1.0
Denmark	1.8	1.8	2.2	2.4	2.3	0.0	0.4	0.6	0.5
Finland	2.6	2.6	2.8	2.7	2.8	-0.1	0.2	0.1	0.2
France	3.1	3.2	3.2	3.3	3.3	0.1	0.1	0.2	0.2
Germany	1.5	1.5	1.7	1.9	1.6	0.0	0.2	0.4	0.0
Greece	3.3	2.9	2.8	3.0	3.1	-0.4	-0.5	-0.3	-0.2
Hungary	..	..	..	..	..	..	..	..	..
Iceland	3.9	4.4	3.4	2.1	1.8	0.6	-0.5	-1.7	-2.1
Ireland	3.9	5.4	5.2	4.7	4.7	1.5	1.3	0.8	0.8
Italy	3.0	3.0	3.3	3.0	3.0	0.0	0.3	0.1	0.0
Japan	5.4	4.0	4.4	4.0	3.7	-1.4	-1.0	-1.4	-1.7
Korea	5.3	5.0	5.7	5.7	5.8	-0.3	0.4	0.4	0.5
Luxembourg	..	..	..	..	..	..	..	..	..
Mexico	..	..	..	..	..	..	..	..	..
Netherlands	3.3	3.5	3.8	3.9	3.7	0.1	0.5	0.6	0.4
New Zealand	4.5	4.7	5.5	6.3	6.4	0.2	0.9	1.7	1.9
Norway	2.8	3.1	3.5	3.7	3.7	0.2	0.7	0.9	0.9
Poland	..	..	..	..	..	..	..	..	..
Portugal	3.1	2.2	3.0	2.6	2.6	-1.0	-0.2	-0.5	-0.6
Slovak Republic	..	..	..	..	..	..	..	..	..
Spain	3.5	3.8	4.3	4.1	3.8	0.3	0.8	0.6	0.3
Sweden	2.7	3.1	3.5	3.6	3.6	0.3	0.8	0.9	0.8
Switzerland	2.3	1.9	2.1	2.1	2.0	-0.5	-0.3	-0.3	-0.3
Turkey	3.7	3.9	4.0	3.5	3.1	0.1	0.3	-0.2	-0.6
United Kingdom	1.5	2.5	3.1	3.2	3.1	1.0	1.6	1.7	1.6
United States	3.2	3.4	3.6	3.6	3.6	0.3	0.5	0.5	0.4
OECD	3.1	3.2	3.4	3.4	3.3	0.1	0.4	0.3	0.3

Source: OECD, *Economic Outlook 86 Database*.

improve road infrastructures (e.g. Australia, Canada, Czech Republic, Mexico, the Slovak Republic, Spain, Switzerland, the United States) or the quality of the public transport service (e.g. Italy). Most countries have relied on direct public investment, though a variety of other approaches has been taken, including the use of public-private partnerships and various types of regulatory incentives.

- More than half of countries have invested in telecom infrastructure, including improving access to broadband and other types of ICT infrastructure that have important synergies for R&D and innovation (especially Australia, Austria, Canada, Finland, France, Germany, Japan, Luxembourg, Portugal, the United Kingdom and the United States).
- A somewhat smaller but still substantial number of countries have invested in public utilities, notably energy and water, including Canada, Finland, France, Greece, Japan, Korea, New Zealand, Poland, Portugal, the Slovak Republic, Spain and the United States.

Beyond network infrastructure, almost two-thirds of OECD countries raised investment spending on education and health, in line with recommendations made in last

Table 1.3. **Infrastructure measures**

Country	Transport	Telecom	Energy	Water	Health	Education	Defense	Green investment ¹
Australia	X	X			X	X		X
Austria	X	X				X		
Belgium	X					X		X
Canada	X	X		X	X	X		X
Czech Republic	X							X
Denmark	X							X
Finland	X	X	X			X		X
France	X	X	X	X	X	X	X	X
Germany	X	X			X	X		X
Greece	X		X					
Hungary								
Iceland	----- General cut -----							
Ireland	----- General cut -----							
Italy	X	X						X
Japan	X	X	X	X	X	X	X	X
Korea	X		X	X	X	X	X	X
Luxembourg	X	X						
Mexico	X							
Netherlands	X				X	X		X
New Zealand	X		X			X		
Norway	X					X		X
Poland	X	X	X	X				X
Portugal		X	X			X		X
Slovak Republic	X	X	X					
Spain	X	X	X	X		X	X	X
Sweden	X					X		X
Switzerland	X							X
Turkey			X	X				
United Kingdom	X	X				X		X
United States	X	X	X	X	X			X

1. This column indicates whether the infrastructure investments announced in one or more of the seven sectors are intended to contribute to green growth.

Source: OECD (2009a), OECD (2009m), OECD (2009j), Responses to the European Commission questionnaire.

year's *Going for Growth*. Such investments have the potential to boost human capital, with large positive effects on long-term growth. In addition, investments in “green” infrastructure and technologies can also have positive effects on welfare (see Section 1.5), and complement tax-related measures that are discussed next.

Tax measures

The tax take has been reduced in many countries, with declines amounting to more than one percentage point of GDP in cyclically adjusted terms, including both the effects of specific tax measures and other unrelated factors such as the disappearance of the exceptional revenue buoyancy of the pre-crisis period (Table 1.4).⁶ There is a large degree of heterogeneity, however. Declines in cyclically adjusted tax receipts of more than 2½ per cent of potential GDP are estimated for 2008 to 2011 in Canada, France, Iceland, Ireland, Luxembourg, New Zealand, the Slovak Republic, Sweden and the United States, while Hungary, Italy, Korea, Japan and Portugal are expected to have higher tax revenues (as a share of potential GDP), although not all of these countries necessarily modified their tax policies.

Table 1.4. **Total tax revenue as a share of GDP, cyclically adjusted¹**

Country	Total tax revenue as a share of GDP (%)					Gap from 2000-07 (percentage points)			
	2000-07	2008	2009	2010	2011	2008	2009	2010	2011
Australia	30.8	30.2	28.5	28.1	28.4	-0.5	-2.3	-2.7	-2.3
Austria	44.6	44.1	43.3	43.4	43.1	-0.5	-1.4	-1.2	-1.5
Belgium	45.6	45.3	44.6	44.6	44.9	-0.3	-1.1	-1.0	-0.7
Canada	33.4	31.5	30.9	30.7	30.8	-1.9	-2.4	-2.7	-2.6
Czech Republic	35.7	35.8	35.4	35.6	35.8	0.1	-0.3	-0.1	0.1
Denmark	49.6	48.4	48.1	47.5	48.0	-1.3	-1.5	-2.1	-1.6
Finland	43.9	42.6	42.5	42.4	41.9	-1.3	-1.5	-1.6	-2.0
France	44.6	44.0	41.7	41.5	41.5	-0.7	-2.9	-3.1	-3.1
Germany	40.5	40.1	40.5	39.6	39.4	-0.4	0.0	-1.0	-1.1
Greece	34.1	34.6	33.2	34.4	34.4	0.5	-0.9	0.3	0.3
Hungary	38.0	40.0	41.1	40.9	40.2	2.0	3.1	2.8	2.2
Iceland	38.1	36.5	31.7	34.8	36.9	-1.6	-6.4	-3.3	-1.2
Ireland	31.2	30.1	27.6	28.8	29.2	-1.1	-3.6	-2.4	-2.0
Italy	41.1	42.5	42.6	42.8	42.5	1.4	1.5	1.7	1.3
Japan	27.6	28.6	28.0	27.9	28.1	1.0	0.4	0.2	0.4
Korea	24.4	26.6	25.4	25.2	25.3	2.2	1.0	0.7	0.9
Luxembourg	38.2	35.7	36.2	35.2	34.5	-2.5	-2.0	-3.1	-3.7
Mexico	..	..	..	..	..	..	..	..	..
Netherlands	38.4	38.9	37.2	38.5	38.7	0.5	-1.1	0.2	0.3
New Zealand	35.2	35.9	33.3	32.4	32.4	0.7	-1.9	-2.7	-2.8
Norway	46.1	44.7	42.9	43.8	45.0	-1.4	-3.1	-2.2	-1.0
Poland	33.0	34.2	31.9	30.7	30.0	1.2	-1.1	-2.3	-3.0
Portugal	35.6	37.5	36.5	36.7	36.6	1.9	1.0	1.1	1.1
Slovak Republic	31.8	29.2	29.0	28.3	28.2	-2.5	-2.8	-3.5	-3.6
Spain	35.4	33.7	33.1	35.6	35.9	-1.7	-2.3	0.3	0.5
Sweden	49.4	47.5	47.3	45.6	45.4	-1.9	-2.1	-3.8	-4.1
Switzerland	29.1	28.5	27.9	27.9	27.7	-0.7	-1.2	-1.2	-1.4
Turkey	..	..	..	..	..	..	..	..	..
United Kingdom	36.7	36.7	34.9	36.0	36.6	0.0	-1.8	-0.7	-0.1
United States	27.1	25.8	23.4	24.3	25.2	-1.3	-3.6	-2.8	-1.9
OECD	37.1	36.8	35.7	35.8	35.9	-0.4	-1.4	-1.3	-1.2

1. Total tax revenue includes direct taxes, indirect taxes, and social security contributions.

Source: OECD, *Economic Outlook 86 Database*.

Automatic fiscal stabilisers led to even larger declines in actual (non cyclically adjusted) tax receipts and provided further support to economic activity, especially in high-tax countries.

In last year's edition of *Going for Growth*, it was recommended that tax cuts focus on reducing the income and social security tax burden on low-income workers, as a way to both boost short-term spending – as this target group is more likely to spend rather than save additional net earnings – as well as lower the cost of labour and hence cushion employment levels. The extent of labour taxation can have substantial effects on labour supply and demand, especially in the long run. According to the conclusions of the OECD Jobs Strategy reassessment in 2006, a permanent one-percentage point reduction of the average tax burden on labour would increase the employment rate by about 0.4 percentage points in the typical country over the long run.⁷

Reflecting such considerations, tax measures in the dozen OECD countries that made significant use of tax cuts included reductions of the tax burden on low-income earners (Table 1.5). These include targeted tax measures, such as cuts in marginal income tax rates,

Table 1.5. Tax and R&D measures

Country	Income tax measures	Reductions in non-wage labour costs for new or continuing workers	Fiscal measures for low earners	Business taxes	Consumption tax decrease	Temporary consumption tax measure	General VAT rate change	Consumption tax measure for specific goods	Property tax measure	Green tax measure	R&D tax credits	Direct grants for private R&D	Other public R&D expenditures
Australia			X	X									
Austria	Cut of marginal rates		X	X	X	No	No	Yes			X	X	X
Belgium		X	X	X	X	Yes	No	Yes	X		X		
Canada	Cut of lowest marginal rate	X	X	X	X	No	Yes	No	X			X	
Czech Republic		X	X	X					X				X
Denmark	Cut of marginal rates		X		VAT base widening	No	Yes	No	X				
Finland	Cut of marginal rates	X	X	X	X	No	No	Yes			X	X	X
France			X	X	X	No	No	Yes	X		X	X	
Germany	Cut of lowest marg. rate	X	X	X	X	Yes	No	Yes	X				
Greece	Rise highest marg. rates		X	X	X	Yes	No	Yes			X		
Hungary	Lower band widening and rate cut	X	X	X	Rise	No	Yes	Yes	New tax				
Iceland	Expected		Perm rise incl. tax rate		Rise	No	No	Yes					
Ireland	Tax band widening		General rise in taxes	X	Rise	No	Yes	Yes			X		
Italy			Rise	X	X	Yes	No	Yes	Cut	X	X		
Japan		X	X	X		No	No	Yes	X	X	X	X	X
Korea	Cut of marginal rates		X	X	X	No	No	Yes	Cut	X	X		
Luxembourg	Indexation of tax brackets			X	X	Yes	No	Yes				X	
Mexico		X		X	X	Yes	No	Yes					
Netherlands				X	X	No	No	Yes			X		
New Zealand	Cut of marginal rates	X	X			No	No	Yes	X		Removal		
Norway				X							X	X	
Poland	Cut of marginal rates	X		X	Rise	No	No	Yes			X		
Portugal		X	X	X				Cut	X		X	X	
Slovak Republic	Allowance		X	X							X		
Spain	Tax credit	X	X	X	Rise announced				Cut	X	X		X
Sweden	Tax credit, allowance	X	X	X	X	No		No	X		X	X	X
Switzerland	Cut of marginal rates			X	X	No	Yes	No					
Turkey		X				Yes	No	Yes					
United Kingdom	Rise		X	X	X	Yes	Yes	Yes	X				
United States			X	X	X			Rise	X	X	X	X	X

Source: OECD (2009a), OECD (2009j), OECD (2009k), Responses to the European Commission questionnaire.

increases in exemption levels, and decreases in social security contributions on low-wage workers. Provided they are adequately financed and thereby sustainable, such measures should help boost both short and long-term employment. Countries that cut taxes but did not take such measures included Italy, Japan, Luxembourg, Mexico, Netherlands, Norway, and Turkey.

Aside from the level of taxes, changes in a country's tax composition might also affect long-run economic efficiency and growth. Recent work at the OECD suggests that corporate and labour taxes may be more damaging for economic efficiency than taxes on consumption and immovable property (Johansson *et al.*, 2008). So, measures taken in response to the crisis may also yield longer-term effects on growth insofar as they enhance the tax structure.

Virtually all countries undertook at least some action in the area of business or corporate taxation, generally reducing taxes, except in the case of Italy, which raised them. Tax cuts on business may have had little immediate impact, given the weak current profitability of most companies. However, they might be expected to enhance growth over the longer term.

About half of OECD countries cut their consumption taxes in the context of the crisis, a shift in tax composition which if announced as permanent may have relatively limited short-term stimulus effect, and may not be very beneficial to long-term growth insofar as it entails a shift towards other more distortive taxes (permanent consumption tax cuts have been announced in the cases of Austria, Finland, France, Korea, the Netherlands, Sweden and Switzerland and temporary ones, which may bring forward consumption and may thus be more cost-effective, in Belgium, Germany, Greece, Italy, Luxembourg, Mexico and the United Kingdom). Furthermore, about half of the countries that cut their VAT rates targeted specific sets of goods or services, an approach which may create distortions in the tax system, especially if this reflects primarily lobbying by special interest groups.

Only six countries have made any change to their property taxes, with Italy, Korea and Portugal cutting real estate taxes and Spain eliminating its wealth tax (since 2008), whereas Hungary has introduced a new country-wide real estate tax and the United States will allow its inheritance taxes to resume after 2010 (with an exemption level of USD 1 million). While the ongoing fragility of the housing sector suggests that it is too early to consider raising property taxes to offset tax cuts on income and consumption, this is an option countries should strongly consider as they seek to return to sustainable fiscal policy.

Measures directed at stimulating innovation

In light of the crisis, three-quarters of OECD countries took action in the area of tax support for R&D (see Table 1.5), which as a complement to sound framework conditions (and high-quality ICT infrastructure, already mentioned) can help to stimulate innovation and improve long-term economic growth (see *Going for Growth* 2006 and OECD, 2009c). Regulatory measures in support of R&D and innovation were also taken by Japan, Korea and the United States (see Table 1.9). In the short term, the growth impact of such measures is small, but by stimulating short-term demand for researchers and ensuring the continuity of projects, it can reduce the loss of human capital that might otherwise occur.

Countries were fairly evenly split between those that increased R&D tax credits and those that provided additional direct grants for private R&D, with some countries carrying out both measures (France, Japan, Norway, Portugal, Slovak Republic and the United States). A smaller number of countries also increased direct funding for public R&D. However, some types of public R&D support have been shown to have a crowding-out effect

on private R&D, possibly reducing the marginal return to government support. Thus, it is important that the policy measures are designed carefully in order that they provide strong incentives to augment innovation investments that have high social returns (Jaumotte and Pain, 2005).

Tax and spending measures to promote green growth

Many of the measures countries have taken to address the crisis have aimed to foster green growth, notably in the areas of infrastructure and taxation. Green growth has been put forward as a new paradigm to achieve simultaneously strong economic growth and a shift towards a cleaner economy, with particular emphasis on low carbon emissions. In 2009, OECD Ministers adopted a Green Growth Declaration with the aim of pursuing a shift towards sustainable low-carbon growth (OECD, 2009d).

In the area of capital structures, a range of efforts have been made to enhance the energy efficiency of buildings as well as to upgrade transport systems. Two-thirds of OECD countries (Australia, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Italy, Japan, Korea, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States) have made investments that are intended to contribute to green growth (see Table 1.3). While most of these projects are in transport, such as high-speed rail and public transit, renewable energy generation projects were also an important focus. Some governments have devoted large parts of their stimulus to such efforts (notably Australia, Japan and Korea), and sought to stimulate the development of a new range of jobs related to cleaner production through tax incentives. However, unless used as a complement to more cost-effective policies – typically involving the pricing of environmental externalities and narrowly targeted (e.g. green R&D) subsidies, public spending on green investment and emission-reducing subsidies would prove to be relatively costly ways to lower emissions in the long term.

Green policy initiatives in the area of taxation have complemented investment measures. Efforts have been undertaken in half of OECD countries (Belgium, Canada, the Czech Republic, Denmark, France, Germany, Italy, Japan, Korea, the Netherlands, Portugal, Spain, Sweden, the United Kingdom and the United States) to promote cleaner energy consumption and the development of cleaner technologies through tax policy (see Table 1.5). This type of initiative includes tax subsidies on environment-related R&D, as well as taxes on pollution and energy consumption, that could help to achieve existing and future emission reduction objectives at a lower cost.

Some measures taken have uncertain environmental outcomes, such as car scrapping schemes, which help to remove less efficient vehicles from the roads, but may also encourage greater material consumption, vehicle use and ultimately increased emissions. Some industry support schemes have sought to have more environmentally-neutral effects by tying support to the development of less polluting vehicles. Such schemes should be carefully evaluated however, as there are often cheaper ways to achieve similar environmental objectives. More broadly, a cost-effective green growth strategy would primarily price pollutant emissions and use other policy instruments such as R&D support policies, regulations and standards or infrastructure spending to address other specific market failures. In the area of climate change mitigation, co-ordination across countries would also greatly lower the overall cost of meeting environmental objectives (OECD, 2009e). In the future, especially as a follow-up to the 2009 United Nations Framework Convention on Climate Change Conference in Copenhagen, broader use of environmental

taxes and other market-based instruments, such as cap-and-trade schemes with auctioned permits, could also contribute to fiscal consolidation and improve the overall efficiency of the tax system from a broad perspective including environmental considerations.

Labour market measures

Active labour market policy measures

Labour market policies can help to mitigate the negative employment effects of the crisis in the short term and to reduce the hysteresis that can result from a prolonged downturn over the longer run. Active labour market programmes (ALMPs) can help workers acquire new skills and in turn facilitate job transitions. While evaluations show highly variable – and in some cases even negative – returns (see OECD, 2006), the pay-off from ALMPs may be larger in the current situation since crises lengthen the expected duration of employment spells. This may for instance be the case for training programmes, as the need for job losers to change industry and upgrade skills is often larger, and the opportunity cost of training lower, in the wake of major recessions.⁸ Compulsory training programmes have also been found to facilitate the take-up of new jobs. It is also important to scale up ALMP expenditures as unemployment rises, in order to avoid the inefficient cuts in spending per unemployed that have typically been seen in past downturns. In terms of allocating ALMP spending, policies that can help reduce long-term unemployment at the current juncture include devoting greater resources not only to training programmes but also to helping workers search for employment, as well as targeting ALMPs on particular groups of workers that may be especially vulnerable to withdrawal or have difficulties entering or re-entering the workforce, such as youths or older workers (OECD, 2009f).

Resources devoted to enhancing and introducing new ALMPs during the crisis varied considerably across countries. Several countries dramatically increased their expenditure, most notably Korea, Japan, Mexico, Poland, Spain and the United Kingdom, although from a relatively low base (overall, about 0.6% of GDP on average). These countries all increased their spending by more than a quarter, with Spain's expenditure on such programmes reaching over 1% of GDP. More qualitatively, over two-thirds of countries made adjustments to their job search assistance programmes, with all but three of the remainder strengthening activation requirements to help the unemployed to find work (Table 1.6).

A strong emphasis has been put on training programmes for the unemployed. Virtually all OECD countries have made some efforts to expand and/or strengthen training, despite concerns about the feasibility of scaling up such programmes very quickly to meet the sharp increase in need while still retaining their effectiveness. Some programme design features need to be examined, since for instance, very few of these new programmes appear to be compulsory, weakening their potential positive effect on return to work through job-search incentives. In addition, some training through ALMPs is being offered to existing (employed) workers as well, and its effectiveness has not been clearly demonstrated and needs to be carefully monitored.

Many countries have also developed special measures dedicated to youths and others at the margin of the workforce. Such measures may be valuable in helping the transition of these vulnerable groups into the workforce, as well as from unemployment into employment (OECD, 2009f). They include training programmes, special job search assistance, apprenticeships and

Table 1.6. **Measures taken in the area of ALMPs**

Country	Activation requirements to help unemployed find work	Job search assistance and matching for unemployed	Training programmes to help unemployed find work	Training for existing workers	Apprenticeship schemes	Short-time work measures
Australia	X	X	X	X	X	
Austria		X	X	X	X	X
Belgium		X	X			X
Canada		X	X	X	X	X
Czech Republic	X					X
Denmark	X		X		X	X
Finland	X	X	X	X	X	X
France		X	X	X	X	X
Germany		X	X	X		X
Greece		X	X	X		
Hungary						X
Iceland		X	X	X		X
Ireland	X	X	X		X	X
Italy	X	X	X			X
Japan		X	X			X
Korea	X	X	X			X
Luxembourg						X
Mexico		X	X			X
Netherlands		X	X	X	X	X
New Zealand	X	X	X	X		X
Norway		X	X			X
Poland	X	X	X	X		X
Portugal	X	X	X	X	X	X
Slovak Republic				X		X
Spain	X	X	X	X		X
Sweden		X	X	X		
Switzerland						X
Turkey	X		X			X
United Kingdom	X	X	X	X	X	
United States		X	X	X		X

Source: OECD (2009f), OECD (2009k).

job subsidies. More than three-quarters of countries have implemented some type of programme dedicated to youth and most of the remainder have targeted other vulnerable groups, such as low-skilled workers, temporary workers and small businesses.

Short-time work schemes

An overwhelming majority of OECD countries have responded to the recent crisis by introducing or expanding short-time work schemes, which aim to reduce the labour costs of companies in temporary distress, cushion the incomes of workers and preserve jobs that would be viable in the long run (Table 1.6). Measures undertaken consist in extending the coverage of existing schemes to workers or firms not previously eligible (*e.g.* Belgium, France, Germany, Italy, Japan, Portugal), as well as in increasing the compensation paid to short-time workers (*e.g.* Belgium, France, Korea, Portugal and Turkey) and/or the maximum duration of benefits/subsidies (*e.g.* Austria, Canada, Finland, France, Germany, Luxembourg, Portugal, Switzerland, Turkey). Short-time work schemes have good resilience properties as they tend to limit hysteresis effects (Box 1.2). They should therefore be preferred to

Box 1.2. **How do structural policies affect the reaction of economies to macroeconomic shocks?**

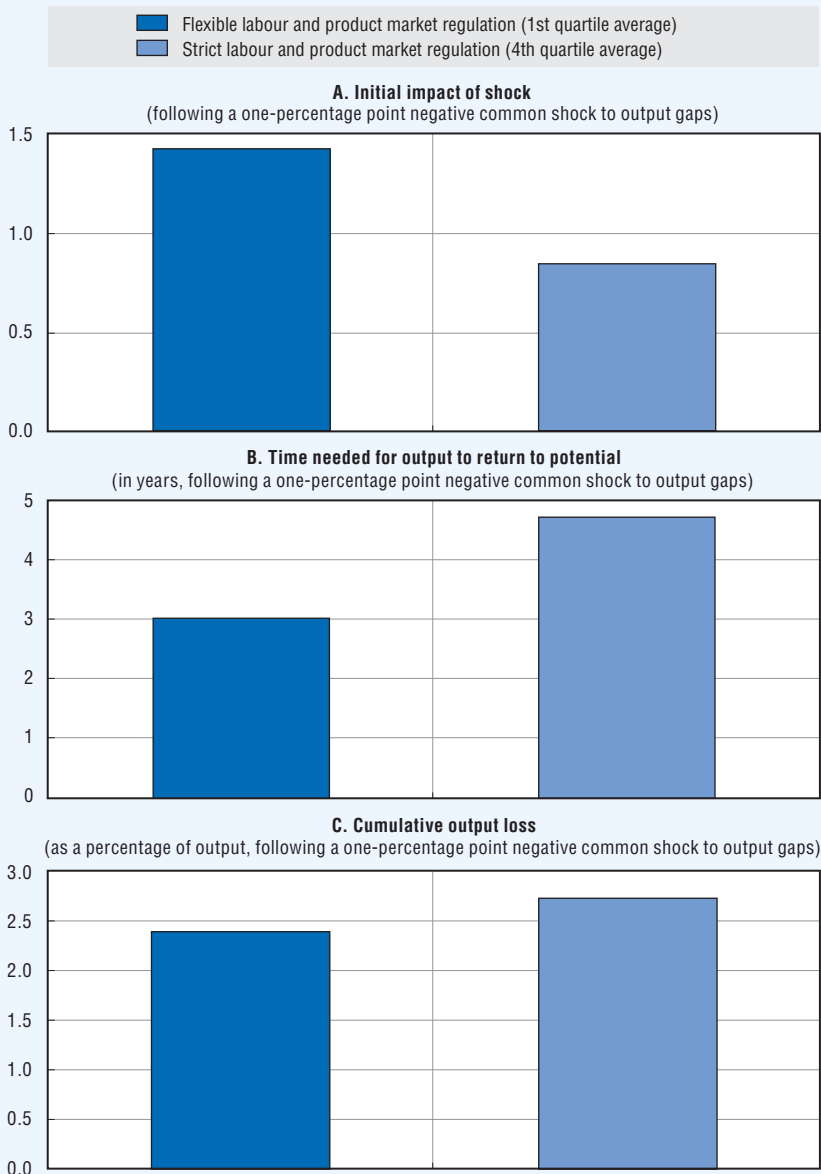
Many policy priorities identified in *Going for Growth* influence not only long-term material living standards but also how economies react to various macroeconomic shocks. Structural policy settings are likely to affect economic resilience, i.e. the ability of an economy to contain output losses in the aftermath of shocks. Resilience reflects both the size of the impact of the shock and its subsequent persistence. Because structural policy settings may have conflicting effects on these two dimensions of resilience, their overall impact is ambiguous *a priori*. For example, strict job protection may mitigate lay-offs and thereby dampen the short-term impact of adverse shocks, but by impeding the wage and employment adjustment process it can depress labour demand and delay the return of employment and output to their initial levels (Blanchard and Summers, 1986). Likewise, high and long-lasting unemployment benefits and other social transfer programmes may support short-term aggregate demand and the economy, while at the same time reducing job-search intensity (Machin and Manning, 1999) and willingness to accept job offers. At a broader level, there is some recent theoretical evidence to suggest that more rigid structural policy settings may lead to smaller but more persistent output reactions to certain shocks (Cacciatore and Fiori, 2009). This may hold especially for policies or institutions that increase wage or price stickiness (e.g. stringent EPL, high coverage of collective agreements bargained between unions and firms, and restrictive PMR), as these should trigger smaller but longer-lived responses of central banks to shocks (Duval and Vogel, 2008).^{*} In normal times, provided it is achieved in a way that does not hamper the stability of the financial system, competition in financial markets may also be an important determinant of economic resilience to shocks, in particular by influencing the strength of monetary policy transmission channels. For instance, countries with the most liberalised financial markets have been found to exhibit larger wealth effects from housing and financial assets (Catte *et al.*, 2004), thereby facilitating the macroeconomic stabilisation role of central banks. Given the peculiar nature of the recent crisis, these financial market transmission mechanisms have not operated as they had in the past. Their existence nevertheless underlines the need for regulation of securities markets to strike a delicate balance between stability and competition (see Chapter 6).

OECD empirical evidence finds support for conflicting effects of structural policy settings on resilience, but suggests that the net impact of more rigid policies may be detrimental (Duval and Vogel, 2007). As an illustration, some of these recent empirical results are used here to assess the overall impact of labour and product market regulations (as measured by a synthetic indicator of product market regulation, employment protection legislation, the level and duration of unemployment benefits and the wage bargaining system) on two alternative measures of resilience, namely the time needed for output to return to potential and the cumulative output loss in the aftermath of a common shock that reduces GDP by 1% on average in all OECD countries. This analysis abstracts from the possible effects of shocks on the level of potential output itself. As shown on the figure below, the initial impact of such a shock is estimated to be almost twice as large on average in a group of countries with relatively flexible labour and product markets (Canada, Great Britain, New Zealand, United States) than in counterparts with more stringent regulations

^{*} However, not all policy settings necessarily entail a trade-off between mitigating the impact of shocks and its persistence. For instance, the short-time work schemes implemented or reinforced by many OECD countries as a response to the recent crisis may cushion the initial impact of shocks, but unlike EPL they may have limited detrimental impact on subsequent wage adjustment and thereby may allow quicker return to potential.

Box 1.2. **How do structural policies affect the reaction of economies to macroeconomic shocks?** (cont.)

Structural policy influences on resilience to macroeconomic shocks



Source: OECD estimates based on Duval et al. (2007).

StatLink  <http://dx.doi.org/10.1787/786563271873>

(Austria, France, Netherlands, Portugal). But despite this, the cumulative output loss appears to be somewhat smaller in less regulated countries, as it takes over a year and half less for output to get back to potential, compared with more regulated counterparts. In the current context, this implies *ceteris paribus* that comparatively stringent policy settings may have dampened the initial impact of the crisis in most continental European countries, but could now delay economic recovery and possibly lead to larger cumulative output losses overall than in more flexible English-speaking and Nordic countries. Such a pattern was observed for instance in the aftermath of the 2000-2001 global economic

Box 1.2. How do structural policies affect the reaction of economies to macroeconomic shocks? (cont.)

downturn. It should however be noted that the effects of structural policies on resilience discussed here are of a relatively small scale compared with their impact on long-term income levels.

Two lines of empirical evidence suggest that structural policy settings may likewise determine the extent to which unemployment is durably affected by temporary adverse macroeconomic shocks. First, the long-term unemployed have been found to have less impact on market wages than their short-term counterparts, implying that increases in the prevalence of long-term unemployment could raise non accelerating inflation rates of unemployment (NAIRUs) (Llaudes, 2005). Second, recent OECD work points to significant cross-country differences in the response of long-term unemployment to shocks on overall unemployment, with stringent PMR and high long-term unemployment benefit replacement rates amplifying the response, and public spending on ALMPs dampening it (OECD, 2009m).

stringent employment regulation to support employment during a short downturn, as they allow for a quicker return to potential and are expected to have less adverse effects on structural unemployment notably by limiting losses of firm-specific human capital. However, short-time work schemes could also delay economic recovery by hampering the reallocation of resources towards new and more productive activities. This type of measure should therefore be temporary, with clear incentives for workers and firms to exit the scheme as activity recovers, since otherwise it may turn into a permanent reduction in available labour input.

Labour market support measures

Half of the OECD governments have taken measures with respect to unemployment benefits in the context of the crisis (Table 1.7). About half of these actions have broadened eligibility criteria, thereby helping to expand the share of the working-age population covered by unemployment insurance. If combined with the enforcement of job search requirements, this will reduce the risk of poverty among some job losers, but also help them to keep contact with the labour market. At the same time, some countries have permanently increased benefit duration (France, Spain) and/or replacement rates (Belgium, Greece, Poland and Turkey). These measures may reduce precautionary saving and therefore help sustain aggregate demand but could damage long-run labour market performance, especially where benefit duration and/or levels were already fairly high (Belgium), since they reduce job-search incentives, unless accompanied by strong activation policies (OECD, 2006). Recent measures – but also pre-crisis support where excessive – should thus be re-assessed as the crisis passes to ensure that long-term unemployment levels do not rise. Temporary measures taken by other countries (Canada, Japan, Portugal and the United States) have been more consistent with the goal of maintaining long-run labour market performance. The crisis has also confirmed that reforms of job protection that promote atypical work patterns through temporary contracts, rather than addressing the stricter protection awarded on permanent contracts, not only raise labour market segmentation and insecurity, but also imply the risk of hardship as temporary workers have often not been covered by unemployment insurance.

Table 1.7. **Labour market measures taken**

Country	Eligibility for unemployment benefits	Change in duration of unemployment benefits	Change in replacement rate
Australia	Temporary easing		
Austria			
Belgium			Permanent rise
Canada	Adjusted to unemployment	Adjusted to unemployment	Temporary rise
Czech Republic			
Denmark			
Finland	Permanent easing		Temporary rise
France	Permanent easing	Proportional to affiliation period	
Germany			
Greece			Permanent rise
Hungary			
Iceland			
Ireland			
Italy			
Japan	Permanent easing	Temporary rise	
Korea			
Luxembourg			
Mexico			
Netherlands			
New Zealand	Temporary easing		
Norway	Permanent easing	Temporary rise	
Poland		Permanent reduction	Permanent rise
Portugal	Temporary easing	Temporary rise	
Slovak Republic			
Spain	Temporary easing	Rise	
Sweden	Temporary easing		
Switzerland			
Turkey			Permanent rise
United Kingdom			
United States	Temporary easing	Temporary rise	Temporary rise

Source: OECD (2009k).

In the context of rising unemployment, there may also be a temptation to open pathways to early retirement for older workers who lose jobs and to relax criteria for long-term sickness or disability benefits for job losers with some health problems. Such policies were pursued and failed in the past – notably in the 1970s and the 1980s – undermining labour supply and growth for a generation, without creating the job opportunities for younger workers that were envisioned (Duval, 2003; OECD, 2006). Fortunately, these schemes have not been expanded so far in the response of OECD countries to the current crisis, but caution will be needed to ensure that early retirement does not rise *de facto* via some relaxation of eligibility criteria to existing social transfer programmes (i.e. unemployment benefit or disability schemes). Besides, even without any policy change, damaging early exit from the labour force may occur regardless as a result of early retirement options that are still in place in many countries.

Regulatory and industry support measures

During a particularly large cyclical shock, some “temporary support” to certain sectors might help to delay or prevent irreversible capital scrapping and the associated sunk costs

in otherwise viable firms and industries. However, it is important that such measures be temporary, do not delay necessary industry restructuring and are not allowed to durably hamper competition. Otherwise they can reduce the incentives for new firms to enter markets and prevent resource reallocation throughout the economy, thereby impinging on productivity growth. Subsidies to particular domestic industries can also represent a form of trade protectionism insofar as they give domestic firms particular advantages over their foreign competitors (see *e.g.* OECD, 2009g).

Direct and indirect subsidies to particular sectors – some of which were already in place before the crisis – have been frequent, with one-third of OECD countries (Australia, Canada, France, Germany, Italy, Korea, Portugal, Spain, Sweden, the United Kingdom and the United States) offering some type of financial support for their automotive industries, and many countries engaging in activist interventions to forestall plant closure through managed bankruptcies and government-sanctioned mergers (see Table 1.8). Within the European Union, the amount of fiscal support for business has been considerable,

Table 1.8. International trade and industry support measures taken

Country	Tariff barriers and tariff rate quotas	Non-tariff restrictions ¹	Anti-dumping measures	Procurement measures	Subsidies for the auto industry (or related sectors)	Subsidies for other sectors and export refunds
Australia					X	
Austria						
Belgium						
Canada	X	X	X		X	
Czech Republic						
Denmark						
Finland						
France					X	
Germany					X	
Greece						
Hungary						
Iceland						
Ireland						
Italy					X	
Japan		X				
Korea	X				X	
Luxembourg						
Mexico	X	X				
Netherlands						
New Zealand						
Norway						
Poland						
Portugal					X	X
Slovak Republic						X
Spain					X	
Sweden					X	
Switzerland						X
Turkey	X	X	X			
United Kingdom					X	
United States	X		X	X	X	X
European Union	X		X			X

1. Examples of measures included: import quotas; licensing requirements; safeguard measures; import bans.
Source: Gamberoni and Newfarmer (2009), OECD (2009h) and WTO (2009).

amounting to a quarter of a per cent of GDP in the median member state during the first half of 2009, and extending to the construction and tourism industries (EC, 2009a). This support may have insulated some sectors from the full shock of the crisis, and OECD investment guidelines, as well as EU and WTO rules, provide for emergency measures in response to a crisis. However, if these measures are not withdrawn sufficiently rapidly, they could have long-lasting distorting effects on firm dynamics (entry and exit) and competition, and thereby significantly hamper the structural changes needed (such as in the automobile industry, see OECD, 2009l) and reduce long-run productivity levels (OECD, 2003; *Going for Growth* 2007).

So far, the pressure to take more explicit protectionist measures has mostly been resisted during the crisis, and OECD countries have generally kept their WTO commitments to open markets. Besides, several measures have been taken to facilitate trade and investment following specific commitments of countries in the G20 (OECD-UNCTAD-WTO, 2009). Nevertheless, there has been a 28% increase in anti-dumping actions since 2008, after a long period of gradual decline from 2001 to 2007 (WTO, 2009), and a notable increased use of safeguards since the end of 2008 (EC, 2009b). Only a few OECD governments have imposed new tariff barriers: Turkey on iron and some cereal and fruit products, Korea on imports of crude oil, Canada on milk protein substances in the form of a tariff rate quota (see Table 1.8). Retaliatory duties have also been imposed by the European Union, Turkey and the United States in response to anti-dumping cases or as safeguard measures. Besides the European Union (which has decided to extend tariffs on shoe imports from China and Vietnam), three OECD countries (Canada, Turkey and the United States) initiated anti-dumping procedures. The United States initially imposed non-tariff barriers in the form of procurement requirements as part of its stimulus package ("Buy American"), but these provisions were later watered down. However, it is in the areas where WTO rules are either weak or non-existent that trade distortive measures may become more frequent. In particular, some local governments in OECD countries have imposed procurement requirements that discriminate against non-locally sourced products. Restrictive actions have been more frequent outside of the OECD though, with around half of the actions among developing countries involving new import duties (Gamberoni and Newfarmer, 2009). Any scaling-up of the limited range of restrictive trade measures taken so far could have serious consequences on growth given the fragility of the economic recovery (Box 1.3), and could have longer-lasting effects if they undermine broader efforts at trade liberalisation such as the long-delayed Doha Round.⁹

More generally, overly stringent product market regulations (PMR) have direct negative effects on both short and long-run economic performance by inhibiting competition and stymieing resource reallocation (Conway et al., 2006). In the context of the crisis, entry barriers to new firms and innovative technologies in particular (e.g. restrictions on networks that inhibit broadband access) could lower output in the short run, as well as slow productivity catch-up over the longer term.

In their response to the crisis, about a dozen OECD countries have taken various measures to reduce anti-competitive PMR (Australia, Belgium, Czech Republic, Hungary, Italy, Japan, Luxembourg, Mexico, Netherlands, Poland, Slovak Republic, Sweden and Spain) (Table 1.9). These measures included reduction of entry barriers through simplification of business start-up procedures, speeding up of administrative procedures, as well as adaptation of bankruptcy procedures to facilitate rapid restructuring. Such initiatives should make it easier for new firms to enter existing industries, and improve

Box 1.3. The possible effects of trade-restrictive measures

Protectionist pressures in OECD countries have so far been largely resisted, and although a number of G20 countries have used antidumping, safeguard measures and countervailing duties, these affected less than 0.5% of the total merchandise imports of G20 countries (Bown, 2009). Furthermore, some existing empirical evidence indicates that (most favoured nation) international tariff hikes implemented in the aftermath of sharp economic downturns have typically been small since the mid-1990s (Foletti et al., 2009).

However, a number of factors that might still increase protectionist pressures going forward call for strong vigilance (Evenett, 2009): fiscal packages have not yet been fully spent and some of their distorting effects could gradually appear; the temptation of protectionism could increase as unemployment continues to rise; with the limited room for manoeuvre of monetary and fiscal policies, governments may be tempted to resort to trade and industrial policies in case of another weakening of economic activity; a significant increase in the use of trade-distorting measures by one single major country or area might trigger a domino effect. For instance, the European Commission estimates that from October 2008 to October 2009, 223 trade restrictive measures have been reported as planned or introduced, with a sharp increase in the number of initiations of trade defence instruments that may be used in a non-WTO compatible way to protect domestic industries (EC, 2009b). One “gravity”-based measure of *implicit* trade costs, by Jacks et al. (2009), suggest that trade frictions, including credit constraints, may have risen much more than explicit measures indicators suggest.

What could be the impact on international trade and economic growth of a worst-case scenario? During the Great Depression, world trade was divided by three and it is estimated that 25% to 50% of this collapse can be attributed to protectionist measures (Foletti et al., 2009). Feeding these figures into recent OECD growth equations (OECD, 2003; Boulhol et al., 2008) suggests that a trade collapse similar to that experienced during the Great Depression could cut long-run GDP per capita levels by between 3% and 6%. This estimate is however surrounded by considerable uncertainty, and amplifying mechanisms may imply an even larger reduction in long-run GDP per capita levels in the presence of such a large trade fall.

More restrictive product market regulations and higher other behind-the-borders barriers to trade would also be detrimental to living standards. As an illustration, past OECD work can be used to assess the potential impact of bringing OECD indicators of product market regulation back to their 2003 levels. Based on estimates in Nicoletti et al. (2003) and Boulhol et al. (2008), such a scenario could lead to a decrease in international trade of goods of about 20%, which in turn might lower GDP per capita by about two per cent in the long run. While they might be seen as fairly large, these figures do not take into account the effects from possible changes in trade between OECD and non-OECD countries, such as reduced trade in services, FDI restrictions, or increases in tariff barriers.

competition, new product innovation and productivity growth, *ceteris paribus*. These reforms will need to be maintained over the longer term in order to yield durable benefits on incomes.

Table 1.9. **Positive product market regulation measures taken**

Country	Easing entry barriers and promotion of small businesses and entrepreneurship	Regulatory reforms in support of R&D and innovation
Australia	X	
Austria		
Belgium	X	
Canada		
Czech Republic	X	
Denmark		
Finland		
France		
Germany		
Greece		
Hungary	X	
Iceland		
Ireland		
Italy	X	
Japan	X	X
Korea		X
Luxembourg	X	
Mexico	X	
Netherlands	X	
New Zealand		
Norway		
Poland	X	
Portugal		
Slovak Republic	X	
Spain	X	
Sweden	X	
Switzerland		
Turkey		
United Kingdom		
United States		X

Source: OECD (2009m), Responses to the European Commission questionnaire.

Sustainable growth after the crisis

Some of the structural policy measures described so far have helped OECD economies avoid the worst outcomes, by supporting short-term activity without significantly compromising longer-term growth or even, in some cases, enhancing it. To this extent, they have generally been consistent with the recommendations in last year's edition of *Going for Growth*. However, as noted, other policy measures with negative longer-term repercussions have also been undertaken.

The future structural policy agenda will not only be driven by the desire to raise incomes in the long run, but also by the need to restore sustainability of government finances. In particular, the relative magnitude and form of future spending cuts and/or tax increases will affect growth going forward. This section first discusses the impact of recent policies and the scope for further growth-enhancing measures, and then examines fiscal consolidation paths. Overall, the need to consolidate is more urgent than in the past, increasing the need for reforms. At the same time, the necessary reforms may be easier to undertake politically in the current crisis situation.

The impact of crisis policies on long-term growth

The impact of the measures discussed above on trend output is uncertain in the long term. However, there is some OECD and other empirical evidence to indicate the general magnitudes of possible impacts of these policy actions:

- Infrastructure investment is an area where the long-run impacts of expenditure on GDP per capita may be relatively high. Estimates of the size of multipliers for this type of investment have a wide range, and they can be as high as one meaning that a permanent increase in investment by 1% of GDP may be able to yield a sustainable additional increase of up to 1% in GDP per capita. However, the range of outcomes is highly variable, and may be as low as zero according to some studies, since projects may not always be chosen carefully and some countries have more developed infrastructure, which could mean then that fewer positive externalities would be found. Using a multiplier value of about 0.5 would imply that the 0.4% of GDP infrastructure investment response to the crisis could, if sustained, yield a long-term additional increase of about 0.2 percentage points in GDP per capita levels (see *e.g.* Shanks and Barnes, 2008).
- Tax cuts financed in the future by reductions in less productive public spending may also have relatively high long-run effects, similar in overall size to infrastructure investment, and possibly larger in the case of direct taxes. For instance, recent OECD analysis finds that a permanent cut in the overall tax burden ratio by one percentage point might raise GDP per capita levels by 0.2% in the long run, although there is wide uncertainty around this estimate (see Johansson *et al.*, 2008). This is the same order of magnitude as the average decline in (cyclically-adjusted) tax ratios across OECD countries in the aftermath of the crisis (OECD, 2009b). However, most crisis-related tax cuts are likely to be of temporary nature, as they have been implemented to restart the economy and will probably be removed as countries accelerate the pace of fiscal consolidation in the coming years (see the next sub-section). Cuts that are left in place will have to be accompanied by spending decreases in order to be sustainable.
- Innovation incentives such as R&D tax credits and subsidies are likely to boost research and development in the business sector and thereby long-run GDP per capita levels (Jaumotte and Pain, 2005). Although there is broad uncertainty in this area, OECD estimates suggest that a one-percentage point increase in the share of business R&D expenditures in GDP may increase GDP per capita by around 0.1 per cent in the long run (OECD, 2003). Much higher estimates have been found using models that allow for endogenous growth effects of R&D policies (*e.g.* Roeger *et al.*, 2008).
- Labour market reforms can have substantial effects on GDP per capita levels in the long run. This may hold for instance for reforms of unemployment benefit systems: a 10 percentage point increase in replacement rates could depress employment rates by about 2.5 percentage points, amounting to a roughly similar loss in GDP per capita levels, *ceteris paribus* (Bassanini and Duval, 2006). However, labour market policies based on activation principles may provide an offset, with a 10 percentage point increase in ALMP spending per unemployed as a share of GDP per capita typically associated with a decline in unemployment of at least ½ of a percentage point.¹⁰ Countries that have increased the level and/or duration of unemployment benefits without taking such counter-balancing measures may therefore wish to do so or, alternatively, reconsider the benefit measures as the economic situation allows.

Countries could also take advantage of this crisis to amplify long-run growth-enhancing measures that have remained modest so far:

- Reductions in anti-competitive product market regulation (PMR) can accelerate productivity convergence. Only modest steps to reduce PMR have been taken so far in this crisis, but aligning anti-competitive PMR to OECD best practice might raise GDP per capita levels by as much as 2.5% in the typical OECD country, based on estimates in Boulhol *et al.* (2008) that do not factor in possible gains arising further from higher private R&D spending and increased employment levels. By contrast, continued support to various industries could distort entry and exit incentives, and thereby *de facto* worsen PMR with negative effects on productivity and GDP per capita levels.
- In addition to tax cuts, there is some room within OECD countries to achieve permanent shifts in the overall tax composition that may have further permanent beneficial effects. As already mentioned, there is some evidence that a higher reliance on consumption and property taxes compared with income taxes may be positively related to GDP per capita. For instance, according to previous OECD work (Arnold, 2008), raising the share of consumption and property taxes in total tax revenues by one percentage point could raise long-term GDP per capita by $\frac{1}{4}$ per cent. Long-run GDP may be further increased if taxes on corporate revenues were decreased in relative terms compared with those on other tax bases.

At the same time, a number of downside risks exist. Many of the growth-enhancing measures have been costly and may be gradually removed as governments consolidate their public finances. For instance, any interruption of policies to support innovation and R&D would be of particular concern (Aghion and Marinescu, 2007) if credit constraints were to persist (Aghion *et al.*, 2008). While non-co-operative protectionist policies (*e.g.* non-tariff barriers, barriers to FDI, anti-competitive product market regulations¹¹) have been limited thus far, history suggests they could get worse especially if the recovery remains subdued and employment rates fail to recover. Moreover, governments may be more inclined to implement detrimental policies, such as those that encourage labour market exit, in a context where unemployment is likely to remain elevated even as the recovery proceeds.

Scenarios for returning to sustainable public finances

A major policy challenge faced by virtually all OECD countries in the next several years will be to restore sustainable fiscal positions. In addition, because the current worsening of fiscal positions is also due to structural factors (*e.g.* the disappearance of exceptionally high tax revenues, higher interest payments, lower potential growth, depending on countries), consolidation will have to go well beyond a mere removal of recent fiscal stimulus. Given its scale, this removal will have to occur gradually as economies recover. As countries have been hit by the crisis and will recover in different ways and also entered the crisis with different underlying fiscal positions, their fiscal consolidation paths may well differ. This is unlikely to raise major co-ordination issues, as coordinated fiscal tightening would in fact have mostly negative international externalities.

Structural policy reforms can raise potential output, and they thereby facilitate consolidation. In particular, measures raising potential output through higher structural employment levels will usually have a larger impact on fiscal balances than those raising potential GDP through higher labour productivity. On the expenditure side, higher employment reduces public spending on welfare benefits, while such benefits typically

adjust quickly to productivity gains. The positive impact of higher productivity on fiscal balances may also be reduced in case of a quick upward adjustment of public sector wages. On the tax receipts side, higher productivity is expected to increase the return on both capital and labour, and insofar as the marginal tax rate on capital income is lower than the one on labour income, the fiscal gain is lower than under a rise in structural employment that yields primarily income tax receipts.

Generally speaking, fiscal consolidation may have negative feedback on long-run GDP per capita levels if achieved through tax increases rather than spending cuts, although this varies depending on categories of taxes and expenditures (Cournède and Gonand, 2006). Given the magnitude of fiscal consolidations required in most countries, both spending cuts and tax measures are likely to be required. In the current context, priority should be given to measures on both fronts that are known to be the least harmful to growth. For example, although the link between public expenditures and potential output is prone to empirical uncertainty, cutting the most productive public spending, such as in education, R&D, transport and communication infrastructure or health could damage long-run living standards, unless such cuts are accompanied by sizeable productivity gains in efficiency. Improving public spending efficiency in these areas is thus clearly a priority as it would limit the extent of spending cuts and/or tax increases. Recent OECD estimates point to sizable potential efficiency gains from adopting best-practice policy settings in education and health.¹² Likewise, on the taxation side, as already mentioned, previous OECD work suggests that income taxes (and particularly those on corporate income) may be more harmful than consumption and property taxes.

As an illustration of the potential effects of fiscal consolidation on long-run GDP per capita, the consolidation scenarios identified in OECD (2009b) to bring government budgets back into or near balance might entail a permanent loss in GDP per capita of about one per cent on average across OECD countries if carried out exclusively through tax hikes (based on estimates derived from OECD growth analysis in Bassanini *et al.*, 2001, and Arnold, 2008). Nevertheless, these detrimental effects of fiscal consolidation could be mitigated if governments seized the opportunity to move towards a more growth-friendly tax structure. Consolidation will also represent a good opportunity to increase the share of environment-related fiscal revenue.

Addressing global current account imbalances

Another major policy challenge going forward will be to address current account imbalances so as to further improve global financial and economic stability. While fiscal consolidation will help reduce the United States' current account deficit, it will not contribute to restore external balance in surplus areas such as Japan and some European countries. In the latter areas, implementing structural reforms could indirectly reduce external surplus. Indeed, although the primary goal of structural reforms is not to address global imbalances, and their long-run impact on current accounts would be expected to be small since they boost both supply and demand, some of them can still have transitory side-effects by lowering the household saving rate and boosting investment (through an increase in permanent income and in the return to capital, respectively). In some non-OECD countries, especially China, structural reforms could also contribute to reduce surpluses.

The current account effects of structural reforms are likely to vary across countries and types of reforms, however, with financial and product market reforms likely to have more positive effects than labour market reforms. Financial market size has a significant

positive impact on investment, while more competitive and complete financial markets lower saving by lifting household credit constraints. Reforms that increase competition in financial markets – in parallel with strong prudential regulation – are therefore expected to weaken current accounts. Greater product market competition stimulates firm entry and investment, and also increases permanent income and thereby may induce households to consume more and save less. This latter effect is likely to be especially strong when financial markets are sufficiently developed and competitive to allow households to borrow against future income. This further highlights the role of financial market reforms for magnifying the current account impact of product market reforms in Japan as well as some non-OECD countries with surpluses. Labour market reforms may not necessarily reduce the household saving rate and improve current accounts. As suggested for instance by the German experience with the Hartz reforms, measures such as unemployment benefit cuts or relaxation of job protection can increase uncertainty and thereby precautionary saving for a while. Consistent with these theoretical considerations, there is some tentative empirical evidence (Kennedy and Sløk, 2005) that financial and – to a lesser extent – product market reforms have a negative impact on current accounts in the short to medium term, while the effect of labour market reforms is insignificant. Other types of reforms that directly affect saving may have much bigger effects, such as pension but also possibly health reforms.

Notes

1. The links between financial market regulation and competition are addressed in Chapter 6.
2. Although some of the measures reviewed in this chapter were planned or implemented before the crisis with other objectives in mind, the timing of their impact is such that they are considered here as part of the policy response to the crisis.
3. Iceland also imposed temporary capital controls.
4. There is some cross-country evidence that more stringent prudential financial regulation in some areas, including stronger capital requirements, has been associated with a lower net expected cost of financial sector rescue packages during the recent crisis (see Ahrend *et al.*, 2009). Also, provided supervisors are strong enough, higher capital requirements do not seem to undermine competition – rather they appear to actually strengthen it (see Chapter 6).
5. Table 1.2 shows the increase (or decrease) in government investment that has been made or is expected in OECD countries during 2008-11 relative to the 2000-07 average.
6. These estimates are differences from the 2000-07 average in cyclically-adjusted tax and output measures (Girouard and André, 2005), and should only be considered indicative of the actual size of fiscal impulse from tax cuts implemented as a response to the recession.
7. Moreover, lower marginal tax rates can induce second earners – usually women – to increase their hourly participation in the workforce. Recent OECD analysis suggests that a one-percentage point decrease in the marginal tax rate would typically raise the hours worked by women by around 0.7% (OECD, 2009c).
8. Whether the returns from training are larger in crisis times is nevertheless uncertain, given the difficulty in expanding such programmes rapidly (OECD, 2009f). Based on German data, Lechner and Wunsch (2009) find for example that the negative impact of undergoing training on job search intensity is smaller, and the positive long-run employment effects are larger when unemployment is higher. Conversely, McVicar and Podivinsky (2007) find in the context of the UK New Deal for Young People that ALMPs are less effective when the local unemployment rate is higher.
9. For instance, the European Union re-introduced export refunds for several agricultural goods in January 2009. This measure goes against the efforts of the Doha Round to reduce such farm subsidies. Reforms of producer support in agriculture could increase per capita GDP significantly (OECD, 2009h).
10. This estimate is also based on Bassanini and Duval (2006).

11. For instance, a reversion of PMR in seven non-manufacturing industries to the level of five years ago could lower GDP per capita levels by about 0.7% in the long run (based on estimates of Boulhol et al., 2008).
12. For example, if a typical school (at the primary and secondary levels) moved to OECD best practice, efficiency could increase by between 20% and 40% (Sutherland et al., 2007), with a budgetary saving for the average country amounting to close to ¾ per cent of GDP. In health care, a convergence of the average OECD country to international best performance could raise efficiency by up to one-third, with a budgetary saving of up to 2% of GDP.

Bibliography

- Aghion, P., P. Askenazy, N. Berman, G. Clette and L. Eymard (2008), "Credit Constraints and the Cyclicity of R&D Investment: Evidence from France", *Note d'étude et de recherche* 198, Banque de France.
- Aghion, P. and I. Marinescu (2007), "Cyclical Budgetary Policy and Growth: What Do we Learn from OECD Panel Data?", *NBER Macroeconomics Annual* 2007, Vol. 22, p. 251-278.
- Ahrend, R., J. Arnold and F. Murtin (2009), "Prudential Regulation and Competition in Financial Markets", *OECD Economics Department Working Papers*, No. 735.
- Arnold, J. (2008), "Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries", *OECD Economics Department Working Papers*, No. 643.
- Bassanini, A. and R. Duval (2006), "Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions", *OECD Economics Department Working Papers*, No. 486.
- Bassanini, A., S. Scarpetta and P. Hemmings (2001), "Economic Growth: The Role of Policies and Institutions", *OECD Economics Department Working Papers*, No. 283.
- Boulhol, H., A. de Serres and M. Molnar (2008), "The Contribution of Economic Geography to GDP Per Capita", *OECD Economics Department Working Papers*, No. 602.
- Bown, C.P. (2009), "Antidumping, Safeguards, and other Trade Remedies", in S. J. Evenett, B.M. Hoekman, O. Cattaneo (eds.), *The Fateful Allure of Protectionism: Taking Stock for the G8*, CEPR-The World Bank.
- Cacciatore, M. and G. Fiori (2009), "Macroeconomic Effects of Product and Labor Market (De)Regulation: The Long and Short of Reforming Europe", Boston College, *Working Papers*, forthcoming.
- Catte, P., N. Girouard, R. Price and C. André (2004), "Housing Markets, Wealth and the Business Cycle", *OECD Economics Department Working Papers*, No. 394.
- Conway, P., D. de Rosa, G. Nicoletti and F. Steiner (2006), "Regulation, Competition and Productivity Convergence", *OECD Economics Department Working Papers*, No. 509.
- Cournède, B. and F. Gonand (2006), "Restoring Fiscal Sustainability in the Euro Area: Raise Taxes or Curb Spending?", *OECD Economics Department Working Papers*, No. 520.
- Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", *OECD Economics Department Working Papers*, No. 370.
- Duval, R., J. Elmeskov and L. Vogel (2007), "Structural Policies and Economic Resilience to Shocks", *OECD Economics Department Working Papers*, No. 567.
- Duval, R. and L. Vogel (2007), "How do Nominal and Real Rigidities Interact? A Tale of the Second Best", *OECD Economics Department*, Manuscript.
- Duval, R. and L. Vogel (2008), "Oil Price Shocks, Rigidities and the Conduct of Monetary Policy: Some Lessons from a New Keynesian Perspective", *OECD Economics Department Working Papers*, No. 603.
- EC (2009a), "The EU's Response to Support the Real Economy During the Economic Crisis: An Overview of Member States' Recovery Measures", *European Economy Occasional Papers*, No. 51, July.
- EC (2009b), "Fifth Report on Potentially Trade Restrictive Measures in the Context of the Global Economic Crisis", Directorate-General for Trade, Brussels, November.
- Evenett, S. J. (2009), "Stimulus Packages and Government Procurement", in S. J. Evenett, B. M. Hoekman, O. Cattaneo (eds.), *The Fateful Allure of Protectionism: Taking Stock for the G8*, CEPR-The World Bank.
- Foletti, L., M. Fugazza, A. Nicita and M. Olarreaga (2009), "Tariff Changes", in S. J. Evenett, B.M. Hoekman and O. Cattaneo (eds.), *The Fateful Allure of Protectionism: Taking Stock for the G8*, CEPR-The World Bank.

- FSB (2009), "Improving Financial Regulation: Draft Report of the FSB to G20 Leaders (Draft version)", Financial Stability Board, Basel, September.
- Gamberoni, E. and R. Newfarmer (2009), "Trade Protection: Incipient but Worrisome Trends", *Trade Notes*, No. 37, The World Bank.
- Girouard, N. and C. André (2005), "Measuring Cyclically-adjusted Budget Balances for OECD Countries", *OECD Economics Department Working Papers*, No. 434.
- Jacks, D.S., C.M. Meissner and D. Novy (2009), "Trade Booms, Trade Busts, and Trade Costs", *NBER Working Papers*, No. 15267.
- Jaumotte, F. and N. Pain (2005), "From Ideas to Development", *OECD Economics Department Working Papers*, No. 457.
- Johansson, Å., C. Heady, J. Arnold, B. Brys and L. Vartia (2008), "Taxation and Economic Growth", *OECD Economics Department Working Papers*, No. 620.
- Kennedy M. and T. Sløk (2005), "Structural Policy Reforms and External Imbalances", *OECD Economics Department Working Papers*, No. 415.
- Lechner, M. and C. Wunsch (2009), "Are Training Programs More Effective When Unemployment is High?", *Journal of Labour Economics*, Vol. 27.
- Llaudes, R. (2005), "The Phillips Curve and Long-term Unemployment", *European Central Bank Working Papers*, No. 441.
- Machin, S. and A. Manning (1999), "The Causes and Consequences of Long-Term Unemployment in Europe", in Ashenfelter, O. and D. Card (eds.), *Handbook of Labor Economics*, Vol. 3.
- McVicar, D. and J.M. Podivinsky (2007), "Does the Impact of Active Labour Market Programs Depend on the State of the Labour Market? The Case of the UK New Deal for Young People", *Discussion paper* No. 0704, University of Southampton.
- Nicoletti, G., S. Golub, D. Hajkova, D. Mirza and K.-Y. Yoo (2003), "Policies and International Integration: Influences on Trade and Foreign Direct Investment", *OECD Economics Department Working Papers*, No. 359.
- OECD (2001), *OECD Employment Outlook 2006 – Boosting Jobs and Incomes: Policy Lessons from Reassessing the OECD Job Strategy*, Paris.
- OECD (2003), *The Sources of Economic Growth in OECD Countries*, Paris.
- OECD (2006), *OECD Employment Outlook 2006 – Boosting Jobs and Incomes: Policy Lessons from Reassessing the OECD Job Strategy*, Paris.
- OECD (2009a), *OECD Economic Outlook: Interim Report (March)*, Paris.
- OECD (2009b), *OECD Economic Outlook 85 (June)*, Paris.
- OECD (2009c), "Policy Responses to the Economic Crisis – Investing in Innovation for Long-Term Growth", www.oecd.org/dataoecd/59/45/42983414.pdf, June.
- OECD (2009d), *OECD, Green Growth: Overcoming the Crisis and Beyond*, Paris, June.
- OECD (2009e), *The Economics of Climate Change Mitigation: Policies and Options for Global Action Beyond 2012*, Paris.
- OECD (2009f), *OECD Employment Outlook 2009 – Tackling the Jobs Crisis*, Paris, September.
- OECD (2009g), *Competition and Financial Markets – Key findings*, Paris.
- OECD (2009h), *Agricultural Policies in OECD Countries: Monitoring and Evaluation*, Paris.
- OECD (2009i), *The Financial Crisis: Reform and Exit Strategies*, Paris, October.
- OECD (2009j), "Moving Beyond the Crisis: Ensuring Sustainable Revenue", Centre for Tax Policy and Administration, Committee on Fiscal Affairs.
- OECD (2009k), "Addressing the Labour Market Challenges of the Economic Downturn: A Summary of Country Responses to the OECD-EC Questionnaire", Paris.
- OECD (2009l), *OECD Economic Outlook 86 (November)*, Paris.
- OECD (2009m), "The Role of Institutions in Explaining Long-Term Unemployment Responses to Unemployment Shocks", in *OECD Economic Outlook 86*.
- OECD (2009n), *Policy Framework for Effective and Efficient Financial Regulation*, Paris, October.

- OECD-UNCTAD-WTO (2009), "Report on G20 Trade and Investment Measures", September.
- Roeger W., J. Varga and J. Veld (2008), "Structural Reforms in the EU: A Simulation-Based Analysis Using QUEST Model with Endogenous Growth", *European Economy Economic Papers*, No. 351.
- Shanks, S. and P. Barnes (2008), "Econometric Modelling of Infrastructure and Australia's Productivity", *Research Memorandum, Australia Productivity Commission*, No. 08-01.
- Sutherland, D., R. Price, I. Joumard and C. Nicq (2007), "Performance Indicators for Public Spending Efficiency in Primary and Secondary Education", *OECD Economics Department Working Papers*, No. 546.
- WTO (2009), "Report to the TPRB from the Director-General on the Financial and Economic Crisis and Trade-Related Developments", *JOB(09)/30 and JOB(09)/62*.

PART I

Chapter 2

Responding to the Going for Growth Policy Priorities: an Overview of Progress since 2005

Against the background of a stronger need for reform in the wake of the crisis, this chapter assesses the progress that each country has made over the past five years in a broad range of structural policy areas where government action could boost long-term growth. Two-thirds of OECD countries have sought to address at least one of the five policy weaknesses that were identified over the period. However, such reforms have been mostly incremental rather than radical in nature, and have seldom fully addressed the underlying policy deficiencies. Reforms have also been more frequent where they were expected to deliver immediate benefits – such as for increased spending on active labour market policies or tax cuts – than where they might have hurt the short-term interests of specific groups – such as with incumbent investors, farmers and permanent workers under competition policy, agricultural policy and job protection reforms.

Introduction

Since its inception in 2005, *Going for Growth* has identified structural policy priorities for each OECD country and the European Union to raise GDP per capita, an imperfect but still useful proxy for material living standards (see Box 2.1 for a broad overview of welfare measures). The priorities have aimed at improving long-term material living standards by reforming policies that impede efficiency and labour utilisation. Five policy priorities were first identified in 2005 for each country and the European Union, which were then reassessed in the 2007 and 2009 editions based on both observed progress in reform and new evidence. Policy priorities have been mainly concentrated on labour and product market policies, but have also covered education, health, innovation, housing policies, the efficiency of public sectors and tax systems, and, very occasionally, the financial sector.

This chapter provides a broad overview of the progress that countries have made on the identified policy priorities since 2005. Because reform is often a lengthy process, five years – rather than just one year as in the 2006 and 2008 editions of *Going for Growth* – is an appropriate time span to evaluate the extent to which countries acted on their priorities and to identify broad reform patterns. At the same time, this assessment is subject to a number of caveats, both conceptual and practical (Box 2.2). While looking at reforms carried out since 2005, the chapter also covers in detail actions taken over the past year, including early stages of reforms such as government statements, formal consultation and draft legislation presented to parliaments.

Progress in reform is assessed at a time when most OECD countries are gradually recovering from a deep recession.¹ This crisis has raised new structural policy challenges, such as reviving economies and consolidating public finances in a way that also fosters sustainable long-term growth, and avoids non-co-operative, anti-competitive regulatory and trade measures that could aggravate the effects of the crisis. These policy issues are analysed in the lead chapter of this year's edition of *Going for Growth*. At the same time, as argued in that same Chapter 1, the structural reform priorities set last year remain by and large valid, and many of them may have in fact become even more urgent in the current context. This is particularly true of measures in the areas of active labour market policies, product market regulation (PMR) or employment protection legislation (EPL) that would speed up the economic recovery. This is also true of reforms of early retirement schemes that would prevent the large recent declines in employment from triggering permanent withdrawals from the labour market. Accompanying country notes highlight the structural reform priorities that it would be most beneficial to address at the current juncture (Chapter 3).

The main reform patterns that emerge from the stocktaking exercise carried out over the period 2005-2009 are the following:

- OECD countries have indeed followed up on *Going for Growth* policy priorities since 2005. Two-thirds of them took some legislative action in at least one of their priority areas each

Box 2.1. A broad overview of welfare measures

A broad examination of measures of well-being was completed in September 2009 by the Commission on the Measurement of Economic Performance and Social Progress, which was set up by the French President and led by Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi. The Commission considered a wide range of alternatives to GDP per capita, including national accounts-type measures, more general quality of life measures, as well as measures of environmental sustainability.

The numerous weaknesses of GDP per capita as a measure of well-being were highlighted in the report, many of which were previously discussed in a *Going for Growth* chapter on “Alternative Measures of Well-Being” (OECD, 2006). One objection is that as a measure of material well-being, GDP is less suited than other national accounts-based measures because it is a gross production concept, whereas an income concept that is net of international transfers and capital stock depreciation should be preferred. However, as discussed in OECD (2006), such measures correlate well across countries with GDP per capita in levels (used in this report), though they show somewhat larger differences in terms of growth rates. More significantly, and because of measurement issues, GDP also poorly captures the quality of health or government services, and makes no allowance for the depletion of natural resources and the degradation of the environment.

Cross-country comparisons of both income levels and growth rates based on GDP per capita can be significantly altered when household production and/or the value of leisure time are accounted for. Methods to take account of these differences have been developed, although they often require substantial imputations.¹ Accounting for household production and leisure time could increase by as much as half conventionally measured GDP in many countries. For instance, including such adjustments to income may nearly halve the gap in household incomes between France and the United States (Stiglitz *et al.*, 2009). However, such estimates are surrounded by a considerable degree of uncertainty – much more than for conventional GDP. Given the high degree of uncertainty in estimating alternative measures of well-being that are more wide-ranging than national accounts-based income measures, the Commission concluded that a broad array of indicators is needed to make robust assessments of well-being.

Income inequality is another factor that may lead cross-country comparisons based on average income levels to give a skewed impression of well-being (see OECD, 2006). This is because one currency unit of additional income is generally seen to be worth more to low-income households than to richer ones. This issue has gained prominence in recent years, as economy-wide (average) income gains have accrued disproportionately to high-income households, as illustrated in the table below (OECD, 2009).

Another set of issues relates to the measurement of dimensions of individual well-being which go beyond material aspects such as income. Measures of the quality of life, including subjective well-being, are appealing in this regard and they often do not correlate well with more conventional measures of income, wealth, or even human development, such as health and life expectancy (OECD, 2006). They may capture other, broader drivers of well-being such as social attachments or the quality of institutions, although answers to surveys could also reflect differences in *relative* well-being within communities. As a result, such indicators are likely to be most useful as complementary measures rather than as substitutes to more conventional measures of well-being.

Box 2.1. A broad overview of welfare measures (cont.)

Trends in real household incomes by quintiles

	Average annual change mid-1990s to mid-2000s				
	Bottom quintile	Middle three quintiles	Top quintile	Median	Mean
Australia	2.4	2.0	1.9	2.2	2.0
Austria ¹	-2.1	-0.5	-0.4	-0.6	-0.6
Belgium ¹	1.4	1.3	1.7	1.2	1.5
Canada	0.2	1.2	2.1	1.1	1.4
Czech Republic ¹	0.4	0.6	0.7	0.5	0.6
Denmark	0.6	0.9	1.5	0.9	1.1
Finland	1.6	2.5	4.6	2.5	2.9
France	0.9	0.7	1.0	0.8	0.8
Germany	-0.3	0.5	1.3	0.6	0.7
Greece	3.6	3.0	2.7	2.9	2.9
Hungary	0.9	1.2	1.0	1.1	1.1
Ireland ¹	5.2	7.7	5.4	8.2	6.6
Italy	2.2	1.0	1.6	1.0	1.3
Japan	-1.4	-1.0	-1.3	-1.0	-1.1
Luxembourg	1.5	1.5	1.7	1.5	1.6
Mexico	-0.1	-0.1	-0.6	-0.2	-0.4
Netherlands	1.8	2.0	1.4	2.0	1.8
New Zealand	1.1	2.2	1.6	2.3	1.9
Norway	4.4	3.9	5.1	3.8	4.3
Portugal ¹	5.0	4.1	4.4	4.2	4.3
Spain ¹	5.2	5.1	5.0	5.5	5.1
Sweden	1.4	2.2	2.8	2.2	2.3
Turkey	-1.1	-0.5	-3.2	-0.3	-1.9
United Kingdom	2.4	2.1	1.5	2.1	1.9
United States ²	-0.2	0.5	1.1	0.4	0.7
OECD ³	1.5	1.8	1.8	1.8	1.7

1. Changes over the period mid-1990s to around 2000 for Austria, Belgium, the Czech Republic, Ireland, Portugal and Spain (where 2005 data, based on EU-SILC, are not deemed to be comparable with those for earlier years).
2. A large discrepancy exists between current population survey and national accounts-based measures of household income for the United States. A large part of the discrepancy is explained by exclusion from household measures of income increases in fringe benefits such as employers' contributions to social security, pensions and health insurance (see Burtless, 2007).
3. Refers to the simple average for all countries with data.

Source: *Growing Unequal? Income Distribution and Poverty in OECD Countries* (OECD, 2009).

This report continues to use GDP per capita as its primary aggregate measure of performance (with a revised numéraire for comparison²), given its timeliness and ready availability. It is also important to note that *Going for Growth* uses detailed indicators of productivity and labour utilisation in order to identify performance weaknesses. Such indicators are clearly not measures of well-being and as such are less subject to some of the critiques that have been made for GDP. In the current edition, one narrow but still highly relevant performance measure in the context of globalisation, namely real gross domestic income (GDI) per capita – a measure that takes into account income gains and losses through international trade, which in several OECD countries have been large enough to induce a significant gap between the growth rates of GDP and broader income measures in recent years – is evaluated in Annex 2.A2.

1. Supplementary “satellite” accounts provide a framework for incorporating into national accounts measurements activities outside of the conventional GDP production boundary such as the environment and household activities.
2. The numéraire for aggregate income comparisons has been revised from the United States to be the simple average of the upper half of OECD countries in each year, which makes comparisons less sensitive to US-specific factors.

Box 2.2. **Conceptual and practical issues involved in assessing progress on *Going for Growth* priorities**

Assessing progress on reform priorities involves a number of conceptual and practical issues, especially when – as in this chapter – quantitative indicators of reform activity are constructed (see also Annex 2.A1):

- *Going for Growth* identifies five reform priorities for each OECD country. The assessment of progress implicitly treats all of them as equally important and assumes their effects to be linear and independent from one another. In practice, however, pay-offs differ across fields and may depend on the magnitude of the measures implemented and how they are combined.
 - Three out of the five policy priorities are based on internationally comparable policy indicators which have been linked empirically by the OECD to various aspects of economic performance. The other two policy priorities are mostly based on a judgement of the most binding constraints on material living standards. Although there is a wealth of empirical analysis linking these other policies to economic performance, it is conceptually challenging to assess the strength of overall reform activity.
 - Even when available, not all OECD structural policy indicators are available on a timely basis, and some of them necessarily capture reforms with lags, for example when implementation is spread over several years and/or follows a decision with long lags (e.g. pension reforms).¹ For this reason, and also in order to allow for equal treatment of indicator-based and non-indicator-based priorities, this chapter relies primarily on more qualitative information to assess the significance of reforms (the matching between this qualitative information and OECD policy indicators is discussed in Box 2.3).
 - Determining whether a priority has been sufficiently addressed is not straightforward. In principle, if deemed sufficiently radical, action taken is followed by the removal of the corresponding priority in the subsequent *Going for Growth*. Yet, *Going for Growth* is an evolving process, and changes in priorities may reflect not only measures taken but also a reassessment of priorities on the basis of new information and empirical analyses, as well as the emergence of even more urgent priorities.
 - Finally, responsiveness to priorities should not necessarily be construed as reform activity more broadly. This is because reforms in non-priority areas are only loosely covered in the *Going for Growth* process, though they matter for economic performance – especially for countries where, in fact, a large number of areas qualified as potential priorities but, at most, five of them could ultimately be retained (see *Going for Growth* 2009).
1. By contrast, some OECD structural policy indicators are forward-looking in the sense that they do not capture the current but rather the eventual stance of policy, once already enacted legislation is fully implemented. In particular, OECD estimates of implicit taxes on continued work measure steady-state financial incentives to retire once all already legislated pension reforms are phased in.

year. Likewise, about a quarter of the countries subject to a priority in a given reform field acted every year.

- OECD countries have been more responsive to *Going for Growth* recommendations when looking over longer time spans. For example, while only one-third of 2005 priorities had been followed with significant action by 2006, that share increased to two-thirds by 2008, although it appears to have levelled-off since then.

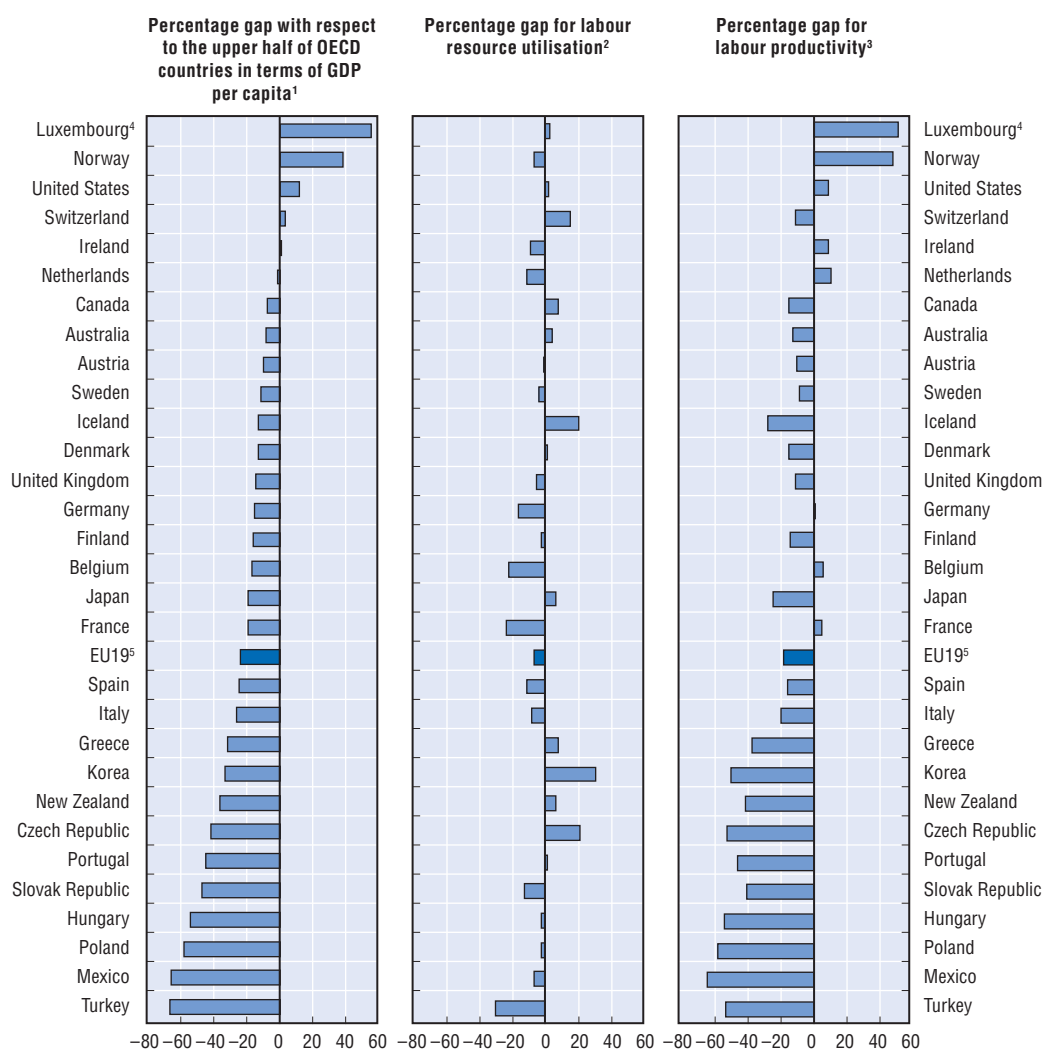
- Dramatic reforms are politically difficult to implement. Hence, actual reforms have typically been incremental in nature. The bulk of the measures taken have not yet been deemed ambitious enough, in terms of scale and scope, to warrant a removal of the corresponding *Going for Growth* priority.
- OECD countries have made more progress in labour productivity-enhancing reform areas than in those targeted at labour utilisation. Policy responses to priorities aimed at boosting productivity levels have been strongest in the areas of innovation policy and public sector efficiency, and weakest for agricultural support policies. Actions taken to raise labour utilisation have been most widespread in the fields of labour taxation – including in 2009 as part of the fiscal stimulus packages implemented by many OECD countries – as well as in active labour market policies and retirement, disability and sickness support schemes. By contrast, little progress has been achieved on priorities dealing with employment protection legislation, wage formation, unemployment benefits, housing policies and health care systems, although some strides have been made in these areas in a number of countries not subject to priorities.
- Reforms appear to be politically easier to undertake where they entail only benefits and little or no short term cost (e.g. labour tax cuts, increased spending on active labour market or innovation policies), and harder to carry out where they may hurt the short-term interests of specific groups (e.g. farmers under agricultural policy, permanent workers under job protection reforms, incumbent investors when it comes to competition reform).
- Countries that have been most active at reforming since 2005 are quite dispersed in terms of geography, size and income levels, although a majority are small OECD economies. There is only a weak link between the apparent need for reform and subsequent reform activity. Those countries that had lower GDP per capita levels and/or poorer growth performance before 2005 have not necessarily been more responsive to *Going for Growth* priorities, while those with higher incomes and/or better performance were not necessarily less responsive.

Progress in reforming policies to improve labour productivity performance

Since the 2005 issue of *Going for Growth*, policy priorities aimed at improving productivity performance have been mainly concentrated on countries with a large gap in output per hour worked vis-à-vis the most productive OECD economies (Figure 2.1) and/or weak productivity growth over the past decade (Figure 2.2).² Such countries have included some North American and Asia-Pacific member countries, as well as a few of the smaller European countries and the European Union as a whole. Suggested policy reforms to boost productivity have included the easing of entry restrictions and controls over business operations in specific product markets, measures to improve educational outcomes, cuts in distortionary agricultural support to improve resource allocation throughout economies, and various other measures. The countries concerned have achieved only mixed progress since 2005 in the areas of education and agriculture, but have generally followed up to a greater extent on recommendations in other areas, including product market regulation.

Product market regulation

The easing of unduly restrictive regulations in product markets has been identified as a priority for most OECD countries – especially those with sub-par productivity performance – and would help them recover faster from the crisis. The European Union

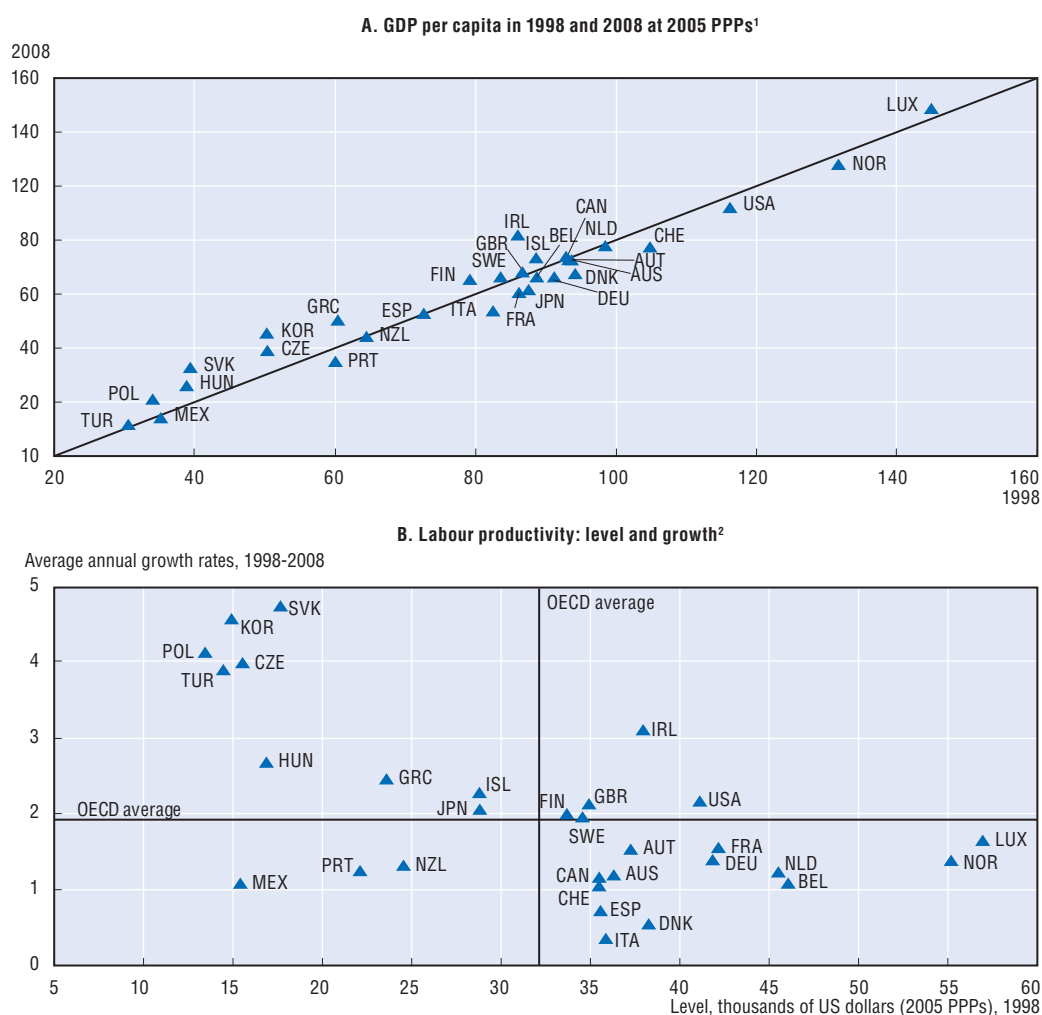
Figure 2.1. **The sources of real income differences, 2008**

1. Relative to the simple average of the highest 15 OECD countries in terms of GDP per capita, based on 2008 purchasing power parities (PPPs). The sum of the percentage gap in labour resource utilisation and labour productivity do not add up exactly to the GDP per capita gap since the decomposition is multiplicative.
2. Labour resource utilisation is measured as total number of hours worked per capita.
3. Labour productivity is measured as GDP per hour worked.
4. In the case of Luxembourg, the population is augmented by the number of cross-border workers in order to take into account their contribution to GDP.
5. The EU19 is an aggregate covering countries that are members of both the European Union and the OECD. These are the EU15 countries plus the Czech Republic, Hungary, Poland and the Slovak Republic.

Source: OECD, National Accounts Database; OECD, Economic Outlook 86 Database and OECD (2009), OECD Employment Outlook.

StatLink  <http://dx.doi.org/10.1787/786610417714>

has taken some steps to foster cross-border competition among its member countries since 2005. The Services Directive, albeit somewhat limited in scope and short of the original proposal, goes in this direction. It was passed in Spring 2006 and was fully transposed into national law at the end of 2009. The Single European Payments Area (SEPA), launched in January 2008, moved forward in November 2009 with the implementation of a new scheme for cross-border direct debits, and will gradually reduce the costs of financial transactions across borders.

Figure 2.2. **GDP per capita and per hour worked: Level and change**

1. In constant 2005 PPPs, relative to the simple average of GDP per capita for the upper half of OECD countries in terms of GDP per capita in 1998 and 2008, which is normalised to 100. In the case of Luxembourg, the population is augmented by the number of cross-border workers in order to take into account their contribution to GDP.
2. Measured as GDP per hour worked in constant prices at 2005 PPPs.

Source: OECD, National Accounts Database and OECD (2009), OECD Employment Outlook.

StatLink  <http://dx.doi.org/10.1787/786610417714>

At the individual country level, around two-thirds of the countries concerned have followed up on recommendations to ease product market regulations since 2005, and the actions taken have been sufficient to result in a removal of the corresponding priorities in around half of these cases (Tables 2.1 and 2.2):

- Easing entry restrictions in services and network industries has been identified as a policy priority for a large majority of OECD countries. In network industries, most have taken action by separating ownership of network elements (Hungary, the Netherlands and Portugal), making third-party access and public tendering mandatory (Poland in the telecommunications sector and Portugal), easing entry restrictions and/or consolidating the power of the regulatory authority (Austria, Canada in 2009, Germany, Greece, Italy, Korea, Mexico and Switzerland), introducing incentive-based regulation (Germany), relaxing threshold restrictions on the free choice of suppliers (Japan), creating a national

Table 2.1. **Progress made in countries with recommendations to reduce entry and operational controls**¹

	2005-2008				2009					
	Action taken	Action taken implying removal of the priority	No significant measure	Policy relapse	Reviews/ laws announced	Public consultation	Legislation concluded	Other measures	No significant measure	Policy relapse
Reduce entry barriers in services and/or industries in general										
Austria	X								X	
France	X								X	
Iceland			X						X	
Ireland			X						X	
Italy	X								X	
Japan	X			X					X	
Korea	X								X	
Norway			X	X					X	
Poland	X								X	
Slovak Republic		n.a.							X	
Turkey			X						X	
Reduce entry barriers in network industries										
Australia	X								X	
Canada			X				X			
Germany	X								X	
Greece	X							X		
Hungary	X								X	
Ireland	X								X	
Luxembourg			X						X	
Mexico	X								X	
Netherlands		X					n.a.			
New Zealand	X				X					
Portugal	X								X	
Switzerland	X								X	
Reduce entry barriers in professional services										
Austria	X								X	
Canada	X						X			
Germany	X								X	
Hungary		n.a.							X	
Luxembourg			X						X	
Switzerland		X					n.a.			
Reduce entry barriers in retail distribution										
Austria									X	
Belgium	X								X	
Denmark	X								X	
France	X								X	
Hungary		n.a.							X	
Ireland		X					n.a.			
Netherlands			X						X	
Spain			X		X					

n.a.: Denotes that the corresponding priority was not yet introduced over the period considered, or was dropped following commensurate actions taken.

1. The table covers only countries with policy recommendations in the area listed. The first set of columns titled "2005-2008" give a synopsis of the progress on 2005 *Going for Growth* priorities in 2005 and 2006 and on 2007 priorities in 2007 and 2008. Similarly, the last set of columns titled "2009" relate to progress on 2009 *Going for Growth* priorities in 2009.

Table 2.2. **Progress made in countries with recommendations to reduce administrative costs, public ownership and reform corporate governance**¹

	2005-2008				2009					
	Action taken	Action taken implying removal of the priority	No significant measure	Policy relapse	Reviews/ laws announced	Public consultation	Legislation concluded	Other measures	No significant measure	Policy relapse
Reduce administrative burdens										
Austria		X			-----		n.a.	-----		
Belgium		X			-----		n.a.	-----		
Czech Republic	X								X	
Denmark	X							X		
Greece		X			-----		n.a.	-----		
Hungary		X			-----		n.a.	-----		
Netherlands		X			-----		n.a.	-----		
Poland	-----	n.a.	-----				X			
Portugal	-----	n.a.	-----					X		
Turkey		X			-----		n.a.	-----		
Reform corporate governance										
Italy		X			-----		n.a.	-----		
United States			X						X	
Reduce the scope of public ownership										
Finland			X		X					
Denmark			X				X			
Greece			X				X			
Mexico	-----	n.a.	-----						X	
Norway			X						X	
Poland			X					X		
Sweden		X			-----		n.a.	-----		
Turkey		X			-----		n.a.	-----		

n.a.: Denotes that the corresponding priority was not yet introduced over the period considered, or was dropped following commensurate actions taken.

1. The table covers only countries with policy recommendations in the area listed. The first set of columns titled "2005-2008" give a synopsis of the progress on 2005 *Going for Growth* priorities in 2005 and 2006 and on 2007 priorities in 2007 and 2008. Similarly, the last set of columns titled "2009" relate to progress on 2009 *Going for Growth* priorities in 2009.

operator for both electricity and gas with transmission planning functions to further enhance the functioning of the national energy market (Australia). In retail trade, legislative measures have taken the form of reductions in entry barriers for large retailers (slight reform in Belgium, under preparation in Spain in 2009), relaxations in retail pricing regulation (France and Ireland), and extensions of shop opening hours (Austria, Belgium to some extent, Denmark, and Finland in 2009). New Zealand reduced uncertainties regarding the regulatory framework and launched reviews of the performance and governance of the electricity market and local telecommunications services obligations. Canada and Switzerland reduced barriers to internal trade, notably in professional services. Canada also signed an agreement to liberalise air travel with the European Union in 2009. Denmark took action across the board by introducing a leniency programme in competition law, and Austria eased restrictions on cross-holding of equity for businesses supplying related services. The actions taken by Ireland, the Netherlands and Switzerland were deemed ambitious enough to warrant the elimination of some of their priorities.

- Administrative burdens have been assessed as a policy weakness in ten countries. All countries but Portugal – for which the priority was set only in 2009 but where some measures had been taken earlier as part of the SIMPLEX programme – have taken some measures by streamlining registration and licensing procedures (Belgium, Greece, Hungary and Turkey), creating a one-stop shop for start-ups (the Czech Republic and Poland in 2009), simplifying bankruptcy procedures (Austria and the Czech Republic), and strengthening benchmarking in publicly-funded services and cutting business red tape (Denmark in 2009). Following significant policy action in most of the countries concerned, lowering administrative burdens remained one of the five policy priorities in the 2009 *Going for Growth* only for the Czech Republic, Denmark and Poland, although sustained efforts will continue to be required elsewhere for administrative burdens to remain constrained.
- Reducing the scope of public ownership has been recommended for eight countries. Sweden, Turkey and Poland (in 2009) have intensified privatisation efforts since 2005, while no significant progress has been recorded in Finland, Mexico and Norway. Sweden also took steps to ensure a level-playing field by enacting a new Public Procurement Act and making the National Board for Public Procurement part of the Competition Authority, while Denmark appointed a new Public Procurement Committee in 2009 to encourage public-sector competition. Most recently, the crisis put a brake on privatisation efforts across the OECD and forced increases in public ownership in the financial sector, though Greece privatised the public airline company Olympic Airways in 2009.

By contrast, there has been some policy relapse in a few countries. In Japan, the zoning regulations that were enacted in 2006 to revitalise suburban areas have erected potential entry barriers for (large) retail stores. In New Zealand, while recommendations focused on divesting public ownership and dismantling entry barriers in international air transport and rail, the rail network has been re-nationalised – which, however, does not need to undermine competition and efficiency if a level playing field is maintained among network users – and ownership restrictions have been tightened against a possible foreign take-over of Auckland Airport. In Norway, the government has simplified procedures to reverse Competition Authority decisions on grounds other than competition.

Human capital

In all but three OECD countries (Canada, Japan and Korea), raising human capital through reforms of primary, secondary and tertiary education systems has been advocated to lift productivity levels. Progress in reform at primary and secondary levels since 2005 has been mixed, with about half of the 14 countries concerned following up on recommendations, and only two of them (Australia and Belgium) in a way that justified removing the priority (Table 2.3). The specific measures implemented in this area have included curricula reforms (Iceland, Ireland, Mexico and Turkey), increased flexibility of vocational education and training and greater responsiveness to the needs of the labour market (Australia, Portugal and the United Kingdom), higher teacher qualification requirements (Mexico and Iceland) and teacher performance evaluations (Portugal), strengthened school and teacher accountability through wider use of standardised exams (Germany), financial incentives for teachers to work in disadvantaged schools (the United Kingdom in 2009), increased support for students from disadvantaged backgrounds (Belgium, Mexico, Portugal and the United Kingdom), and more compulsory years of schooling (Portugal in 2009).

Table 2.3. **Progress made in countries with recommendations to improve educational outcomes¹**

	2005-2008				2009					
	Action taken	Action taken implying removal of the priority	No significant measure	Policy relapse	Reviews/laws announced	Public consultation	Legislation concluded	Other measures	No significant measure	Policy relapse
Reform pre-primary education										
Australia	-----	n.a.	-----						X	
Denmark	X								X	
Germany			X						X	
Ireland			X				X			
Poland	-----	n.a.	-----						X	
United Kingdom	-----	n.a.	-----						X	
Reform primary and secondary education										
Australia		X			-----	n.a.	-----			
Belgium		X			-----	n.a.	-----			
Germany	X								X	
Iceland	X								X	
Ireland			X						X	
Luxembourg			X						X	
Mexico	X								X	
New Zealand			X						X	
Norway	-----	n.a.	-----					X		
Portugal	X						X			
Spain	-----	n.a.	-----						X	
Turkey	X								X	
United Kingdom	X						X			
United States			X						X	
Reform tertiary education										
Austria	X			X					X	
Czech Republic			X						X	
Denmark	X								X	
Finland	-----	n.a.	-----						X	
France	X								X	
Germany	X								X	
Greece	X					X				
Hungary	X								X	
Italy	X								X	
Portugal	X								X	
Poland			X						X	
Slovak Republic	X								X	
Spain		X			-----	n.a.	-----			
Sweden	X				X					
Switzerland	-----	n.a.	-----		X					

n.a.: Denotes that the corresponding priority was not yet introduced over the period considered, or was dropped following commensurate actions taken.

- The table covers only countries with policy recommendations in the area listed. The first set of columns titled "2005-2008" give a synopsis of the progress on 2005 *Going for Growth* priorities in 2005 and 2006 and on 2007 priorities in 2007 and 2008. Similarly, the last set of columns titled "2009" relate to progress on 2009 *Going for Growth* priorities in 2009.

Reform of early childhood education has gained increasing attention in the *Going for Growth* exercise over the years, reflecting mounting evidence of high returns from investments in human capital earlier in children's lives. Many of the recommendations in this area have been set recently. As a result, countries have had little time so far to respond to these priorities, and progress in reform has been limited. Denmark has taken significant measures by introducing compulsory language screening for three-year-olds to detect language difficulties early and bolstering student evaluation. In 2009, Ireland has introduced the Early Childhood Care and Education scheme to extend pre-school education.

Reform of tertiary education systems has been flagged as a priority in many Continental European OECD countries. Most of them have taken some measures, although further action is still needed to address long-standing deficiencies. The reforms undertaken since 2005 have included:

- Strengthening the funding of universities through the introduction or extension of tuition fees (Germany, the Slovak Republic).
- Improving the governance of universities (Greece, which in 2009 also launched a public consultation on education reform), including through greater autonomy (France, Germany, Portugal and Spain) or by creating a new independent accreditation agency to support internal quality assessments of universities (Switzerland in 2009).
- Encouraging early completion by adjusting university funding (Denmark), or by facilitating direct transition from upper-secondary to tertiary education (Sweden).
- Developing professionally-oriented vocational training (Portugal) and introducing courses with vocational content where needed (Hungary).
- Promoting international partnerships and fostering greater international mobility of students and graduates (Portugal).

By contrast, low-level tuition fees have been abolished in Austria.

Agriculture

There has been a significant fall in producer support to agriculture across the OECD since 2005, albeit mainly due to a combination of fluctuating commodity prices and automatic mechanisms built into policy instruments rather than as a result of substantial reform progress (Table 2.4). Nevertheless, the composition of support has shifted towards less distortionary measures, reflecting limited but positive developments in agricultural support policies. In 2008 the European Union launched its Common Agricultural Policy (CAP) health check, laying down plans for further decoupling support by 2013. However, the re-introduction of European Union farm export subsidies in 2009, after two years of suspension of payments, was a step back. In the United States, while more market-oriented support for tobacco has been a step in the right direction, the Food, Conservation and Energy Act of 2008 maintains high agricultural subsidies through 2013 and provides additional scope for support tied to the production of certain commodities – notably for the sugar and dairy sectors. The new crop-specific Average Crop Revenue Election programme, which can be triggered even when commodity prices are high, further distorts production decisions. Also, in responding to climate change concerns, the United States have set mandatory fuel standards to increase the share of renewable sources in overall fuel use, the European Union Council has adopted a biofuel consumption target for transportation, and a number of other OECD countries have taken actions along similar lines. This, along with

Table 2.4. **Progress made in countries with recommendations to reform agricultural support policies¹**

	2005-2008				2009					
	Action taken	Action taken implying removal of the priority	No significant measure	Policy relapse	Reviews/ laws announced	Public consultation	Legislation concluded	Other measures	No significant measure	Policy relapse
Agricultural support										
European Union			X	X					X	X
Iceland	X								X	
Japan	X								X	
Korea			X						X	
Norway			X						X	
Switzerland	X								X	
United States			X	X					X	

1. The table covers only countries with policy recommendations in the area listed. The first set of columns titled “2005-2008” give a synopsis of the progress on 2005 *Going for Growth* priorities in 2005 and 2006 and on 2007 priorities in 2007 and 2008. Similarly, the last set of columns titled “2009” relate to progress on 2009 *Going for Growth* priorities in 2009.

the erection of import barriers to foreign biofuels, has *de facto* put upward pressure on the prices of agricultural products, and has been found to be a very costly means to achieve emissions reduction objectives (OECD, 2008b). In Japan, the government has decided to allow the entry of joint-stock companies into agriculture on a nation-wide basis on leased land, and to concentrate more of the financial support on larger, more efficient farms. The system of administered prices for wheat and barley has also been relaxed. In Switzerland, support has shifted towards more market-friendly instruments. It has been decided to eliminate the milk quota system and trade barriers *vis-à-vis* European Union countries for a few agricultural products. In Iceland, excise taxes on imported food (other than sugar and sweets) have been abolished, and the general import tariff on imported meat products has been lowered significantly with a view to reducing prices. Little progress has been made in Norway and Korea.

Other policies

Policy priorities have also covered a broad range of other areas relevant to productivity performance, some of which – especially in the financial sector, though also in the areas of public sector efficiency and international trade – appear to be especially important at the current juncture for a sound economic recovery and public finance consolidation :

- **External exposure.** Of the five countries which have been diagnosed with a particular policy weakness on this front, all except Mexico have taken some corrective measures since 2005, and in three cases the priority was subsequently removed (Korea, Poland and Switzerland). Reforms have included changing commercial law to facilitate mergers and acquisitions by foreign companies (Japan), creating free economic zones to attract foreign firms (Korea), simplifying procedures for non-residents to set up a business, easing ownership restrictions and providing investors with a binding legal interpretation of existing provisions (Poland), lowering non-tariff barriers (Switzerland), and relaxing existing residency requirements for directors of financial institutions and (in 2009) foreign ownership restrictions (Canada). New Zealand has raised the firm size threshold beyond which consent is required for foreign acquisitions, but also tightened entry

barriers for investment in infrastructure on strategically sensitive lands. Most recently, the crisis has raised concerns that backward steps could be taken in this area across the OECD. Available evidence thus far suggests that some *de facto* protectionist measures have indeed been enacted but remain limited in depth and scope (see Box 1.2 in Chapter 1).

- *Public-sector efficiency.* Nine out of the eleven countries identified as in need of reform in this area have taken some action since 2005, and the policy priority was dropped as a result in four cases (Germany, Luxembourg, Portugal and Turkey). The measures implemented have involved re-organisation of health services and the introduction of fees to enhance cost awareness in health care (the Czech Republic and Hungary), increased competition in government procurement by issuing calls for tenders more widely and simplifying rules (Germany), consolidating a number of ministries and the regional network of public offices, reducing excessive numbers of civil servants and increasing the accountability and transparency of government agencies (Hungary in 2009), tightening the regulations governing budget implementation (Iceland), reforming public sector employment by aligning employment conditions with those prevailing in the private sector (Portugal), introducing results-oriented budgeting in public services (Turkey), increasing competition from the private sector in the provision of publicly-funded services and reforming performance management (the United Kingdom), enhancing the cost-effectiveness of regional policy by substituting regionally differentiated employers' social security taxes for less targeted measures (Norway), and introducing e-government (Luxembourg). New Zealand announced a plan to link tertiary institution funding more closely with performance in 2009. No significant progress has been registered in Canada.
- *Innovation-promoting policies.* All three countries concerned followed up on *Going for Growth* recommendations since 2005 in the form of additional public support for R&D activities (Ireland), measures to facilitate the mobility of researchers and increase the use of competitive grants (Japan), and more rigorous protection of intellectual property rights and improvements in the quality of tertiary education (Korea).
- *Public infrastructure.* Addressing public infrastructure deficiencies has been called for in Ireland, New Zealand, Poland and the United Kingdom. Prior to the ongoing economic crisis, all four countries responded by increasing spending levels. These efforts would need to be sustained to achieve decisive improvements in the quality of infrastructure, but Ireland decided to cut spending to improve the sustainability of public finances in 2009, while most other OECD countries raised expenditures as part of their fiscal stimulus packages (see Tables 1.1 and 1.2 in Chapter 1).
- *Tax system.* Simplifying the tax system, reducing distortions and/or broadening the tax base has been identified as a priority for Canada, Greece, Mexico, Portugal, the United States, and Japan more recently (2009). The first four countries have taken substantial measures since 2005. In Canada, the federal government has decided to reduce the corporate income tax and to eliminate its capital tax and the corporate surtax, while in 2009 the governments of British Columbia and Ontario announced they would harmonise their sales tax with the federal value-added tax. In Greece and Portugal, measures to fight tax evasion have been taken. In Mexico, the income tax has been simplified and the tax base has been broadened.

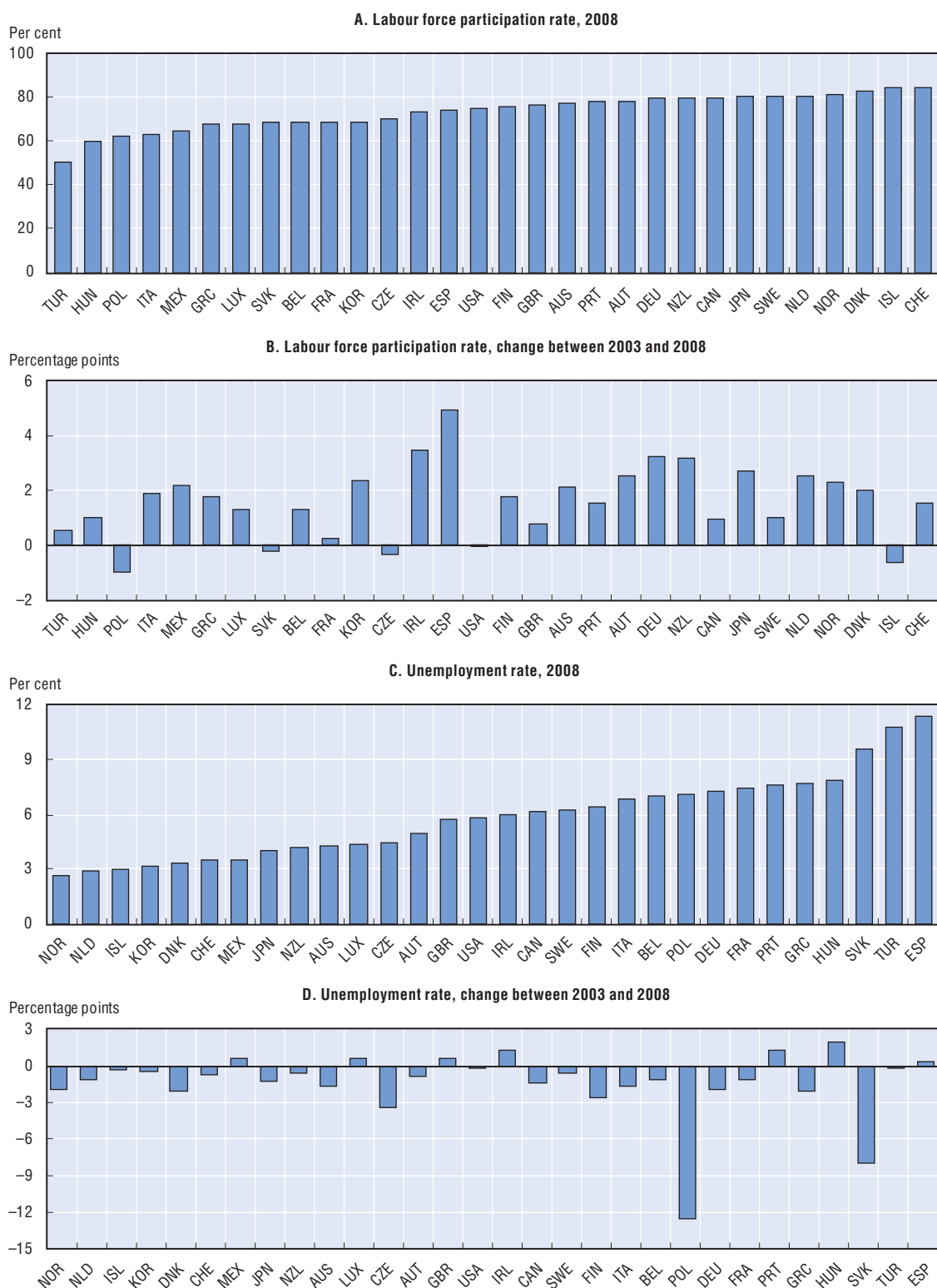
- **Rule of law.** Strengthening the judicial system and law enforcement has been identified as priority in Hungary, the Slovak Republic and Mexico. Only the first two countries have made some progress on this front since 2005, and no further measures have been initiated in 2009.
- **Financial sector.** Financial sector reform was identified as a policy priority for Japan and Korea in the first issue of *Going for Growth*, and both countries quickly followed through. In Japan, government policy helped to address non-performing loan problems at major banks, and the Japan Post was privatised.³ In Korea, the government made considerable strides in the privatisation of banks and investment trust companies. Following the financial crisis, financial sector reform became a *Going for Growth* priority for Iceland and the United States in 2009, and the US government has since taken steps towards overhauling the financial supervision and regulatory system. More broadly, financial sector reform is needed and is currently underway in most OECD countries.

Progress in reforming policies to improve labour utilisation

Since 2005, recommendations to remove impediments to labour utilisation have been made primarily to Continental European countries, where trend labour utilisation rates remain comparatively low despite some noticeable progress prior to the recent crisis (Figure 2.3). Identified policy priorities have included reducing disincentives to work at older ages, obstacles to female participation and labour tax wedges, as well as improving the design of disability and sickness benefit schemes and other labour market policies such as employment protection legislation and unemployment benefits. Priorities have also been identified in these areas outside Europe, as a way to address more specific labour market performance weaknesses. Most countries have taken action since 2005, but deficiencies remain which, if unaddressed, risk turning some of the crisis-related fall in employment into a persistent decline.

Financial disincentives to work at older ages

There has been some modest progress since 2005 – but not in 2009 – in reducing financial disincentives to work at older ages embedded in old-age pension systems and/or available social transfer programmes where this was deemed a policy priority (Table 2.5). Some of the reforming countries phased out or restricted access to early retirement schemes by tightening eligibility conditions (Belgium, Denmark, Finland, Germany and Spain). Others indexed the minimum retirement age to life expectancy (Denmark), sought to increase the effective retirement age by enhancing financial incentives to work beyond the statutory age (Belgium, Finland, France, Germany, Greece and Spain), lengthening contribution requirements to claim full pensions (Belgium, France and Spain), or adjusting benefits in line with life expectancy (Norway). As a result, the priority was dropped for Denmark, Germany, Norway and Spain. Greece launched a public consultation on pension reform in 2009. In Norway, however, the government later weakened the reform by deferring the life expectancy adjustment of pension benefits. In Luxembourg and the Slovak Republic, no significant measures have been carried out, and in Austria some aspects of the 2003-2004 pension reform have been reversed, reducing the penalty rate for early retirement and extending the special early retirement scheme. As the post-crisis recovery unfolds, further reductions of financial disincentives to continued work, not least faster phasing out of special or *de facto* early retirement routes, including *via* disability and

Figure 2.3. **Labour force participation rates and unemployment rates**

Source: OECD, Economic Outlook 86 Database.

StatLink  <http://dx.doi.org/10.1787/786610417714>

sickness systems, would help to ensure that older workers who have suffered from crisis-related lay-offs remain attached to the labour market.

Table 2.5. Progress made in countries with recommendations to reform disability and sickness systems, remove disincentives to work at older ages, or reduce impediments to female participation¹

	2005-2008				2009					
	Action taken	Action taken implying removal of the priority	No significant measure	Policy relapse	Reviews/ laws announced	Public consultation	Legislation concluded	Other measures	No significant measure	Policy relapse
<i>Reduce implicit tax on continuing to work and work at older age</i>										
Austria			X	X					X	
Belgium	X								X	
Denmark		X			-----	n.a.	-----			
Finland	X								X	
France	X								X	
Germany		X			-----	n.a.	-----			
Greece	X					X				
Luxembourg			X						X	
Norway		X			-----	n.a.	-----			
Slovak Republic			X						X	
Spain		X			-----	n.a.	-----			
Turkey	X								X	
<i>Reform disability and sickness benefits</i>										
Australia	X								X	
Denmark	X						X			
Hungary	X						X			
Netherlands	X								X	
Norway	X						X			
Poland		X			-----	n.a.	-----			
Sweden	X								X	
Switzerland		X			-----	n.a.	-----			
United Kingdom	X						X			
United States			X						X	
<i>Reduce implicit tax on returning to work following child birth</i>										
Austria	X								X	
Germany	X								X	
Ireland	X						X			
Korea	X						X			
Netherlands	X								X	
New Zealand	X								X	
Slovak Republic	-----	n.a.	-----						X	
Switzerland	X								X	
United Kingdom	X								X	

n.a.: Denotes that the corresponding priority was not yet introduced over the period considered, or was dropped following commensurate actions taken.

1. The table covers only countries with policy recommendations in the area listed. The first set of columns titled "2005-2008" give a synopsis of the progress on 2005 *Going for Growth* priorities in 2005 and 2006 and on 2007 priorities in 2007 and 2008. Similarly, the last set of columns titled "2009" relate to progress on 2009 *Going for Growth* priorities in 2009.

Disability and sickness benefit schemes

Disability and sickness benefit schemes have been subject to reform since 2005 in nine out of the ten countries concerned, although only in the case of Poland and Switzerland was action taken followed by a removal of the priority (Table 2.5). Some countries have sought to better discriminate between recipients depending on their work capacity. One approach has been to increase economic incentives to work (partially linking benefit levels and the earnings capacity of benefit recipients in the Netherlands). Another approach has been to adjust or enforce eligibility criteria, either through tighter work obligations or eligibility conditions for new claimants (Australia, Poland, Switzerland and, in 2009, the United Kingdom), or *via* increased emphasis on rehabilitation and work capacity assessment (Denmark in 2009, Hungary in 2009, the Netherlands and Switzerland). Other countries have reduced the incentives for employers and recipients to over-use the schemes (introduction of/or increase in employers' financing of disability and sickness benefits in the Netherlands and Sweden; reduction of the maximum wage subsidy under the Flexjob scheme in Denmark). In Norway, participants in the long-term sickness and disability benefit schemes are now more closely followed, and the ongoing merger of the welfare system and the employment services network is intended to improve co-ordination of these services. Finally, Poland and Sweden have restricted the duration and amount of benefits.

Impediments to full-time female labour participation

Some of the impediments to full-time female participation have been reduced since 2005 in all eight countries where this was put forward as a policy priority. This was achieved by expanding childcare facilities through subsidies (Germany, Ireland, Korea and New Zealand), lowering the compulsory schooling age or promoting full-day schools (Germany and Switzerland), and reducing marginal tax rates on second earners (Austria, Ireland, the Netherlands, Switzerland and the United Kingdom).

Labour taxation

Of the 13 countries for which reforms of labour taxation have been advocated, nine took some remedial actions between 2005 and 2008. However, in no case were the measures taken extensive enough to warrant a reconsideration of the policy priority, reflecting in part the difficulty to achieve major but still fiscally sustainable tax cuts over a relatively short time period (Table 2.6). Average and/or marginal tax wedges were reduced across the board mainly through lower income tax rates and/or higher exemption levels (Belgium, the Czech Republic, Denmark, Italy and Poland). More frequently, the cuts were targeted at the low-skilled, in the form of reductions in social security contributions (Austria, Belgium, Italy, Poland, Sweden and Turkey) or in-work tax credits (Belgium and Sweden). Germany lowered social charges, and reforms of unemployment insurance and pension systems will help sustain lower contributions in the future. While these cuts were offset by an increase in indirect taxes (the VAT rate), the associated shift in the tax structure from labour to consumption taxes should still benefit longer-term growth (see Johansson *et al.*, 2008). In Hungary, a pressing need to consolidate the budget resulted in an increase in the tax wedge, although this was accompanied by a smoother marginal tax schedule.

Labour taxation reforms have been widespread throughout 2009, mostly as part of the recent fiscal stimulus packages. Countries that had been encouraged to cut tax wedges

Table 2.6. **Progress made in countries with recommendations to reduce labour taxation and reform labour market policies¹**

	2005-2008				2009					
	Action taken	Action taken implying removal of the priority	No significant measure	Policy relapse	Reviews/laws announced	Public consultation	Legislation concluded	Other measures	No significant measure	Policy relapse
Lower labour taxes										
Australia	X				X					
Austria			X				X			
Belgium	X						X			
Czech Republic	X								X	
Denmark	X						X			
Finland			X				X			
Germany	X								X	
Greece	-----	n.a.	-----						X	
Hungary	X			X			X			
Italy	X								X	
Norway	-----	n.a.	-----						X	
Poland	X						X			
Slovak Republic			X				X			
Sweden	X								X	
Turkey	X						X			
Review wage formation or minimum cost of labour										
Australia			X	X					X	
Belgium			X						X	
Finland			X						X	
France			X						X	
Greece			X						X	
Italy			X						X	
Poland			X	X					X	
Spain			X						X	
Turkey	X								X	
Reform employment protection legislation										
Czech Republic			X						X	
France	X								X	
Germany	-----	n.a.	-----						X	
Greece	X								X	
Japan			X						X	
Korea			X						X	
Luxembourg			X						X	
Netherlands	-----	n.a.	-----						X	
New Zealand	X								X	
Portugal	X								X	
Spain			X						X	
Sweden	X								X	
Turkey			X					X		
Reform unemployment benefits										
Belgium	-----	n.a.	-----						X	
Canada			X						X	
Finland	X								X	
Luxembourg			X						X	
Activation of long-term unemployed										
Belgium		X			-----	n.a.	-----			
Germany			X						X	
Netherlands			X						X	
New Zealand		X			-----	n.a.	-----			
Slovak Republic	-----	n.a.	-----					X		

n.a.: Denotes that the corresponding priority was not yet introduced over the period considered, or was dropped following commensurate actions taken.

1. The table covers only countries with policy recommendations in the area listed. The first set of columns titled "2005-2008" give a synopsis of the progress on 2005 *Going for Growth* priorities in 2005 and 2006 and on 2007 priorities in 2007 and 2008. Similarly, the last set of columns titled "2009" relate to progress on 2009 *Going for Growth* priorities in 2009.

have reduced income tax rates and/or increased tax relief (Austria, Denmark, Finland, Hungary and Poland), introduced or raised in-work tax credits (Denmark and the Slovak Republic), lowered social security contributions (Finland, Hungary and Poland) and increased wage subsidies (Belgium). In the same period, Australia has undertaken a review of the tax system and its interaction with the welfare system. In Turkey, social contribution rates have been reduced, albeit temporarily.

Labour market policies

Little has been done since 2005 to address priorities in most other labour market policy areas, including wage formation, employment protection legislation and unemployment benefit systems. One exception is the field of active labour market policy, where priorities have typically been dropped as a result of more significant policy action.

- *Wage formation.* Of the nine countries where reducing the minimum cost of labour or making wage bargaining more flexible has been seen as a priority, only Turkey has taken action since 2005 by cutting social security contributions for low-wage earners (Table 2.6). In Australia, the 2006 reform of the wage bargaining system has been partly reversed. In Poland, the new indexation rule is likely to result in an increase in the minimum wage relative to the average wage.
- *Employment protection.* Reforms have also been limited in the area of employment protection legislation, where some easing has been suggested where existing provisions were deemed excessively stringent. Only five out of the 11 countries subject to a recommendation have taken significant action since 2005, with no specific action taken in 2009, and only Portugal, New Zealand and – to a lesser extent – Greece focused on permanent contracts (Table 2.6). Dismissal procedures have been substantially simplified in Portugal. In New Zealand, a trial period of 90 days for new employees in businesses with fewer than 20 staff has been introduced. In Greece, permanent contracts for new employees in all public enterprises and entities, as well as a rule which allowed collective dismissals of only 2% of the workforce per month for medium-sized firms, have been abolished. Elsewhere, only partial reforms targeted at temporary contracts have been carried out. France reduced the frequency of cases requiring a court ruling in return for higher severance payments, and introduced a new fixed-term contract for specific projects. Sweden eased the rules for temporary contracts so that these can be used without particular reason and longer than previously (24 months instead of 12).
- *Unemployment benefits.* The reform of income support schemes for the unemployed has been a priority in Canada, Finland and Luxembourg since 2005 (Table 2.6). While no significant progress has been made in Luxembourg, Canada has introduced an earned-income tax credit to increase work incentives, and Finland has made receipt of unemployment benefits after 500 days conditional on participation in active labour market programmes. However, in 2009 Finland temporarily raised unemployment benefits in the context of the economic crisis, and Belgium raised initial unemployment benefit levels and increased benefits for workers on reduced working time (*chômage temporaire*). A number of other OECD countries have taken crisis-response measures along similar lines, some of which would need to be reconsidered as the labour market situation improves, or be balanced by active labour market policies (see Chapter 1).
- *Activation of the long-term unemployed.* Since 2005, some efforts to strengthen the efficiency of active labour market policies have been made in Belgium, New Zealand and

– in 2009 – the Slovak Republic, but not in Germany (after the 2005 Hartz reforms) where this has also been identified as a priority (Table 2.6). In New Zealand, the government introduced a single core benefit that would apply one set of criteria to all working-age beneficiaries and deliver employment assistance based on their work capacity, rather than their benefit category. In Belgium, co-ordination between the regional placement agencies has been improved by creating an interregional association to exchange job offers and through increased co-operation in the field of training. The Slovak Republic has taken action by strengthening the competency of the Public Employment Service.

Other policies

Remaining priorities aimed mainly at enhancing labour utilisation have focused on health care costs – as a way to lower tax wedges – and housing policies – in order to enhance labour mobility.⁴ As regards health care, Switzerland has benchmarked reimbursements for pharmaceuticals more closely to generic products in order to bring costs under control. In the United States, the extension of Medicare prescription drug coverage to all seniors without accompanying cost-saving measures has put further upward pressure on costs. In 2009, the US government has announced plans to overhaul the health care sector by, *inter alia*, lowering drug costs and speeding up the adoption of health care information technology.

Of the 11 countries where a removal of distortions in housing policies has been recommended, six have taken action since 2005. Policy measures have included easing residential zoning and planning regulations (the United Kingdom, where the boundaries of the “green belts” that restrict the supply of land for commercial and housing development in fast-growing areas are also under review, and the Netherlands to some extent), relaxing rent regulation (the Czech Republic and Sweden), curbing the tax advantages of home ownership (Spain to some extent), restricting housing-loan subsidies and making them portable (Hungary in 2009), or introducing new courts and accelerated procedures to enhance the enforcement of rental contracts (Spain). Sweden has cut rental housing subsidies but eased taxation on owner-occupiers. Denmark, Iceland, Poland and the Slovak Republic have taken no significant steps forward since 2005, and Ireland eased housing taxation *de facto* by raising the price threshold below which first-time buyers of existing dwellings are exempt from stamp duty.

Summing up overall reform patterns

In order to identify and assess broad reform patterns across the OECD since the first issue of *Going for Growth*, two alternative indicators are constructed for each individual priority area, each broad reform field (labour-productivity or labour-utilisation enhancing reforms) and each individual country (see Annex 2.A1 for details):

- An annual “responsiveness rate”, based on a scoring system under which each possible reform opportunity (*i.e.* whenever a priority was set in the previous edition of *Going for Growth* for the individual policy area considered) takes value 1 if significant action is taken the following year, and 0 otherwise. The responsiveness rate is therefore calculated as the ratio of the total number of years in which some action towards addressing the policy weakness is taken to the total number of years in which some action could potentially be taken – which by definition excludes the year when the policy priority is first set and the years before.

- A “follow-through rate”, a measure of deep reforms based on a scoring system which for each possible reform opportunity takes value 1 if any action taken is significant enough for the corresponding priority to be dropped in the following *Going for Growth* exercise, and 0 otherwise. It is basically the ratio of the number of priorities dropped following significant action during the previous two years to the total number of two-year *Going for Growth* cycles in which the policy recommendation appears. Priorities dropped following significant action are determined based on previously published information (see Box 2.3 in *Going for Growth* 2009). The follow-through rate cannot be readily compared with the responsiveness rate since it is computed over a two-year rather than one-year period, and only over the period 2005-2008 – rather than 2005-2009 – covered by the 2005, 2007 and 2009 issues.

Both indicators measure the extent to which OECD countries have followed up on *Going for Growth* recommendations since 2005, with the latter setting a more stringent criterion – a subsequent removal of the priority – than the former to define action taken. Neither aims to assess overall reform intensity *per se*, which would require both accounting for reforms carried out in non-priority areas and quantifying the importance of each individual measure. Also, these indicators are imperfect substitutes for reform assessments based on the quantitative and internationally comparable OECD structural policy indicators that underlie *Going for Growth*. Nevertheless, they are used here mainly because of their greater comprehensiveness and timeliness (see Box 2.2 and Annex 2.A1 for an overview of the limitations of the responsiveness and follow-through indicators, and Box 2.3 for a discussion of the matching between these and OECD structural policy indicators).

Box 2.3. Structural policy versus subjective reform indicators

The retrospective reform assessment undertaken in this chapter relies on qualitative assessments which have several important advantages in the specific context of this analysis over the quantitative information supplied by the OECD’s internationally comparable structural policy indicators:

- They allow comprehensive coverage of all reforms undertaken in priority areas since 2005. Relying instead on the OECD structural policy indicators would restrict the analysis to indicator-based priorities and exclude many other (non indicator-based) key priorities that in the 2009 *Going for Growth* exercise accounted for around 20% of all priorities.
- They are up-to-date and allow tracking reforms in real time, including most recent (2009) information on early stages of reforms. By contrast, many of the key OECD structural policy indicators (e.g. employment protection legislation or product market regulation indicators) are not updated on a continuous basis, reflecting the time required and resources needed for this matter. Furthermore, in a few cases the quantitative indicators used in *Going for Growth* so far capture outcomes rather than policy settings, and/or convey lagged information by construction. This is the case for instance of the educational attainment indicators used in the area of human capital, or the aggregate spending indicators used in the area of health.
- They are readily built upon, and thereby help summarise the qualitative information from previous *Going for Growth* editions in a systematic and straightforward manner. They allow the construction of summary reform indices covering all *Going for Growth* areas, with symmetric treatment of indicator-based and non-indicator based priorities.

Box 2.3. Structural policy versus subjective reform indicators (cont.)

It is, nevertheless, useful to assess the extent to which the qualitative information on reforms provided in all *Going for Growth* issues since 2005 matches the (changes in) OECD structural policy indicators. The approach followed here is to explore the correlation between qualitative and quantitative reform indices for the three *Going for Growth* priorities supported by indicators over 2005-2008. To this end, a binary variable that takes value 1 when there is improvement in the value of the quantitative policy indicator and 0 otherwise is constructed. This binary variable is then compared with the binary variable that provides the basic information used to compute the responsiveness rate, i.e. a binary variable that takes value 1 when some legislative action is taken and 0 otherwise.

The overall match between these binary quantitative and qualitative reform indicators is at best moderate. They provide consistent messages in 61% of the cases, meaning that for 61% of the reform opportunities considered in the analysis, (no) significant action according to the qualitative indicator is matched by some (no) improvement in the corresponding quantitative indicator (see the table below). The limited match between the two types of indicators is to be expected. In particular:

- While the qualitative reform indicators provide ideally all relevant information on reform efforts over the period 2005-2008, most OECD structural policy indicators by their very nature cover only partly or inexactly the period of interest.¹
- There are typically lags between decisions and actions, and reform implementation is often spread over several years. As a result, changes in OECD structural policy indicators between 2005-2008 are likely to capture only incompletely the legislative actions taken during this period, while at the same time reflecting in part the gradual effects of earlier reforms.² Both factors are sources of mismatch between the quantitative reform indicators and their more coincident qualitative counterparts
- By construction, the qualitative reform indicators do not reflect deteriorations in policy stances or reversals of reforms (see Annex 2.A1). In cases where legislative action is taken and then reversed (partially or fully) throughout the period under consideration, unlike the quantitative indicators the qualitative indicators capture only the progress recorded but not the subsequent policy relapse – as the latter is scored zero rather than minus one by assumption. In fact, when an alternative binary qualitative indicator is used which also accounts for deteriorations in policy settings – i.e. which takes value 1 only if action is taken and not followed by backtracking, the correlation between this new indicator and the binary quantitative indicator improves and becomes significant at the 5% confidence level.

Match between the information content of OECD structural policy indicators and the qualitative reform indicators used in this chapter

	Some action taken	No action taken
Improvement in the corresponding structural policy indicator	49	23
Deterioration or no change in the corresponding structural policy indicator	16	15

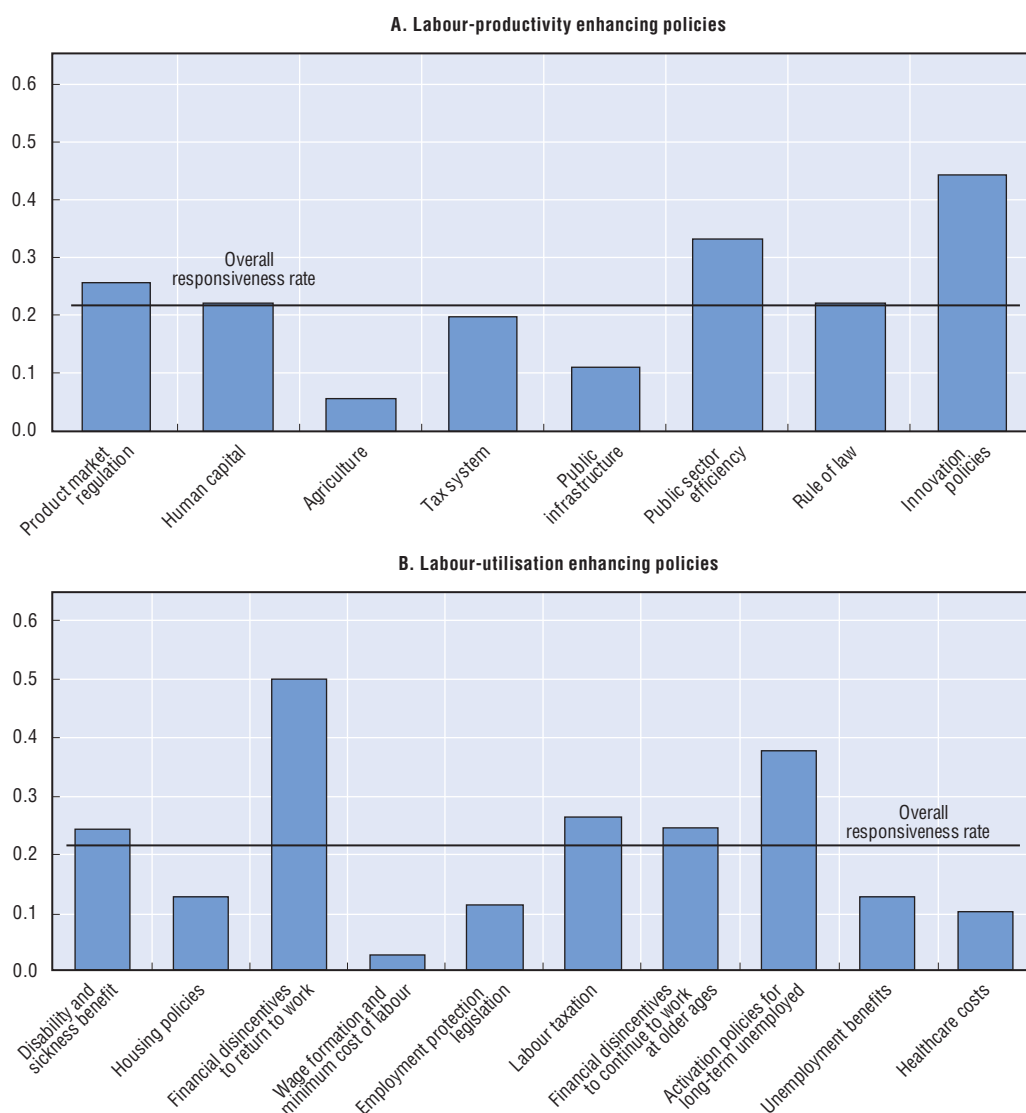
Source: *Going for Growth*

1. For instance, 2003 and 2008 vintages of product market regulation indicators, and 2004 and 2006 vintages of disability benefits recipients data are taken to approximate the change in policy settings between 2005 and 2008, which is less than ideal. When the latest available vintages of the indicators are too old or the two successive data points would potentially be widely misleading as a measure of change in the indicator between 2005 and 2008, those policy priorities are not included in the comparison and the calculation of the correlation coefficient reported in the table above.
2. This may explain in part the 23 mismatches mentioned in the upper-right cell of the table featured in this box.

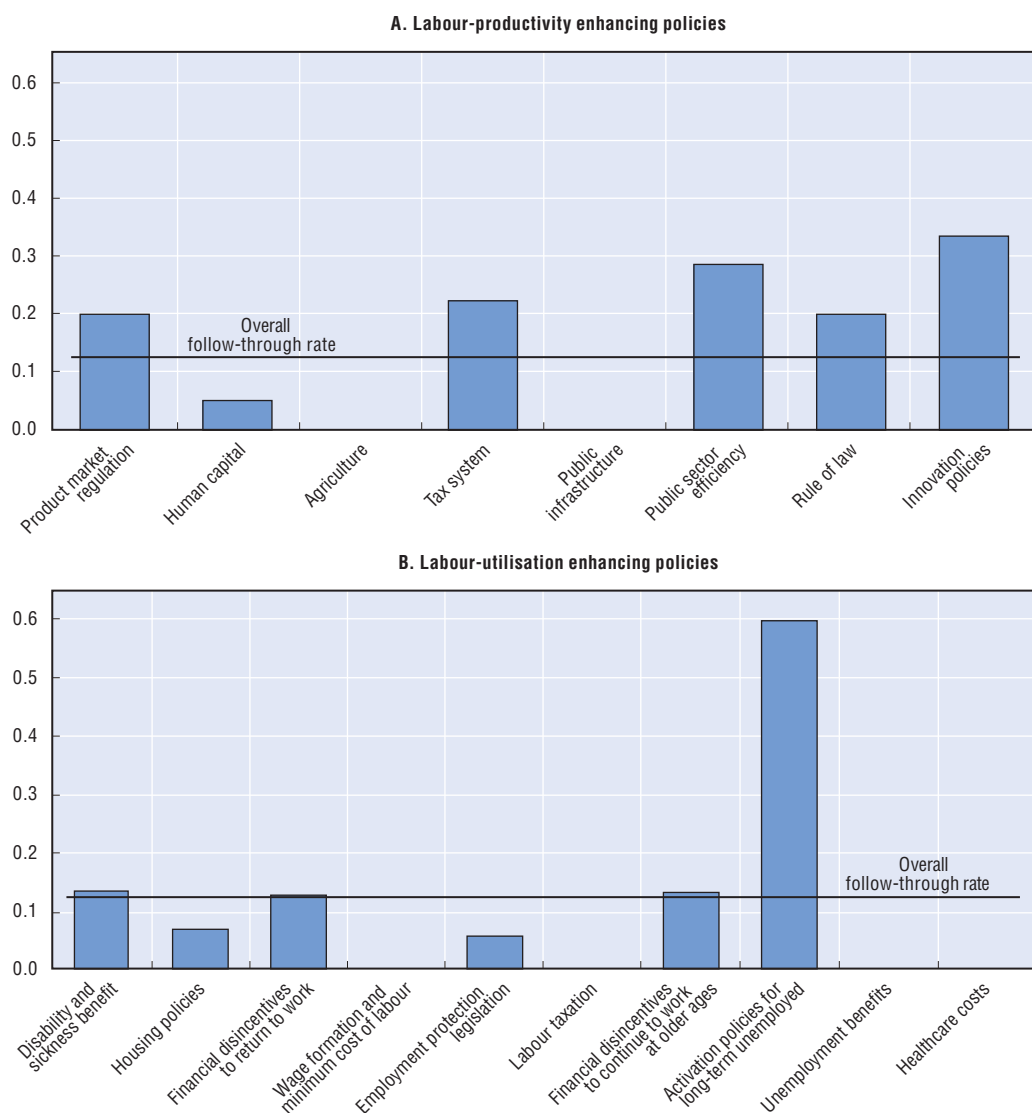
Reform patterns across fields

Based on these indicators, OECD countries appear to have followed up on *Going for Growth* recommendations to a greater extent in labour-productivity enhancing reform areas than in labour-utilisation enhancing ones since 2005 (Figures 2.4 and 2.5). Policy responses to priorities aimed at boosting productivity levels have been strongest in the areas of innovation policy and public sector efficiency, and weakest on agricultural support policies. Actions taken to raise labour utilisation have been most widely seen in the fields of labour taxation, active labour market policies, and retirement and disability and sickness schemes, while little has been done to reform employment protection legislation, wage formation, unemployment benefits, housing policies and health care systems. These findings are consistent with previous OECD analysis of labour market reform intensity carried out as part of the reassessment of the OECD *Jobs Study* (Brandt *et al.*, 2005). In

Figure 2.4. **Responsiveness to *Going for Growth* recommendations across reform areas since 2005**



StatLink  <http://dx.doi.org/10.1787/786610417714>

Figure 2.5. **Follow-through of Going for Growth recommendations across reform areas since 2005**

StatLink  <http://dx.doi.org/10.1787/786610417714>

particular, the overall evidence supports the view that reform is easier to undertake where it entails only benefits and little or no short-term cost (e.g. labour tax cuts, increased spending on active labour market or innovation policies), and harder to carry out where it may hurt the short-term interests of specific groups (e.g. farmers and permanent workers, under agricultural support policies and job protection reforms, respectively).

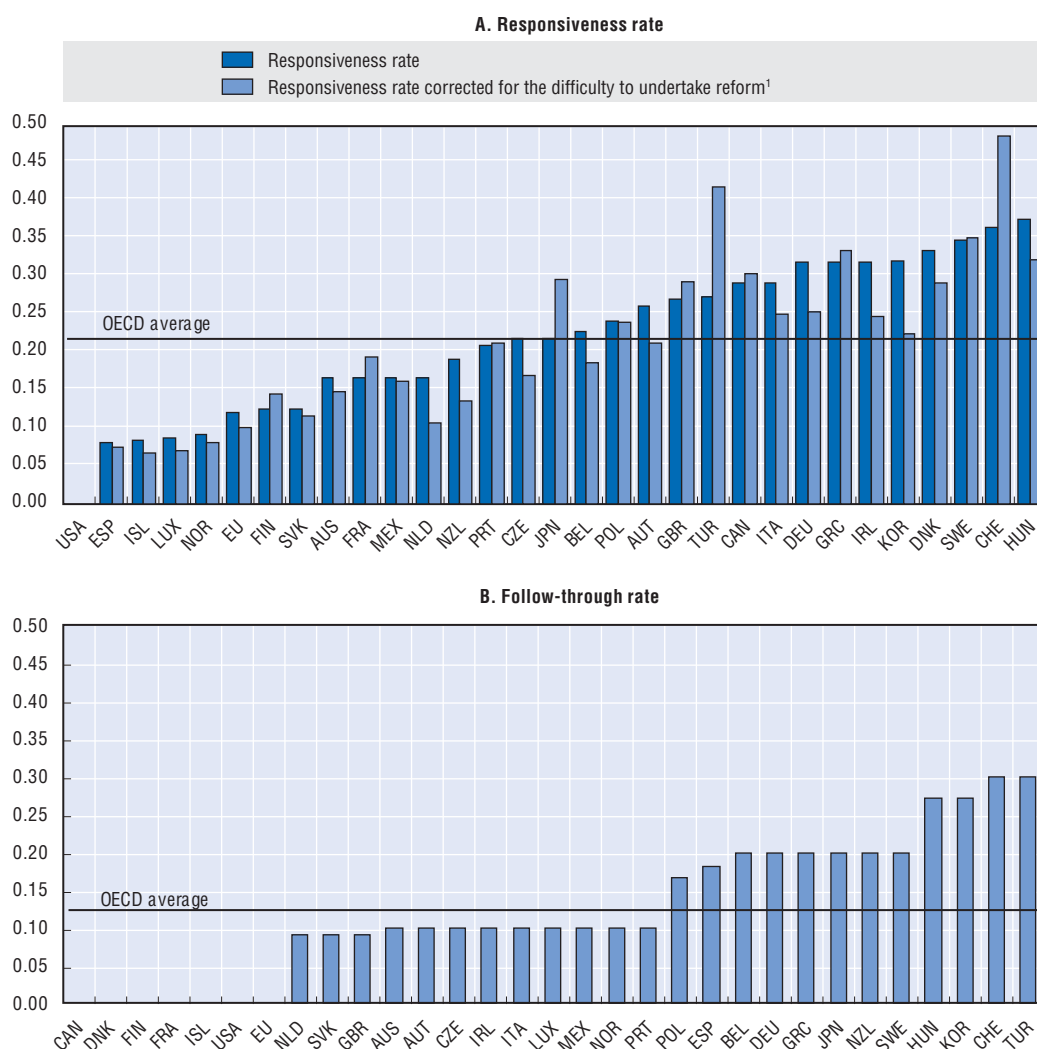
Also, while action has been relatively frequent in the *Going for Growth* priority areas, it has rarely been followed by a removal of the policy priority, hinting at some lack of major reforms. The follow-through rate is much lower than the responsiveness rate – all the more so when account is made for the fact that it assesses reforms on a two-year cycle rather than on an annual basis. Still, both indicators usually convey consistent messages across fields, except in areas where sustained reform efforts, and not just measures carried out over a couple of years, are often required to address the priority (e.g. cuts in labour tax

wedges, which in order to be sizeable and permanent need to be financed through reductions in public spending, or education reforms which improve human capital only with long lags).

Reform patterns across countries

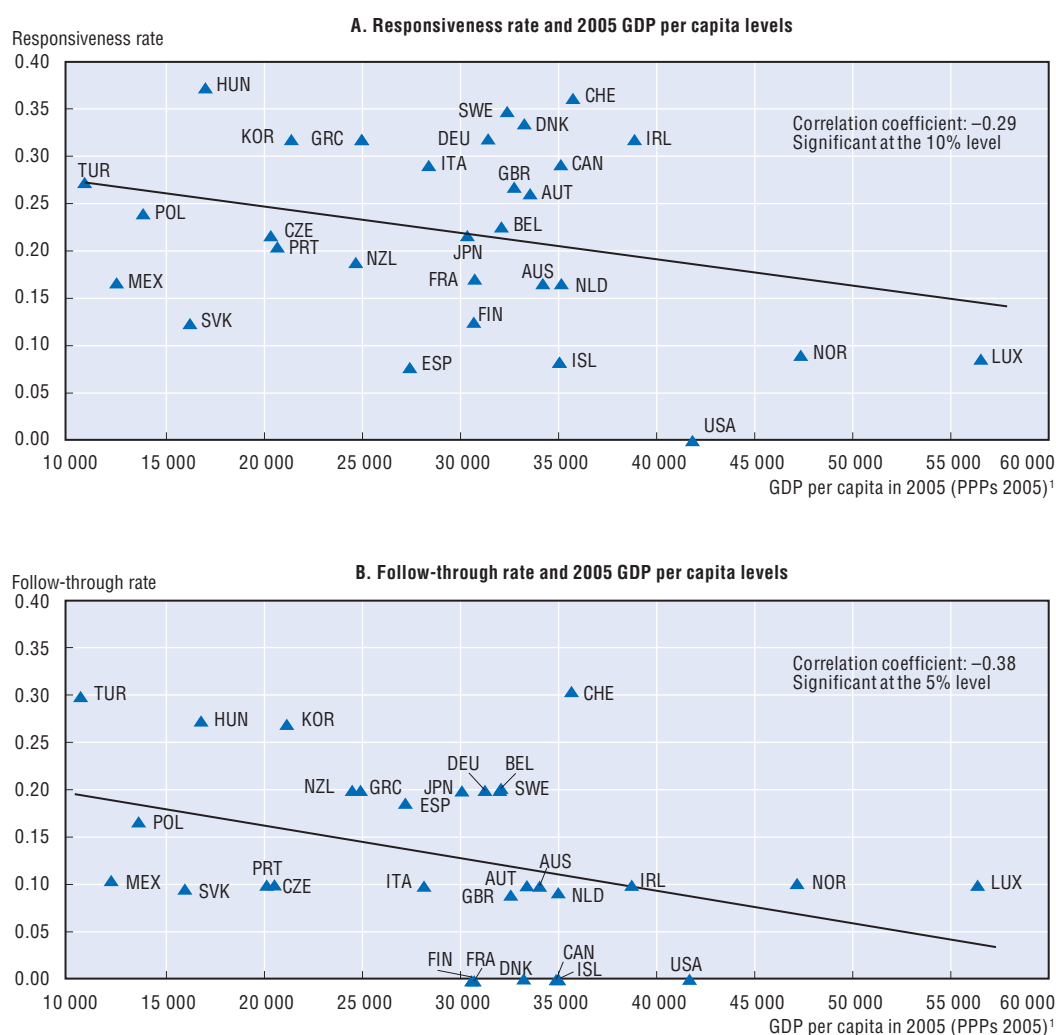
Countries that have been most active in reforms since 2005 are quite dispersed in terms of geography, size and income levels, although a majority are small OECD economies (Figure 2.6). More active countries have typically taken measures in a broader range of *Going for Growth* priority areas and have experienced greater turnover in priorities. There is only a weak link between the need for reform and subsequent reform activity, i.e. those countries that had lower GDP per capita levels in 2005 have, on average, only mildly been more responsive to *Going for Growth* priorities (Figure 2.7).⁵

Figure 2.6. **Responsiveness to and follow-through of *Going for Growth* recommendations across countries since 2005**



1. See Annex 2.A1 for details.

Figure 2.7. Initial income levels and subsequent progress in reforms



1. In the case of Luxembourg, the population is augmented by the number of cross-border workers in order to take into account their contribution to GDP.

StatLink  <http://dx.doi.org/10.1787/786610417714>

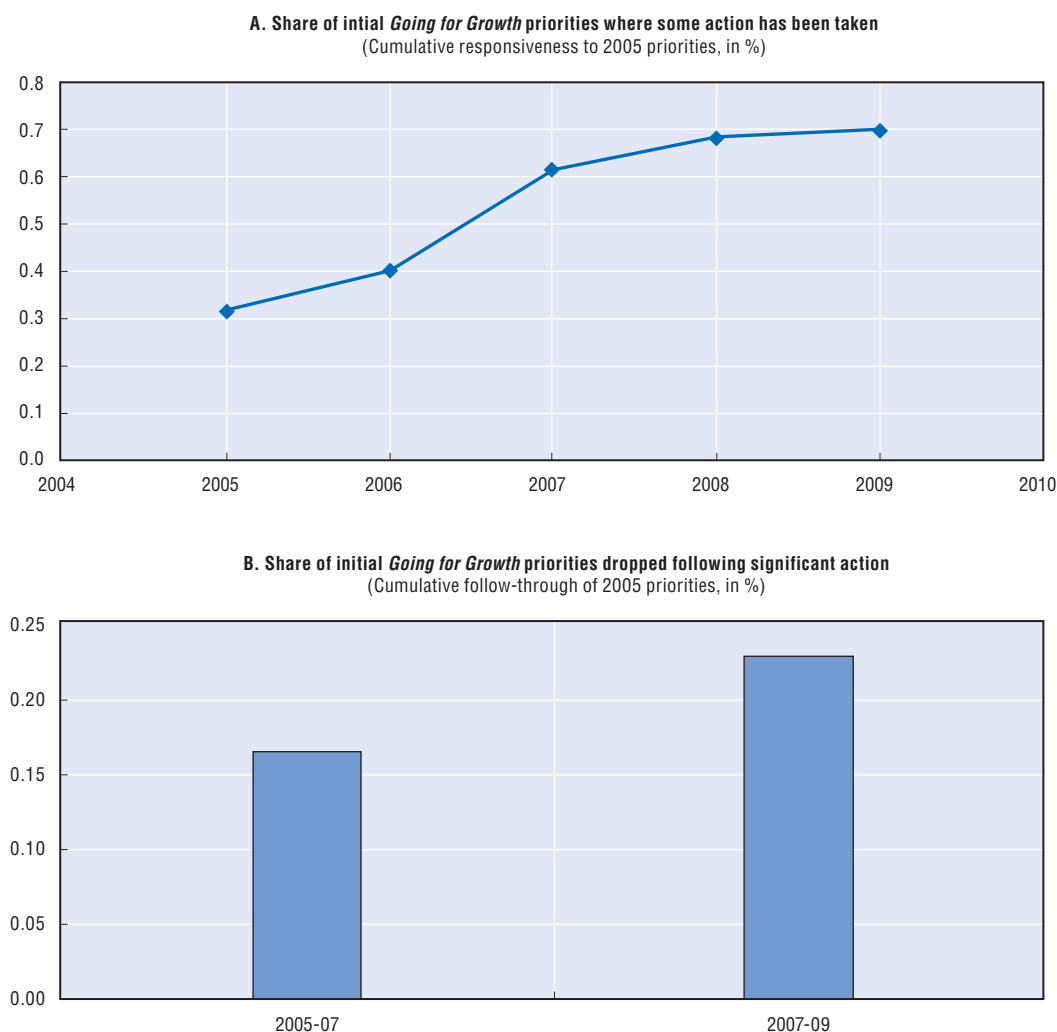
Because some policy areas appear to be more difficult to reform than others (see Figures 2.4 and 2.5), the extent to which countries have followed up on *Going for Growth* priorities may also be shaped by the nature of the recommendations. For instance, a country subject to recommendations in the areas of innovation and public sector efficiency might be expected to be more responsive than another country with similar appetite for reform but with priorities in the areas of EPL and wage formation. In order to account for this possibility, a “corrected” responsiveness rate is computed, which weighs responsiveness on each individual priority according to the difficulty to undertake reform in the corresponding field – as measured by the overall responsiveness to priorities in this area across the OECD (see Annex 2.A1 for details). The overall picture is not widely affected (Figure 2.6). Nevertheless, “corrected” responsiveness is significantly higher in a few countries where action since 2005 has focused on challenging reform fields (e.g. Japan, Sweden, Switzerland, Turkey), and lower where measures have been targeted at areas

where political resistance to reform is likely to be weaker (*e.g.* Austria, the Czech Republic, Germany, Ireland, Korea, the Netherlands, New Zealand).

Reform patterns over time

Finally, countries appear to have been more responsive to *Going for Growth* recommendations when looking over longer time spans. This confirms that proposing, negotiating, adopting and implementing reforms is often a lengthy process. For instance, while on average less than one-third of 2005 *Going for Growth* priorities had been followed by significant action by 2006, that share increased to almost two-thirds by 2008, although it appears to have levelled off since then. (Figure 2.8, Panel A). Likewise, the share of the initial 2005 priorities that have been dropped has been increasing over time (Figure 2.8, Panel B). The recent crisis does not seem (at least so far) to have accelerated the pace of structural reform, with average responsiveness rates across the OECD having been approximately halved between 2006-2007 and 2008-2009. This may reflect to some extent a

Figure 2.8. **Cumulative action taken OECD-wide on 2005 *Going for Growth* priorities since their introduction**



StatLink  <http://dx.doi.org/10.1787/786610417714>

temporary shift in countries' priorities towards macroeconomic policy issues, as well as the difficulty to launch reforms – such as in the area of labour markets – that could have further depressed demand and activity at the start of a crisis.

Notes

1. While the focus of this and the opening chapter is on OECD member countries only, a special chapter (Chapter 7) discusses structural policy challenges and reform priorities for the five countries with which the OECD pursues “enhanced engagement” (Brazil, China, India, Indonesia and South Africa), preparing the ground for their full integration into *Going for Growth* 2011.
2. These gaps in GDP per capita have been persistent over time in most countries, although they have changed in a couple of cases as a result of the crisis. In particular, the gaps for Iceland and Ireland have widened markedly in 2009.
3. Although Japan Post was privatised according to the SNA classification, the government still holds all the equity, and as a result privatisation is not yet effective in terms of ownership or legal control. The Japan Post holding company has to divest the banking and insurance subsidiaries by 2017 while keeping all the equities of the two postal service subsidiaries.
4. Housing policies can in fact be considered as policies aimed at improving labour utilisation or productivity, depending on the nature of the recommendations. While most housing-related *Going for Growth* priorities have aimed to enhance labour mobility, some recommendations – such as a reduction in the favourable tax treatment of owner-occupied housing – have primarily sought to improve the efficiency of resource allocation and thereby productivity.
5. The strength of the link between the initial conditions and subsequent reform performance does not improve substantially when i) the change in trend GDP per capita *growth* over 1985-2005, rather than the 2005 GDP per capita *level*, is used as an indicator of initial conditions; ii) account is made for the difficulty to undertake reform in certain areas, i.e. when the “corrected” responsiveness rate is used; iii) the number of years in which some legislation is taken rather than the responsiveness rate is used; iv) responsiveness to labour-productivity and labour-utilisation enhancing policies are checked separately for correlation with the initial conditions in the corresponding performance area.

Bibliography

- Brandt, N., Burniaux, J.-M. and R. Duval (2005), “Assessing the OECD Jobs Strategy: Past Developments and Reforms”, *Economics Department Working Papers* No. 429.
- Burtless, G. (2007), “Income Progress across the American Income Distribution, 2000-2005”, Testimony for the Committee on Finance, US Senate, <http://tinyurl.com/burtless>, May.
- Johansson, Å., C. Heady, J. Arnold, B. Brys and L. Vartia (2008), “Taxation and Economic Growth”, OECD *Economics Department Working Papers* No. 620.
- OECD (2008a), *Growing Unequal? Income Distribution and Poverty in OECD Countries*, Paris, October.
- OECD (2008b), *Biofuel Support Policies: An Economic Assessment*, Paris.
- OECD (2009), *OECD Employment Outlook*, Paris, September.
- OECD (2006), *Economic Policy Reforms: Going for Growth 2005*, Paris.
- Stiglitz, J., A. Sen and J.-P. Fitoussi (2009), *Report by the Commission on the Measurement of Economic Performance and Social Progress*, www.stiglitz-sen-fitoussi.fr.

ANNEX 2.A1

Constructing Qualitative Indicators of Reform Action

Two alternative summary indicators of reforms are constructed in order to identify reform patterns across the OECD since the inception of *Going for Growth*. A “responsiveness rate” sums up overall reform activity in *Going for Growth* priority areas, while a “follow-through rate” assesses the extent to which commensurate policy action has been taken to address priorities. Both indicators are computed over the period 2005-2009 for each individual priority area, broad reform field (labour-productivity or labour-utilisation enhancing reforms) and individual country.

The “responsiveness rate”

The “responsiveness rate” is calculated based on a scoring system which, for each possible reform opportunity – i.e. whenever there was a priority for the individual policy area considered in the previous edition of *Going for Growth*, assigns value 1 if significant action is taken, and 0 otherwise. The responsiveness rate is therefore calculated as the ratio of the total number of years in which some action towards addressing the policy weakness is taken to the total number of years in which some action could potentially be taken – which by definition excludes the year when the policy priority is first set. For instance, the overall responsiveness rate RR^i of country i is:

$$RR^i = \frac{\sum_p n_p^i}{\sum_p N_p^i}$$

where n_p stands for the number of years in which some action is taken on policy priority p , and N_p is the number of years in which some action could potentially be taken. This overall responsiveness rate can also be expressed as a weighted average of the country's responsiveness rates RR_p^i in each individual priority area p , with weights reflecting the share of each priority area in the total number of priorities set over 2005-2009:

$$RR^i = \frac{\sum_p RR_p^i N_p^i}{\sum_p N_p^i}$$

Because some policy areas appear to be more difficult to reform than others, the nature of priorities set for any particular country may have an impact on its responsiveness rate. For example, a country with weaknesses mainly in labour market policies might be expected to be less “responsive” to *Going for Growth* recommendations than a country with priorities in easier-to-reform areas such as innovation or public sector efficiency, even under similar

reform appetite in both countries. In order to account for this, a “corrected” responsiveness rate is computed as:

$$RR_{corrected}^i = \frac{\sum_p RR_p^i \left(\frac{\overline{RR_p^i}}{\overline{RR_p}} \right) N_p^i}{\sum_p N_p^i}$$

Where $\overline{RR_p^i}$ denotes the overall responsiveness rate across all policy areas and countries, and $\overline{RR_p}$ is the overall responsiveness rate in policy priority area p across countries. The “corrected” responsiveness rate thus weighs responsiveness on each individual priority area RR_p^i according to the difficulty to undertake reform in that field, as measured by the ratio $\overline{RR_p^i} / \overline{RR_p}$ of the overall responsiveness rate to the responsiveness rate in the priority area p considered (both averaged across countries).¹

The “follow-through rate”

The “follow-through rate” instead focuses on deep reforms by setting a more stringent criterion. Concretely, for each possible reform opportunity, the underlying coding of reform efforts involves assigning value one if any action taken is significant enough to warrant a removal of the corresponding priority in the following *Going for Growth* exercise, and zero otherwise. The follow-through rate is basically the ratio of the number of priorities dropped following significant action during the previous two years to the total number of two-year *Going for Growth* cycles in which the policy recommendation appears. The follow-through rate cannot be readily compared with the responsiveness rate since it is computed over a two-year rather than a one-year period, and only over the period 2005-2008 – rather than 2005-2009 – covered by the 2005, 2007 and 2009 issues.

Caveats

Both the responsiveness rate and the follow-through rate measure the extent to which OECD countries have followed up on *Going for Growth* recommendations since 2005. They should not be interpreted as broad reform intensity indicators, as they do not quantify the magnitude of individual measures taken in priority areas and ignore altogether significant reforms that may be carried out in non-priority areas. Furthermore, these indicators are no substitutes for reform assessments based on OECD structural policy indicators, which form the backbone of *Going for Growth*. Nevertheless, they are used here mainly due to their greater comprehensiveness and timeliness.

The construction of responsiveness and follow-through rates is also subject to a number of practical limitations, implying that these indicators should be read with caution:²

- While the underlying binary scoring system limits the impact of judgment calls in assessing the extent of reform efforts, it also has drawbacks. In particular, the responsiveness rate treats minor legislative actions no differently from sweeping reforms, while the follow-through rate ignores major reforms whenever these are insufficient to fully address the policy recommendation – as may happen for instance when initial policy settings are very inadequate.
- When coding reform efforts, the reform year is considered to be the year in which legislative action is taken, rather than the year in which implementation actually takes place or legislation becomes effective. One implication is that whenever legislative

action is taken with a view to implementing a reform agenda over an extended time period, only the decision year is considered as a reform year in the calculation of the responsiveness rate. This may lead to an understatement of actual reform efforts over a given time period, *ceteris paribus*.

- Because laying the groundwork for undertaking reforms takes time, the year in which a particular policy recommendation was first made is not counted as a reform opportunity in the calculation of responsiveness rates. This approach ultimately presumes that there is no time overlap between the reform agendas of governments and the policy recommendations made in *Going for Growth*. However, it implies that governments are not credited for reforms carried out in the first year when a *Going for Growth* priority is first set in the corresponding area.
- Once they are dropped, even when no significant action has been taken, priority areas are no longer covered by the reform indicators. Insofar as governments are more likely to act on policy priorities some time after they are identified, the indicators may not fully reflect longer term progress in reform.
- Some priorities reappeared in the 2009 *Going for Growth* assessment, after having been identified as a weakness in 2005 and dropped in 2007 even though no significant action had been taken. Such priorities are treated as if they had remained priorities since 2005 – i.e. as if they were priorities in the 2007 and 2008 exercises – and reform scores are computed accordingly. However, reform measures carried out in “missing” years may not always be fully documented in such cases.
- No negative scores are assigned when action taken is in contradiction with the priority, i.e. when it results in a deterioration of the corresponding policy stance. This approach potentially results in an overstatement of reform activity, *ceteris paribus*. For example, if positive legislative action is taken and reversed at a later date, the indicators capture some progress even though policy settings ultimately remain unchanged.

Notes

1. There is in fact no straightforward way to correct for the difficulty to undertake reform, and one drawback of the fairly intuitive formulation retained here is that the “corrected” responsiveness rate can in principle exceed 100%. A 100% bound is imposed in those very few cases where, in practice, this happens.
2. Different but still related policy recommendations may be merged between consecutive *Going for Growth* exercises, or conversely a recommendation may be split into separate, more detailed ones. Although, it is not a practical limitation, *per se*, in those cases, reform indicators are computed as if the merged priorities continued to exist separately after the merger, and as if the split priorities were already separate priorities before the split.

ANNEX 2.A2

Incorporating Terms-of-Trade Gains and Losses into International Income Comparisons

Substantial changes in the relative prices of internationally traded goods have taken place over the past decade, most notably wide swings in oil and raw material prices and a continuous decline in the price of information and communication technology (ICT) goods. These price changes have inserted a wedge between production and real incomes in countries with relatively strong or weak specialisation in the goods concerned. Improvements in the terms of trade amount to a windfall gain for a country as a whole, and imply an increase in its real income and material well-being even under unchanged output. Put simply, an improvement in the terms of trade means a country gets more for less. This phenomenon is similar in many ways to technological progress. Contrary to the treatment of technological progress, however, a change in the terms of trade is treated by the System of National Accounts as a price phenomenon, rather than a real effect. Consequently, the beneficial effect of an improvement in the terms of trade is not captured by real GDP measures.¹

Previous work by the OECD, reported in particular in *Going for Growth* 2006, evaluated a range of national accounts-based measures of material well-being, including real gross national income, which takes account of terms-of-trade effects and also makes adjustments for net foreign transfers from abroad that in some cases can be quite large (Boarini *et al.*, 2006). This earlier work did not examine real gross domestic income (GDI) at PPP, a measure whose computation has recently gained a clearer methodological foundation, as the index number properties of its deflators relative to those of the standard GDP measure have been more systematically evaluated (Feenstra *et al.*, 2009; Reinsdorf, 2009).

This annex uses newly-derived computations of real GDI to compare income and output across OECD countries and over time. The analysis finds that taking account of the terms of international trade can indeed be important for assessing *both* changes and cross-country differences in real income, and thereby in material well-being. Regarding *changes* in real income, the gap between real GDI and real GDP per capita growth has exceeded one percentage point annually in several OECD countries over the past decade, confirming that terms-of-trade effects can undermine the accuracy of real GDP per capita growth as an indicator of advances in material living standards. Regarding *real income levels*, and given the conventions used in constructing OECD GDP PPPs, the current *Going for Growth* practice of comparing real GDP per capita levels across countries using PPPs comes in fact close – although it is not fully equivalent – to comparing real GDIs per capita, and as such it

already largely incorporates terms-of-trade effects. One option going forward would be to use explicit real GDI per capita measures for benchmarking purposes in the context of *Going for Growth* – regardless of whether other, more radical, changes to performance benchmarks are considered, such as further development of the types of measures discussed in the conclusions to the recent report of the Commission on the Measurement of Economic Performance and Social Progress (see Box 2.1 in Chapter 2).

From output (real GDP) to income (real GDI)

A number of OECD countries have experienced strong trend changes in their terms of trade over the past decade. For instance, Australia has benefited from a strong improvement in its terms of trade as a result of large increases in commodity prices, while Finland has experienced a terms-of-trade decline as a result of rapid falls in the price of its ICT good exports. Such large shifts in the prices of exports relative to those of imports drive a wedge between the value of production and real incomes, and can offset some of income gains from productivity growth when the latter is concentrated in goods and services that suffer relative price declines on world markets, such as ICT goods. Given that the broadening of globalisation has favoured greater degrees of specialisation, especially for relatively small countries, taking into account gains and losses from the terms of trade is of growing relevance.

In recent years, some effort has been made in the measurement literature to examine the evolution of real GDI and incorporate the terms of trade effects into income computations for certain OECD countries, such as Canada, Switzerland and the United States, among others (see Kohli, 2004, 2006; Reinsdorf, 2009). The main implication is that if the objective is to compare relative incomes across countries and changes over time, then real GDI should be preferred to real GDP, though for productivity measurement the focus should continue to be on real GDP.

The distinction between real GDP and real GDI is made in the UN System of National Accounts, though there is no conceptual difference between *nominal* GDP and GDI.² However, *real* GDP and GDI can differ because their deflators are different. More precisely, the latter may be defined as:³

$$\text{Real GDI} = (\text{Nominal GDP}) / (\text{Domestic absorption price index})$$

where domestic absorption equals consumption plus investment and government expenditure ($C + I + G$), or equivalently GDP minus the trade balance, the latter being defined as exports minus imports ($X - M$). In comparison, the traditional output-based concept defines:

$$\text{Real GDP} = (\text{Nominal GDP}) / (\text{GDP price index})$$

and thus, the difference in the concepts is only on account of the difference in their deflators:

$$\text{Real GDI} - \text{Real GDP} = \frac{X - M}{P_{da}} - \left(\frac{X}{P_x} - \frac{M}{P_m} \right)$$

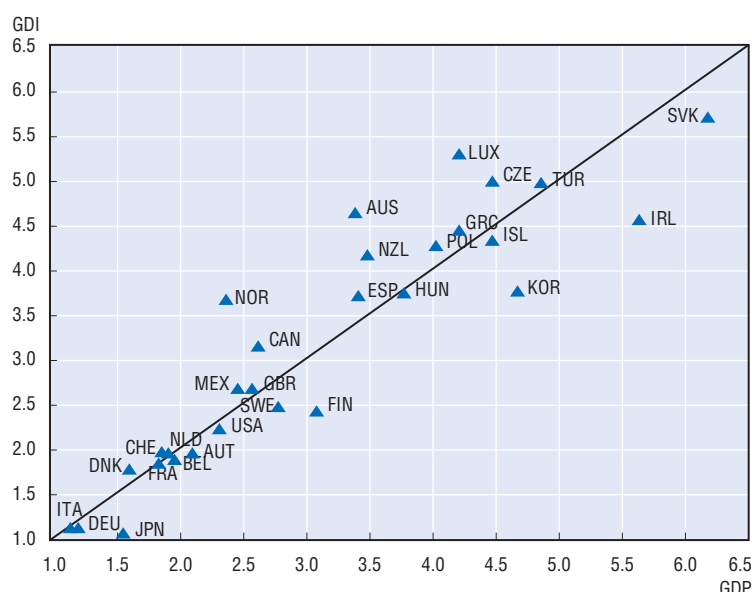
where P_{da} is the price index for domestic absorption and P_x and P_m are the price indexes for exports and imports, respectively. Thus, computing real GDP in domestic currency amounts to deflating each component of GDP by corresponding deflators (i.e. the export and import price deflator for exports and imports, respectively), while computing real GDI implies deflating the whole trade balance by the price index for domestic absorption.

Real GDI affects the evolution of income measures over time

Over the past decade, real income growth has varied substantially for some countries according to whether it is measured by the evolution of real GDI or by changes in real GDP. Depending on the composition of trade, and focusing on the period 2000-2007, countries can be separated into those that gained and those that lost in effective terms as a result of shifts in their terms of trade (Figure 2.A2.1). Annual real GDI growth exceeded real GDP growth by over one percentage point in Australia and Norway as a result of favourable shifts in commodity prices over the period. Canada and New Zealand also benefited, albeit to a lesser extent. Other countries that enjoyed sizable terms-of-trade gains include the Czech Republic, Luxembourg and Spain. By contrast, Ireland, and to a lesser extent Finland, Japan, the Slovak Republic and Sweden suffered significant terms-of-trade losses over the 2000 to 2007 period.

Figure 2.A2.1. **Real income growth differs noticeably from real GDP growth in a number of OECD countries**

Average real GDI vs. real GDP growth from 2000 to 2007 (per cent)



Source: OECD National Accounts Database.

StatLink  <http://dx.doi.org/10.1787/786610417714>

Just like focusing on real GDI growth can yield a different income growth picture than looking at real GDP growth, focusing on real GDI levels can significantly alter cross-country differences in income levels compared with comparisons based on real GDP levels. In order to make comparisons of income levels across countries, domestic currency values need to be converted using appropriate purchasing power parities (PPPs). Own-currency GDP is usually deflated for international comparison using the GDP PPP, while own-currency GDI should be deflated using the PPP for domestic absorption only, analogous to the use of the domestic absorption price index for deflation over time (see Feenstra et al., 2009). These concepts in level terms can be defined as follows:

Real GDP at PPP = (Nominal GDP)/(PPP for output)

Real GDI at PPP = (Nominal GDP)/(PPP for domestic absorption)

The deflation procedure that is used for converting GDP in a country's own currency to international dollars at PPP, in use by the OECD and other international organisations, is actually closer in practice to GDI than to an output-based concept. This means that it is actually straightforward to compute purely GDI-based PPPs. And because published GDPs at PPP already capture some terms-of-trade effects, they are fairly appropriate for international comparisons of income levels, but raise some issues for output and productivity level comparisons (see Box 2.A2.1). GDI-based PPPs for the 2005 benchmark year may then be used in combination with inter-temporal GDI deflators (using domestic absorption) over time to compute a real income (real GDI) measure that is comparable both over time and across countries.

Box 2.A2.1. The difference between the “true” real GDP and real GDI in levels at PPP

The distinction between the income (GDI-based) and the output (GDP-based) deflator concepts implies that changes in the terms of trade will affect the growth rates of GDI and GDP differently. However even the relative levels between countries differ according to which concept is used, because the PPP is not the same for domestic absorption and for overall GDP. In order to correctly measure the terms-of-trade effect in levels across countries and therefore to make accurate international comparisons of output, reliable PPPs for both imports and exports are needed. Experimental work has been carried out using import and export unit value ratios for traded goods to derive PPPs, which attempt to control for major differences in the composition of trade (Feenstra *et al.*, 2009).¹ Using this rough approximation, it appears that cross-country differences in output levels can vary dramatically from cross-country gaps in incomes. This can be observed by examining the difference between the concepts:

$$\text{GDI}_{\text{GDI PPP}} - \text{GDP}_{\text{Output PPP}} \approx \left(\frac{\text{PPP}_x}{\text{PPP}_{da}} - 1 \right) \left(\frac{X}{\text{PPP}_x} \right) - \left(\frac{\text{PPP}_m}{\text{PPP}_{da}} - 1 \right) \left(\frac{M}{\text{PPP}_m} \right) \quad (1)$$

where PPP_x and PPP_m are the purchasing power parities for exports (X) and imports (M), respectively.

In fact, Feenstra *et al.* (2009) estimate that the differences between the income (GDI) and output (GDP-based) concepts can be very large in levels. Taking extremes, in 1996, real GDI at international prices – which is not far from the real GDP at PPP as currently measured and used for benchmarking purposes in *Going for Growth* (see below) – exceeded real output by more than 15% in Ireland, Mexico and Switzerland, while real output was over 15% higher than real GDI in Iceland and Norway. In order to correctly assess labour productivity gaps across countries, separate from terms-of-trade effects, this output-based concept should be computed.

What is the current practice at the OECD? The recommendation by the Eurostat-OECD PPP Manual is to use the “Standard” GDP PPP to compute the level of GDP per capita for a comparison year. In applying this GDP PPP measure to GDP, because PPPs for exports and imports are difficult to measure, they are approximated by the market exchange rate, implicitly assuming the law of one price holds for tradables. By making this approximation – and using the same deflator for both imports and exports, the “Standard” GDP PPP in fact to a large extent takes into account, for that given year, the level of the terms-of-trade effect. As a result, the “Standard” GDP PPP comes closer in practice to a GDI at PPP than to

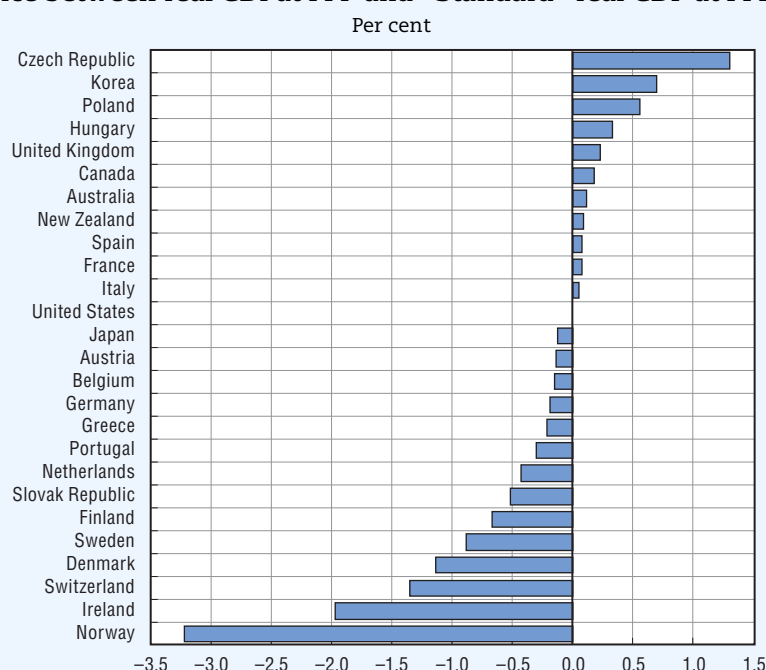
Box 2.A2.1. The difference between the “true” real GDP and real GDI in levels at PPP (cont.)

an output measure at PPP. This can be observed by replacing PPP_x and PPP_m in equation (1) with the exchange rate, $exch$, to obtain:

$$GDI_{GDI\ PPP} - GDP_{\text{“Standard”} GDP\ PPP} = \left(\frac{exch}{PPP_{da}} - 1 \right) \left(\frac{X - M}{exch} \right) \quad (1')$$

In the case of balanced trade, the OECD’s GDP at “Standard” GDP PPP measure is in fact equal to the above GDI at PPP measure. In the case of *unbalanced* trade, while it would be conceptually preferable to use the domestic absorption PPP to compute GDI at PPP, the difference between the “Standard” measure that is current employed by the OECD and an ideal GDI PPP measure is in fact relatively small, as shown in the figure below for the benchmark year 2005.

Difference between real GDI at PPP and “Standard” real GDP at PPP in 2005



Note: Real GDI is obtained using the PPP for domestic absorption, while real GDP uses the OECD’s “Standard” GDP PPP.

Source: Calculated from the OECD National Accounts Database.

StatLink  <http://dx.doi.org/10.1787/786610417714>

Despite the conceptual similarity (particularly as compared to an “ideal” output-based PPP concept) between the GDI at PPP and the OECD’s “Standard” GDP PPP, the differences are not negligible, ranging from negative 4.2% of GDP for Ireland to positive 2.5% for Australia. For this reason, Figure 2.A2.1 in this annex uses purely GDI-based PPPs rather than the OECD’s “Standard” GDP PPPs.

1. These estimates rely on unit values for traded goods at the four-digit SITC level to determine their relative price parities for the construction of import and export PPPs. They implicitly assume that there are no quality differences among traded goods at this level. This is a very strong assumption, and the treatment differs from that in much of the intra-industry trade literature, where international differences in unit values are seen as evidence of quality differences. While there has been work to separate quality from price by Hallak and Schott (2008), which suggests that quality differences may be less of an issue for OECD countries, this analysis remains highly experimental. Thus, these estimates of the difference between real GDI at GDI PPPs and real GDP at output-based PPPs should be considered as indicative of the overall scale of the measurement problem rather than as point estimates in themselves.

Do terms-of-trade issues have implications for *Going for Growth's* assessments and policy recommendations?

Much of the empirical work that underlies *Going for Growth* policy recommendations relies upon GDP-based national accounts aggregates as their explanatory variables. In particular, dynamic panel regressions have been estimated that explore the policy and institutional drivers of either labour productivity growth (GDP per capita or GDP per worker) or GDP-based total factor productivity growth. While these measures avoid the problems discussed above with the level of GDP at PPP, since they rely on growth rates, they do not take into account terms-of-trade gains and losses.

Whether ignoring terms-of-trade changes affects the policy recommendations derived from previous OECD empirical studies is unclear *a priori*. Insofar as terms-of-trade changes are distributed randomly across countries, or at least are unrelated to the structural policies which have been identified as significant influences on productivity growth, policy conclusions drawn from previous OECD work are unaffected. This is no longer the case, by contrast, if certain structural policies have side effects on terms of trade and income which have been overlooked thus far. Unfortunately, it is difficult to discriminate between these two possibilities in practice, due to lack of empirical evidence on the export and import price effects of structural policy reforms.

One open question is whether the productivity-enhancing effects of reforms may have been partly offset – in terms of their impact on incomes – by terms-of-trade declines in some OECD countries since the mid-1990s. In a few small open economies for instance (*e.g.* Finland), structural reforms have been concomitant with increased specialisation in information and communication technology goods, whose relative price has steadily declined. This decline has dampened the effectiveness of productivity gains in boosting material living standards. By contrast, any side-effects of reforms on income through the terms-of-trade channel are likely to be small in larger, more diversified economies.

Notes

1. This issue is elaborated in Diewert and Morrison (1986) and Kohli (2004, 2006). While the balance of imports and exports is of course a vital part of standard GDP computations, the deflators used to evaluate this item in real terms for comparisons across both time and space (countries) make certain assumptions that have conceptually weak foundations.
2. This is leaving aside the statistical discrepancy that may exist in practice between income and production approaches to compiling national accounts.
3. There is no uniform official definition of real GDI, as various deflators can be used to discount imports and exports. However, there are solid theoretical reasons to use the domestic absorption price index to deflate both import and export values (see Kohli, 2004)

Bibliography

- Boarini, R., Å. Johansson and M. Mira D'Ercole (2006), "Alternative Measures of Well-Being", *OECD Economics Department Working Papers*, No. 476.
- Diewert, W.E. and C.J. Morrison (1986), "Adjusting Output and Productivity Indexes for Changes in the Terms of Trade", *Economic Journal*, Vol. 96.
- Feenstra, R.C., A. Heston, M.C. Timmer and H. Deng (2009), "Estimating Real Production and Expenditures Across Nations: A Proposal for Improving the Penn World Tables", *Review of Economic Studies*, Vol. 91.

- Hallak, J.C. and P.K. Schott (2008), "Estimating Cross-Country Differences in Product Quality", *NBER Working Papers*, No. 13807.
- Kohli, U. (2004), "Real GDP, Real Domestic Income, and Terms-of-Trade Changes", *Journal of International Economics*, Vol. 62.
- Kohli, U. (2006), "Real GDP, Real GDI, and Trading Gains: Canada, 1981-2005", *International Productivity Monitor*, Vol. 13.

PART I
Chapter 3

Country Notes

An introduction to this year's country notes

The country notes in this year's edition of *Going for Growth* have two special features. One addresses the current crisis and recovery context, and the other marks the coming-of-age of the *Going for Growth* exercise.

At the present juncture, it is critical that OECD governments recognise which policies are most important for delivering a strong and sustainable economic recovery. Chapter 1 discusses such policies at a broad level, while in the following country notes those current (2009) *Going for Growth* priorities that may be most urgent to address in the current context are marked with an arrow.¹ These crisis-related reform priorities have been identified on the basis of two criteria, namely that they should: i) speed up the recovery, in order to minimise the overall temporary economic loss from the crisis; and, ii) alleviate risks that GDP and living standards will be durably reduced over the longer term — for example, through a persistent increase in unemployment and/or irreversible withdrawal from the labour force of groups with weaker attachment to the labour market. The identification of priorities that meet either or both of these criteria relies on available theoretical and empirical evidence – including OECD work – on the policy determinants of economic resilience and hysteresis effects, respectively (see Box 1.1 in Chapter 1 for more details). Nevertheless, it should be acknowledged that such evidence is not as robust as the existing research on the links between structural policies and long-term economic performance which underpins *Going for Growth*. Therefore some degree of judgemental expertise has also been exercised.

In practice, selected priorities include reforms that would:

- *Improve financial market regulation.* Though it was only singled out for the European Union, Iceland, and the United States in last year's edition of *Going for Growth*, improving financial market regulation is in fact necessary in nearly all OECD countries, as the crisis has revealed major market and regulatory failures in this domain (see Chapter 1).
- *Remove business entry barriers to boost short-term activity and job creation.* Reducing entry barrier regulation facilitates new business creation and expansion and can also help to accelerate resource re-allocation. In particular, many OECD countries would benefit from a relaxation of entry barriers in retail trade and/or liberal professions, as well as from reductions in administrative burdens on business and international barriers that restrict foreign direct investment. By contrast, the short-term benefits of some types of product market deregulation in network industries are less clear-cut, as incumbent monopolies may first lay-off workers while entry of competitors and the associated job creation may take more time, except possibly in telecommunications. Therefore, where countries' priorities include a mix of different regulatory reform priorities, those recommendations that are most conducive to short-term growth benefits should be given relative priority.
- *Facilitate the rebound of employment as economic conditions improve.* Overly stringent employment regulations can deter labour reallocation and businesses from taking on new staff as the recovery proceeds. At the same time, highly imbalanced employment

regulation that favours temporary contracts over permanent ones can lead to increased duality and insecurity. Therefore priority in general should be given to facilitating the smooth reemployment of regular workers.

- *Upgrade the skills and job-search incentives of the long-term unemployed.* Strengthening activation of the unemployed, such as through increased spending on, and reforms of active labour market policies that provide compulsory training and job search support, can help to speed up transition toward new jobs.
- *Reduce incentives for older laid-off workers to withdraw permanently from the labour force.* Incentives for early retirement are often embedded in pension systems but also in other social transfer programmes such as unemployment benefit or disability schemes. Where there is still a risk of new entries in such schemes (e.g. where there is not just a sizable share of disabled workers, but also lenient enforcement of health-based criteria for new entrants into disability schemes), they should be tightened to prevent lay-offs of older workers from turning into irreversible withdrawals from the labour force.

For those countries in which previously identified recommendations did not include any of the above reforms, one measure has however been marked with an arrow that is judged as the most urgent one in the context of the crisis.

Another novelty is that this edition follows up not only on policy priorities that were made last year, but also on all of the priorities that were made since the beginning of the *Going for Growth* exercise. Thus, in cases where relatively more policy action has taken place, or where there has been some re-thinking of policy priorities, there are more than the usual five priorities to assess, in some cases as many as nine (the years that the priorities were made are noted in parentheses after the priority heading). In addition, the assessment of actions taken in priority areas attempts to take into account not only what has happened over the past year, but also what has happened since the priority was set. This gives this edition a longer time horizon than usual for evaluation, as reflected in Chapter 2.

Note

1. Although some of the past *Going for Growth* priorities from 2005 and 2007 exercises may not have been fully addressed even though they were replaced subsequently, they are not considered as candidates for urgent priorities in this exercise.

AUSTRALIA

Priorities supported by indicators

► *Reform disability benefit schemes (2005, 2007, 2009)*

Recommendations: Tighten eligibility criteria for the Disability Support Pension (DSP) and encourage DSP beneficiaries with a substantial work capacity to look for a job.

Actions taken: Stricter eligibility criteria have been applied for new DSP claimants since July 2006. Those able to work or to be retrained to work 15 hours or more per week have become ineligible for DSP, and can instead benefit from personalised employment services to help them meet the activity requirements for unemployment benefits. The authorities did not extend these measures to all DSP recipients.

Strengthen competition in network industries (2005, 2007, 2009)

Recommendations: Complete the national energy market; harmonise state regulations for road and railway freight transport; expand and improve broadband internet access; lift barriers to water right transactions.

Actions taken: Since July 2009, a single operator assumes national electricity transmission planning functions. It has been agreed to set up national regulators for heavy vehicles, rail and maritime safety. A draft reform was introduced in the telecom sector at the end of 2009 to reduce the market power of the incumbent, reinforce the competition regime and deliver superfast broadband services. A plan was adopted in 2008 to enhance water management in the Murray Darling Basin and facilitate trading and public buybacks of water rights.

Improve the performance of upper-secondary education (2005, 2007)

Recommendations: Reduce the proportion of early school leavers by improving and promoting vocational education and training (VET).

Actions taken: Higher financial incentives and supports have raised opportunities for students to enrol in the VET system. All secondary schools will have access to vocational training centres and more training places are available. The participation requirement for school, training or work of those below 17 has been strengthened.

Improve the performance of early education (2009)

Recommendations: Enhance the quality of and access to early childhood education and care, especially for disadvantaged groups.

Actions taken: Tax rebates for “out-of-pocket” childcare spending were raised in 2009. The authorities committed to offer 15 hours per week of early childhood education and care (ECEC) to all four-year-olds. The Council of Australian Governments agreed in 2009 on new national quality standards for ECEC including better child-to-staff ratios and staff qualifications. Funding was also raised to address the needs of indigenous children.

Other key priorities

Improve fiscal incentives for workforce participation (2005, 2007, 2009)

Recommendations: Reduce effective marginal tax rates (EMTRs) further.

Actions taken: Income tax cuts have lowered EMTRs, especially for second wage earners and low income families. The conclusions of a review of the tax and welfare system focusing on incentives for workforce participation will be released in early 2010.

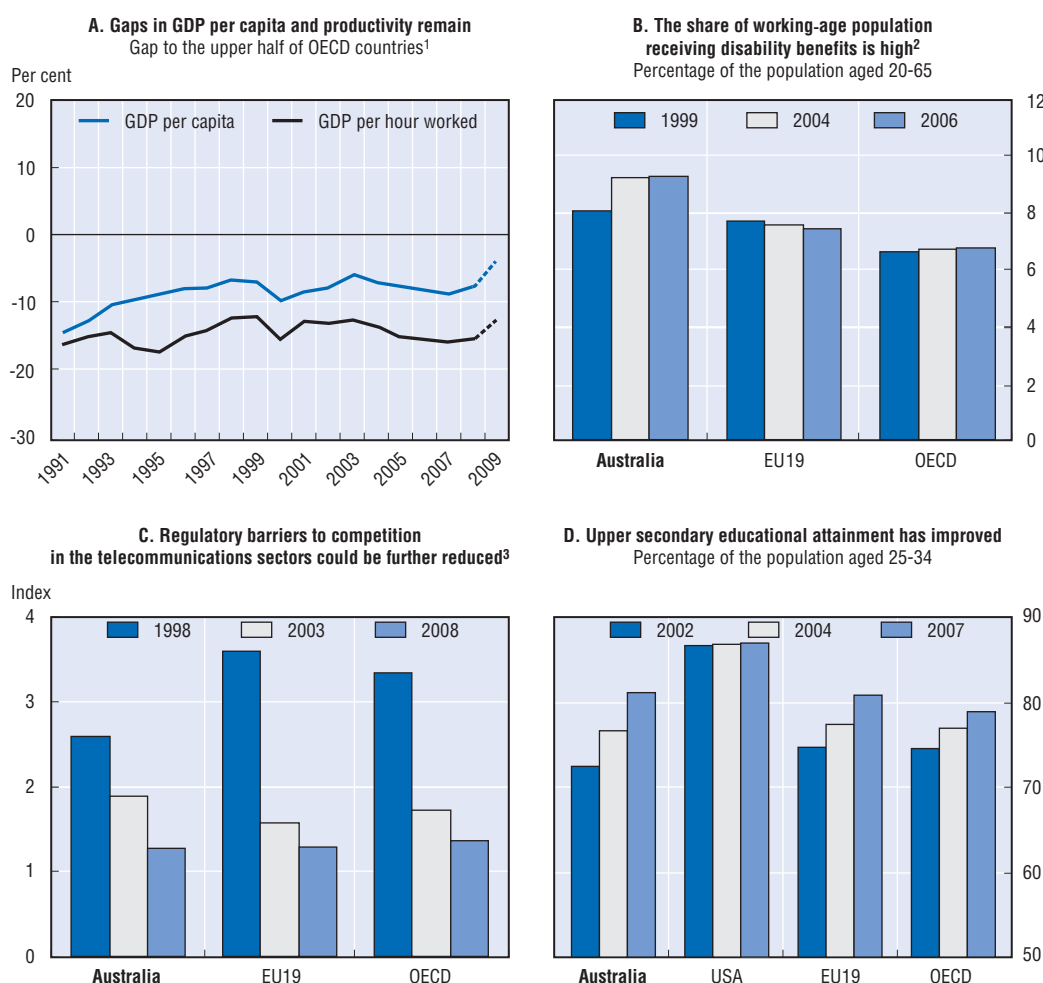
Maintain a flexible wage bargaining system and cut minimum labour costs (2005, 2007, 2009)

Recommendations: Rationalise the award system and maintain wage negotiations at the firm level.

Actions taken: A 2006 reform fostered individualisation of labour relations and an independent body was created to set the federal minimum wage, taking into account its employment impact. These measures were partly reversed in 2008 through a reinforcement of the role of awards, raising the risk of increases in minimum labour costs, although wage negotiations will continue to take place at the firm level and modernisation of awards is being completed. A new independent body has also been established to set the minimum wage.

AUSTRALIA

- The income and productivity gaps relative to the upper half of OECD countries have remained stable since the mid-90s.
- In the key priority areas, the reforms of disability benefit schemes and improved fiscal incentives should further boost labour market participation. The reduction of product market segmentation arising from differences in regulation across states and the reform in the education system should foster potential growth. Efforts in these domains need to continue.
- In other areas, reforms have improved federal-state fiscal relations. Policies to combat climate change have been substantially strengthened.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.
2. Disability benefits include benefits received from schemes to which beneficiaries have paid contributions (contributory), programmes financed by general taxation (non-contributory) and work injury schemes.
3. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD (2003), *Transforming Disability into Ability* and OECD estimates; Chart C: OECD, *Product Market Regulation Database*; Chart D: OECD (2009), *Education at a Glance*.

StatLink <http://dx.doi.org/10.1787/786611566183>

AUSTRIA

Priorities supported by indicators

Improve graduation rates from tertiary education (2005, 2007, 2009)

Recommendations: Extend performance-based funding in tertiary education and allow universities to set tuition fees. Introduce an income-contingent loan system to avoid excluding financially-constrained students.

Actions taken: The three-year performance budgeting system was implemented in 2007, which stipulates that 20% of the university budget is allocated according to output-related indicators. However, the already low tuition fees were abolished for most students at universities in 2008.

► **Reduce implicit taxes on continued work at older ages (2005, 2007, 2009)**

Recommendations: Phase in all provisions of the recent pension reforms without relaxing their conditions. Ensure that disability pensions are only used in well-justified cases.

Actions taken: The 2003-04 pension reforms considerably reduced early retirement incentives. However, some backtracking resulted from the subsequent halving of the discount rate for early retirement in 2007 and extension of the special early retirement scheme in 2008.

Reduce barriers to entry in network industries (2007, 2009)

Recommendations: Reduce or eliminate remaining cross-subsidies. Relax ownership restrictions in the electricity sector. Fully privatise the telecommunications and electricity sectors. Foster competition in rail transportation.

Actions taken: No substantial action taken. Market supervision was strengthened to some degree in the gas and electricity sectors.

► **Reduce administrative burdens on start-ups (2005)**

Recommendations: Reduce company set-up costs. Further narrow the range of trades requiring qualification certificates. Ease entry regulations for liberal professions.

Actions taken: Entry restrictions have been eased in some sectors, notably in wholesale and retail trade in 2005. Electronic legal submissions by Austrian notaries to the Companies' Register were introduced in 2007, and the geographical coverage of electronic trade registration was subsequently extended.

Other key priorities

Lower marginal tax rates on labour income (2007, 2009)

Recommendations: Enhance work and entrepreneurship incentives by lowering marginal income tax rates financed by further broadening the tax base through reducing the numerous tax allowances.

Actions taken: Personal income taxes were lowered in 2009, including through tax relief for families with children, entrepreneurs and freelancers. Unemployment insurance contribution rates were reduced for low-wage workers in 2008.

► **Reduce barriers to competition in professional services and retail trade (2007, 2009)**

Recommendations: Reduce the statutory regulation of trades and professions. Abolish compulsory chamber membership for liberal professions. Further promote competition in retail trade.

Actions taken: The Crafts, Trade, Service and Industry Act was amended in 2008 to facilitate entry in several professions. Several EU directives concerning professional qualification certificates were transposed, and legal shop opening hours were extended.

Reduce inactivity traps in the benefit system (2005)

Recommendations: Reduce inactivity traps in the benefit system by restructuring child benefits in favour of vouchers for childcare, and better integrating job-placement activities with social assistance.

Actions taken: Work incentives of low-income parents were increased in 2008, and a new system of child benefits was introduced, which is more tailored to various work situations.

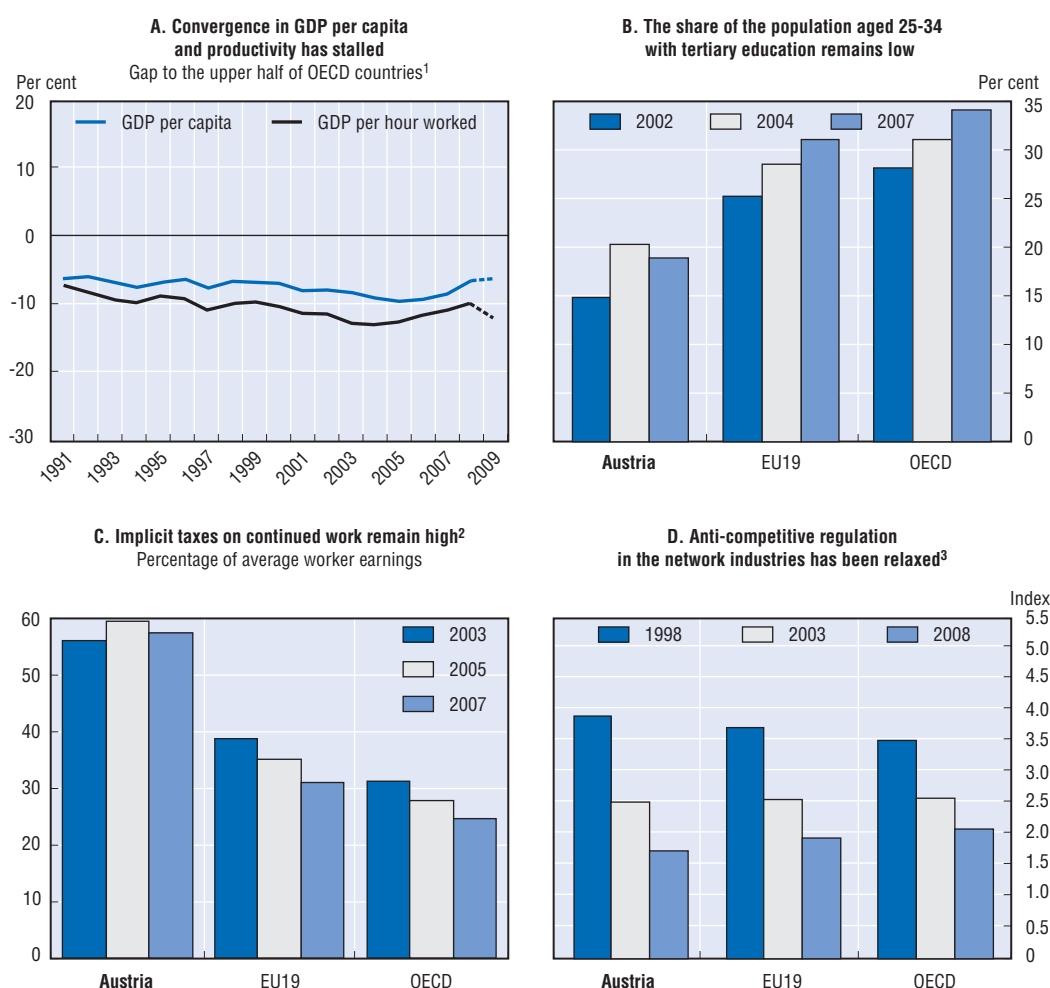
Strengthen competition law (2005)

Recommendations: Strengthen competition law and enforcement by assigning more powers and resources to the competition authority, streamlining the institutional setup, simplifying rules on vertical agreements and introducing a credible leniency programme.

Actions taken: Several changes to the competition law and rules were implemented with the 2005 reform of the Cartel Act, Austrian Competition Act and Unfair Competition Act.

AUSTRIA

- GDP per capita has been below the average of the upper half of OECD countries and its relative position slightly deteriorated until the mid-2000s. Labour productivity has accelerated in the most recent years but labour utilisation remains sluggish, reflecting a decline in average working hours.
- In key priority areas, early retirement incentives, marginal tax rates on labour income and administrative burdens on start-ups have been reduced, and the competition framework has been improved somewhat, but further reforms are still needed. Network industries and especially higher education are in need of deeper reforms.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Implicit tax on continued work in early retirement route, average for 55 and 60-year-old workers.
3. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD (2009), Education at a Glance; Chart C: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", OECD Economics Department Working Papers, No. 370 and OECD calculations; Chart D: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

BELGIUM

Priorities supported by indicators

► **Further reduce implicit taxes on continued work at older ages (2005, 2007, 2009)**

Recommendations: Phase out early retirement schemes.

Actions taken: Job-search requirements up to age 58 have been progressively tightened. During the mid-2000s, the minimum age for eligibility to an early retirement pension was raised to age 60 and the standard retirement age for women was aligned with that of men (65 years). A number of paths to early retirement have been closed or made less attractive and the working life requirement for a full pension has been increased. Financial incentives to work longer, in the form of in-work benefits for the older unemployed and a pension bonus have been introduced.

Further reduce the tax wedge on low-income workers (2005, 2007, 2009)

Recommendations: Target all wage subsidies and reductions of social security contributions to low-wage earners. Finance cuts in tax wedges by lowering government spending and tax expenditures.

Actions taken: The government gradually reduced social security charges and personal income taxes for low income workers and introduced a tax credit. In 2009, wage subsidies were increased for all workers, including some higher-wage workers (shift, night and R&D workers).

► **Ease regulation in the retail sector (2007, 2009)**

Recommendations: Continue relaxing regulation of zoning and shop opening hours.

Actions taken: Opening hour restrictions have been slightly relaxed. No further action has been taken.

Ease the regulatory burden on business operations (2005)

Recommendations: Systematically evaluate alternatives before adopting a new regulation. Continue to eliminate across the board anti-competitive sectoral regulation and reduce administrative burdens, as well as review laws and regulations governing the liberal professions.

Actions taken: Administrative burdens have been reduced somewhat through simplification and greater use of e-government. Licences and permits for at least eleven trades were abolished in 2005.

Other key priorities

Increase the flexibility of wage bargaining and determination (2007, 2009)

Recommendations: Increase the scope for individual companies to opt-out from sector-wide agreements. Abolish wage indexation.

Actions taken: No action taken.

Strengthen the efficiency of active labour market policies (2005, 2007)

Recommendations: Improve enforcement of job-search requirements for unemployed and co-ordination between regional placement agencies. Redirect ALMP funds from subsidised employment to compulsory training.

Actions taken: In 2007, the regional placement agencies created an inter-regional association to exchange job offers and to co-operate on training.

Reform the unemployment benefits system (2009)

Recommendations: Reduce the level of unemployment benefits with the unemployment duration to fully benefit from activation policies.

Actions taken: No action taken to reduce benefits. In 2009, unemployment benefits were raised for the initial period of unemployment, implying some reductions in benefits over the early parts of the unemployment period.

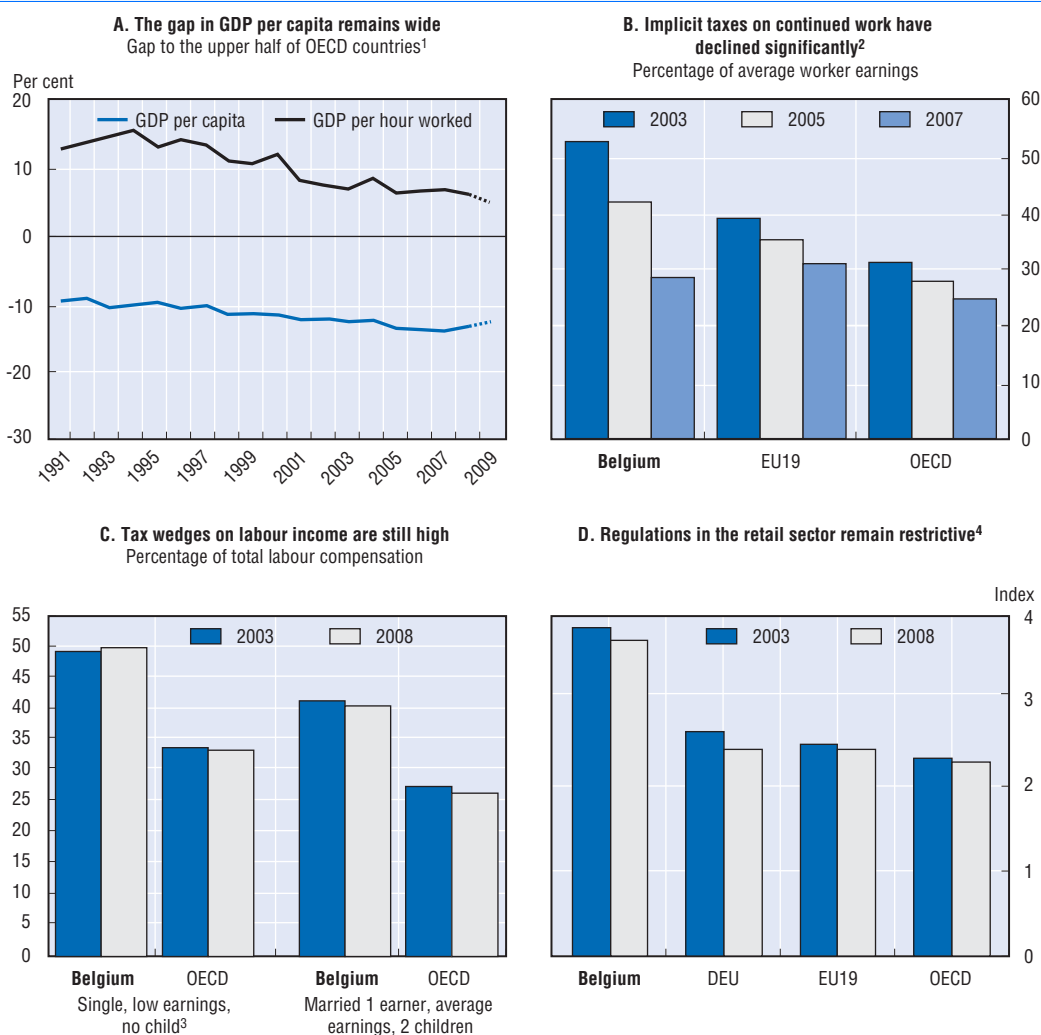
Improve the labour market performance of ethnic minorities (2005)

Recommendations: Improve education outcomes of students from ethnic minority backgrounds and strengthen the enforcement of anti-discrimination laws to enhance this group's labour-market performance.

Actions taken: No action taken.

BELGIUM

- GDP per capita has declined relative to the upper half of OECD countries, reflecting mainly lower employment rates, in particular of older workers.
- In key priority areas, reforms have recently raised participation of older workers, albeit from a low level. The tax wedge has been reduced somewhat, but remains among the highest in the OECD. Regulation of the retail sector remains restrictive, hindering competition, and there has been no progress on increasing wage flexibility. The exchange of information between regional employment agencies has improved and unemployment benefits now decline faster with duration, although their duration remains unlimited. Labour activation policies have been reformed, particularly across regions, to enhance search activity among the unemployed.
- Outside of key priority areas, the framework for competition policies has been enhanced by reforming the competition authority.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.

2. Implicit tax on continued work in early retirement route, average for 55 and 60-year-old workers.

3. Low earnings refer to two-thirds of average earnings.

4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", *OECD Economics Department Working Papers*, No. 370 and OECD calculations; Chart C: OECD, *Taxing Wages Database*; Chart D: OECD, *Product Market Regulation Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

CANADA

Priorities supported by indicators

► **Further reduce barriers to inter-provincial competition in professional services (2005, 2007, 2009)**

Recommendations: Mutually recognise, harmonise, or eliminate provincial regulation of trades and professional services, to enhance inter-provincial trade and competition in these occupations.

Actions taken: In January 2009, provincial premiers approved revisions to the Agreement on Internal Trade, under which any worker certified for an occupation by a regulatory authority of one province or territory is to be recognised as qualified for that occupation by all others.

► **Further reduce barriers to foreign ownership (2005, 2007, 2009)**

Recommendations: Reduce restrictions on foreign direct investment, which remain higher than in the majority of OECD countries, particularly in telecommunications, broadcasting and air transport.

Actions taken: Residency requirements for directors of Canadian financial institutions were relaxed in 2007. Amendments to the *Investment Canada Act* that came into force in February 2009 limit net benefit reviews to larger transactions and aim to improve transparency. The Air Pact signed with the European Union in May 2009 provides for a future relaxation of foreign ownership restrictions on Canadian airlines.

► **Reduce barriers to competition in network industries (2007, 2009)**

Recommendations: Strengthen competition in regulated telecommunications markets. Reduce public ownership and vertical integration in the electricity sector and develop competitive retail markets. Liberalise postal services by eliminating legislated monopoly protections and privatising Canada Post.

Actions taken: Some progress has been made to introduce better price signals in electricity markets at the retail level. Local phone service was deregulated in 2007 and new wireless spectrum auctioned in 2008.

Reduce work disincentives in the income support system (2005)

Recommendations: Implement stricter job-search and activation requirements and reduce effective marginal tax rates at low incomes by coordinating abatement rates more tightly across programmes and jurisdictions.

Actions taken: In 2008, the federal government introduced the Working Income Tax Benefit, a refundable tax credit for low-income individuals and families who are already in the workforce. It also encourages labour-market entry, albeit at the cost of raising marginal effective tax rates in the abatement range.

Other key priorities

Further reform the tax system (2005, 2007, 2009)

Recommendations: Reduce marginal effective tax rates on capital by aligning capital cost allowances (CCA) with the useful life of assets and eliminating provincial capital taxes and sales taxes on capital goods.

Actions taken: Many CCA rates have been increased to better reflect useful lives, general capital taxes have been or are being eliminated at the federal level and in all provinces, and British Columbia and Ontario have announced harmonisation of their retail sales tax with the federal value-added tax effective in July 2010.

Reform the employment insurance system (2007, 2009)

Recommendations: Introduce employer experience rating or scale back access to employment insurance for seasonal and temporary workers, and eliminate regionally-differentiated provisions.

Actions taken: No significant action taken.

Restrain growth in public health costs (2005)

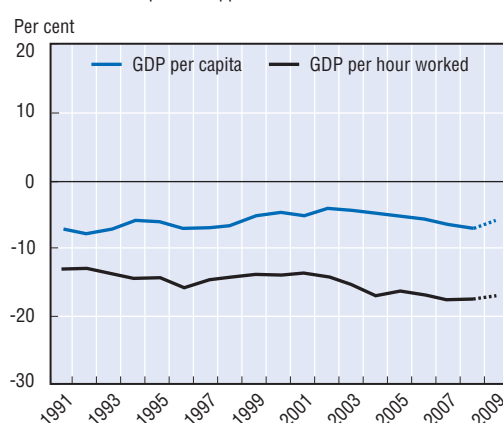
Recommendations: Introduce a mixed remuneration system for primary-care providers and allow output-based hospital funding and more contracting-out of services.

Actions taken: The number of primary-care providers in mixed-remuneration systems has been rising for several years. Some provinces have delisted formerly insured health services to cut costs. No significant change has occurred on hospital funding.

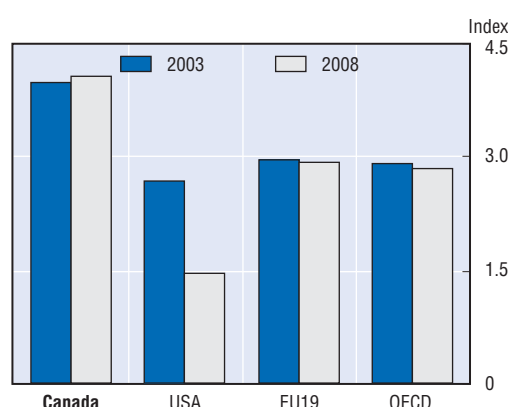
CANADA

- Canada exhibits a modest gap in living standards relative to the upper half of the OECD, entirely due to lower labour productivity.
- Significant progress has been made consistent with the OECD's tax recommendations, both on the taxation of investment and on reducing marginal effective tax rates for low-income workers. Progress has been marginal on other key priorities, however.
- In other areas, while waiting for the federal government to significantly raise the price of carbon emissions, three provinces have now introduced legislation to pave the way for an eventual sub-national cap-and-trade system. Meanwhile, the federal government is seeking to negotiate a free trade agreement with the European Union.

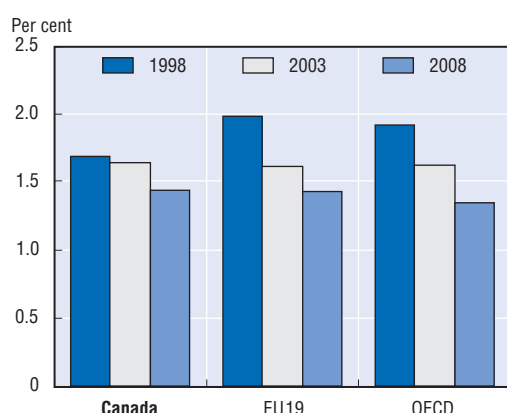
A. The gap in living standards is small but persistent
Gap to the upper half of OECD countries¹



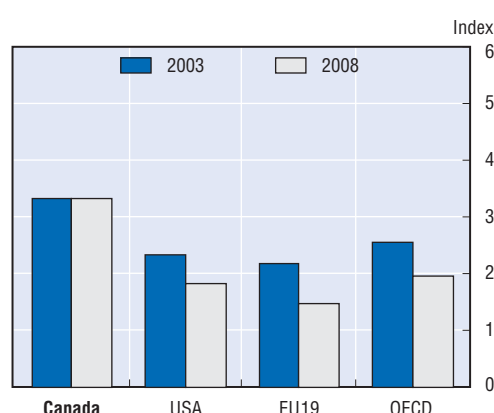
B. Entry in professional services is relatively difficult²



C. Barriers to foreign ownership continue to fall²



D. Barriers to competition in the electricity sector have not been reduced²



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Charts B, C and D: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

CZECH REPUBLIC

Priorities supported by indicators

► Reduce barriers to business entry (2005, 2007, 2009)

Recommendations: Registration should be simplified and bankruptcy law reformed.

Actions taken: A new bankruptcy law took effect in 2008. An amendment to this law was adopted in June 2009. Since 2005, there have also been revisions to the civil and commercial codes and other legislation streamlining business registration and imposing tighter deadlines for processing applications. A network of central registration offices (one-stop shops) was established in 2006.

► Reduce the costs of employment protection legislation for regular workers (2005, 2007, 2009)

Recommendations: Reduce the cost of individual dismissals, including through shorter terms and lower severance pay for short tenures, and less burdensome dismissal procedures.

Actions taken: A new, less stringent labour code took effect in 2007 but it included no significant changes to employment protection for workers on regular contracts.

Increase graduation rates from tertiary education (2007, 2009)

Recommendations: End streaming in secondary schools, and introduce fees backed by income-contingent student loans for tertiary courses in order to cope with rising demand for higher qualifications.

Actions taken: The issue of fees for tertiary courses and proposals for linking output and quality indicators to funding are under study, but there has been no significant change yet.

Reduce the tax wedge for low-income workers (2005, 2007)

Recommendations: Reduce the tax wedge, particularly for low-income earners, financed by reductions in public spending.

Actions taken: Rate reductions and bracket-widening were introduced for the two lowest income categories on the tax schedule in 2006. Tax reforms in 2007-08 also helped lower average tax rates for low-income workers.

Other key priorities

Improve the efficiency of public expenditure (2007, 2009)

Recommendations: Implement health care reforms, measures to increase the efficiency of sub-national governments and pension reform to help limit future rises in contributions.

Actions taken: Fees for some medical services were introduced in 2008 but significantly diluted by regional governments in 2009. The sickness insurance system has been reformed, though ambitious health care reform plans have been stalled. Agreement on a structural pension reform has yet to be reached but in 2008 parliament adopted legislation on raising retirement ages.

Reform the tax-benefit system (2005, 2009)

Recommendations: Improve work incentives for low-income households.

Actions taken: The government replaced the child tax allowance with a child tax credit (2008), introduced a job-search allowance (2007), and reduced the share of the income of the low-paid counted in the means test for living allowances (2007). These tax and benefit reforms have reduced the average effective tax rate at the bottom of the earnings scale for many workers but confront some low earners with higher marginal rates.

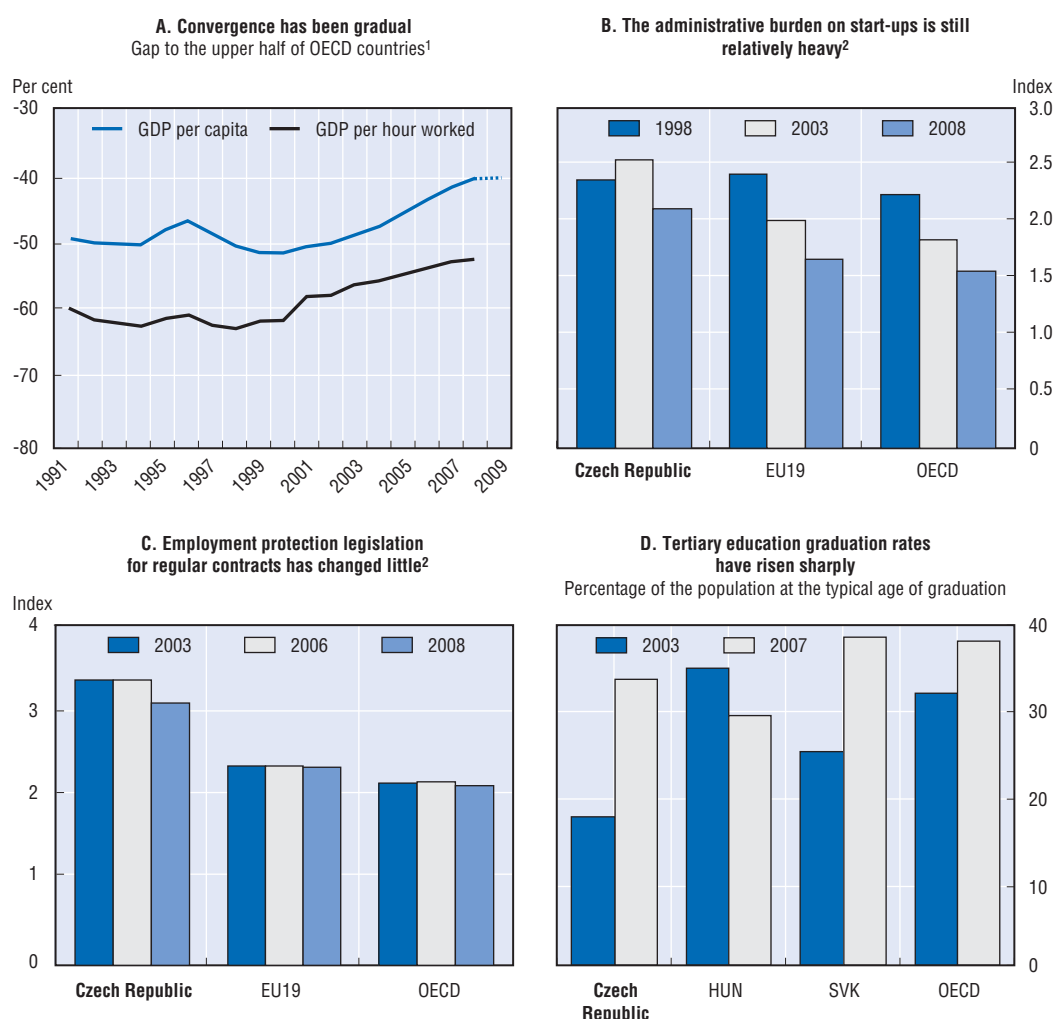
Further liberalise the rental housing market (2005)

Recommendations: Further liberalise the rental housing market to increase labour mobility.

Actions taken: Gradual, centrally capped increases in regulated rents have been allowed since 2007 and from 2010 owners should be able to set the rents freely, although this excludes large cities, where the ceiling on increases will continue until 2012.

CZECH REPUBLIC

- A pick-up in labour productivity growth led to more rapid convergence in the years prior to the crisis. However, the contribution of labour utilisation to growth was limited, as rising employment rates were offset by falling hours worked. The income and productivity gaps vis-à-vis the upper half of OECD countries remain large.
- In priority areas, start-up procedures have been streamlined and the bankruptcy law reformed; significant tax and benefit reforms have taken effect, including modest steps to lower the tax wedge on low-income workers. Pension and health reforms have begun, although they have recently stalled. Little has been done to relax employment protection for regular workers or to reform tertiary education.
- The main reforms in other areas were part of the 2007 fiscal package, which introduced a flat-rate income tax and brought a further shift from direct to indirect taxation.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the *OECD Economic Outlook*, No. 86.
2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *Product Market Regulation Database*; Chart C: OECD, *Employment Outlook Database*; Chart D: OECD (2005) and (2009), *Education at a Glance*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

DENMARK

Priorities supported by indicators

Reduce marginal taxes on labour income (2005, 2007, 2009)

Recommendations: Cut income taxes, focus on lowering the top marginal rate or increase its threshold.

Actions taken: The Parliament adopted a major tax reform in 2009. The top marginal rate will be reduced and the income threshold from which it applies raised. The in-work tax credit will be expanded and the middle state income tax bracket abolished.

Reform sickness leave and disability benefit schemes (2005, 2007, 2009)

Recommendations: Increase incentives for the sick and disabled with some ability to work to return to ordinary employment in the labour market, particularly by reducing remuneration in the special disabled employment programme (Fleksjob).

Actions taken: The Parliament adopted a bill in 2009 which introduced return to work plans for employees on sickness absence, a requirement for employers to conduct interviews with these employees within the first four weeks, and a new form of agreement between the employer, the employee and their doctor about work capacity. No action on Fleksjob since the maximum wage subsidy was reduced in 2006.

► Enhance the competition framework (2005, 2007, 2009)

Recommendations: Enhance competition *inter alia* by liberalising opening hours in retailing, removing discretion in local government planning, and continuing with privatisation and outsourcing of publicly-funded services.

Actions taken: In early 2009, the government introduced a range of measures to cut business red tape, particularly in relation to starting a new business. The government has appointed a new Public Procurement Committee to encourage public-sector competition.

Improve the efficiency of the education system (2005, 2007, 2009)

Recommendations: Improve education outcomes by raising the education content of the first years of school and improving basic literacy. Speed up tertiary completion by introducing tuition charges.

Actions taken: Compulsory language screening for three-year-olds was introduced in 2008 along with strengthened individual evaluation. Universities will receive extra funding when students complete cursus within a year after the prescribed cursus length and a binding time limit was introduced for masters' theses in 2007.

Other key priorities

Reduce housing subsidies and abolish rent regulation (2007, 2009)

Recommendations: Abolish rent regulation and housing subsidies, and raise the real estate tax rate.

Actions taken: While housing taxation has not been raised, the cuts to taxation of equity income announced in 2009 will reduce the gap between taxation of housing and shares. No action on rent regulation.

Raise incentives for later retirement and continued work (2005)

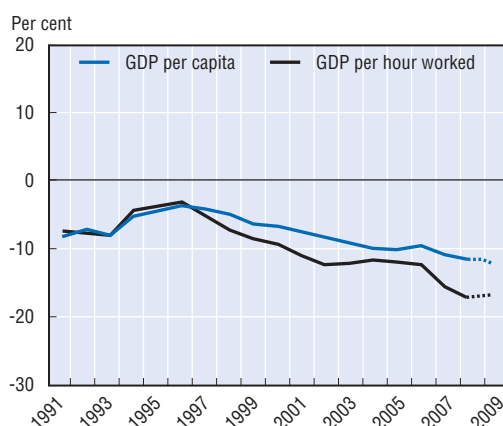
Recommendations: Reduce disincentives for continued work created by the early retirement scheme.

Actions taken: The 2006 Welfare Agreement raised the age of entry into the early retirement scheme and linked it to life expectancy, but will not take effect until 2019. In 2008, the Government introduced a temporary tax rebate for 64-year-olds who were continuously employed from age 60.

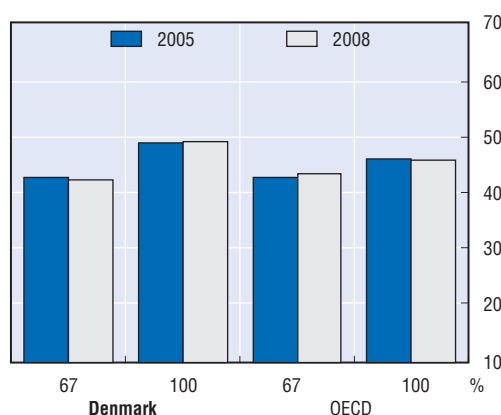
DENMARK

- The income gap with the best-performing countries has widened over the past decade, with rising labour utilisation being more than offset by slower productivity growth. Also, Danish employees still work significantly fewer hours per year than their counterparts in most other OECD countries.
- In key priority areas, the new tax reform package agreed in 2009 will significantly reduce the overall tax burden, which has been amongst the highest in the OECD. Progress has been made in competition policy and sickness and disability, although benefits have not been changed. More fundamental changes recommended in housing and education policy have not been implemented.
- In other areas, labour market reform has been a consistent focus in order to raise labour supply. Ambitious goals in energy and climate policy have also been priorities.

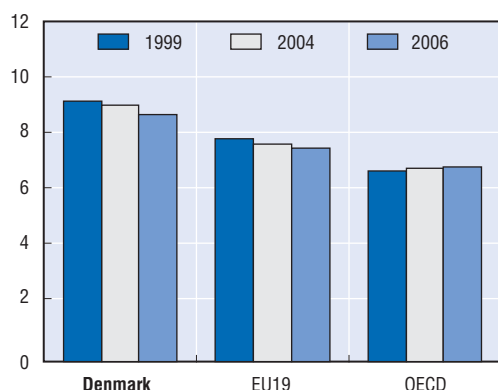
A. Gaps in GDP per capita and productivity have widened
Gap vis-à-vis upper half of OECD countries¹



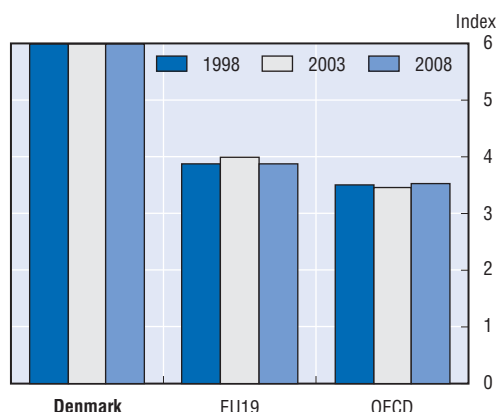
B. Marginal tax wedges are relatively high
Percentage of total labour compensation²



C. The share of working-age population receiving disability benefits is high³
Percentage of the population aged 20-65



D. Regulation of shop opening hours in the retail sector is among the most restrictive in the OECD⁴



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Evaluated at 67% and 100% of average earnings for a single person with no child.
3. Disability benefits include benefits received from schemes to which beneficiaries have paid contributions (contributory), programmes financed by general taxation (non-contributory) and work injury schemes.
4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Taxing Wages Database; Chart C: OECD (2003), Transforming Disability into Ability and OECD estimates; Chart D: OECD, Product Market Regulation Database.

StatLink <http://dx.doi.org/10.1787/786611566183>

EUROPEAN UNION

Priorities supported by indicators

► *Ease the regulatory burden on business operations (2005, 2007, 2009)*

Recommendations: Continue to reduce regulatory obstacles to market integration. Ensure the full transposition of the Services Directive. Further reduce administrative burdens on business. Further improve the quality of *ex-ante* regulatory impact assessments.

Actions taken: The Services Directive was fully implemented at the end of 2009, improving market access in some, but not all, service sectors. Cross-border transactions costs will be reduced by the Single European Payments Area. Market Monitoring procedures are identifying remaining market failures and the Better Regulation agenda is simplifying existing regulations. New Impact Assessment guidelines were introduced in 2009.

Raise competition in network industries (2005, 2007, 2009)

Recommendations: Focus competition policies on enhancing market liberalisation in network industries. Ensure EU-level measures are properly implemented in national markets. Push ahead with initiatives to integrate the transport, postal, telecommunications and energy markets.

Actions taken: Supply and production activities are to be functionally separated from network operations in energy markets. Postal services will be fully liberalised in 2012. Steps have been taken to improve regulatory oversight in the energy and telecommunications sectors. The ten-year strategy plan for raising efficiency in the maritime sector was published in 2009.

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Improve market access for non-EU countries. Continue to move from production-based to income-based support. Lower support prices and the cost of biofuels support.

Actions taken: Common Agricultural Policy (CAP) reform is leading to greater decoupling of payments from production. Price intervention has also been reduced in some sectors. The 2008 CAP Health Check set out plans for further decoupling support by 2013. Milk quotas are to be phased out by 2015. However, the re-introduction of agricultural export subsidies was a step back.

Other key priorities

Raise labour mobility within the European Union (2005, 2007, 2009)

Recommendations: Raise EU-wide labour mobility by improving the portability of occupational pension and social welfare benefit rights. Follow through on proposals to enhance researchers' mobility.

Actions taken: A common EU reference framework for qualifications was adopted in 2008. EU-wide job search services continue to be enhanced. A European Partnership for Researchers is to be implemented by end-2010.

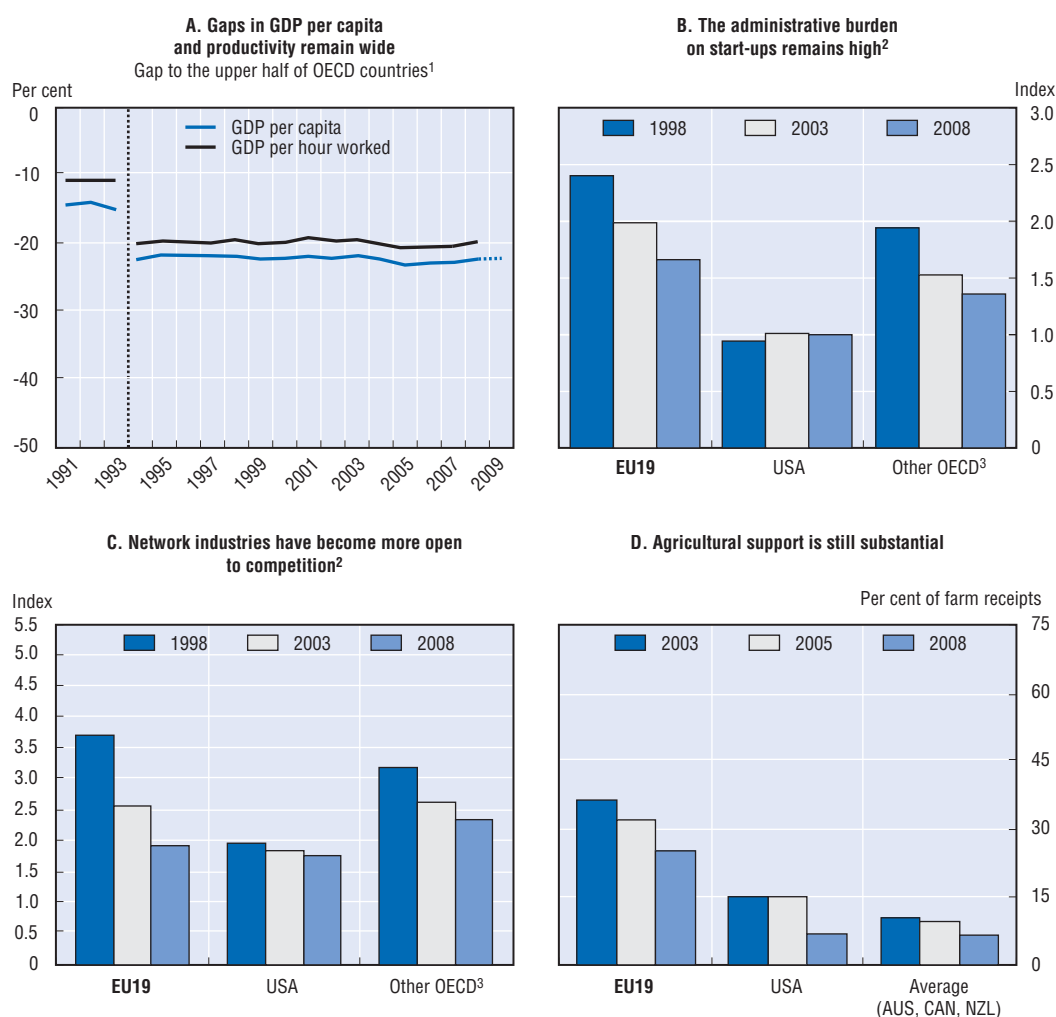
► *Further integrate European financial markets (2005, 2007, 2009)*

Recommendations: Deepen financial market integration by accelerating efforts to integrate retail financial markets. Update and improve financial regulatory and supervisory stability frameworks.

Actions taken: The Financial Services Action Plan has been largely implemented, although more could be done to integrate mortgage markets. Progress is being made towards implementing an EU-wide system of financial supervision. Regulatory and supervisory standards are being tightened for financial services.

EUROPEAN UNION

- The income gap relative to the OECD as a whole has widened slightly over the past decade. Average productivity and labour utilisation levels across the European Union remain below top OECD performers.
- Progress has been made on each of the policy priorities since 2005, but more remains to be done. Competitive pressures in product markets are being strengthened and obstacles to integration in network sectors are being tackled, but the full impact of the legislated changes is some years away. Agricultural support is declining, but barriers to imports remain high for some commodities. More actions are needed to tackle barriers to labour mobility in Europe.
- In other areas, new initiatives are being introduced to create a more integrated research area in Europe, which could help to strengthen innovation performance.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). Break in the series in 1994 when data start to refer to EU19, before 1994 data refer to EU15. The gap in GDP per capita for 2009 is an OECD estimate, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Charts B and C: OECD, Product Market Regulation Database; Chart D: OECD, Producer and Consumer Support Estimates Database.

StatLink <http://dx.doi.org/10.1787/786611566183>

FINLAND

Priorities supported by indicators

Reduce the tax wedge on labour income (2005, 2007, 2009)

Recommendations: Reduce high marginal tax rates on labour across the income distribution. This could be done at least partly in a fiscally neutral way by switching from labour to property taxes.

Actions taken: The government cut income tax rates and social security contributions as part of recent fiscal stimulus measures. The government committee on tax reforms is continuing its work despite delays. Age-related social security contributions were phased out for small and medium-sized companies in 2008.

► **Reduce the use of early retirement pathways (2005, 2007, 2009)**

Recommendations: Reduce access to the “unemployment pipeline”, which provides older workers with benefits for an extended period until retirement.

Actions taken: The starting age of the unemployment pipeline was pushed back from age 55 to 57 in 2005. While the unemployed pension was also abolished in 2005, those unemployed at age 57 continue to enjoy access to the unemployment pipeline right up to the official retirement age of 65.

Reduce the scale of public ownership, especially raising private provision of publicly-funded services (2005)

Recommendations: Reduce ownership and activities of government in commercial sectors and encourage more private-sector participation in the provision of public services.

Actions taken: The government has taken only a few privatisation measures since 2000.

Reform unemployment benefits (2007, 2009)

Recommendations: With among the highest replacement rates for the long-term unemployed in the OECD, stricter activation requirements are needed and should include tapering benefits over the unemployment spell.

Actions taken: No significant action has been taken to improve work incentives. As part of recent fiscal stimulus measures, various benefits (maternity, parental and sickness allowance) have been increased, and unemployment benefits were temporarily increased in the summer of 2009. A relocation allowance was introduced in 2007 to promote greater inter-regional mobility of the unemployed. Receipts of unemployment benefits after 500 days have been made conditional on participation in active labour market programmes.

Other key priorities

Promote greater flexibility in wage determination (2005, 2007, 2009)

Recommendations: Reform the wage setting system so that wages are better aligned with individual productivity performance. This may require that the government re-engage in the process while the reforms are being implemented.

Actions taken: The 2007-08 round of wage negotiations resulted in very large across-the-board wage increases, largely unrelated to individual firm productivity performance.

Further deregulate product markets (2007)

Recommendations: Further deregulate product markets including by relaxing shop opening hours and zoning rules.

Actions taken: Changes to trading hours were announced in mid-2009 although these rules continue to be very prescriptive. The Land Use and Building Act was reformed in 2007.

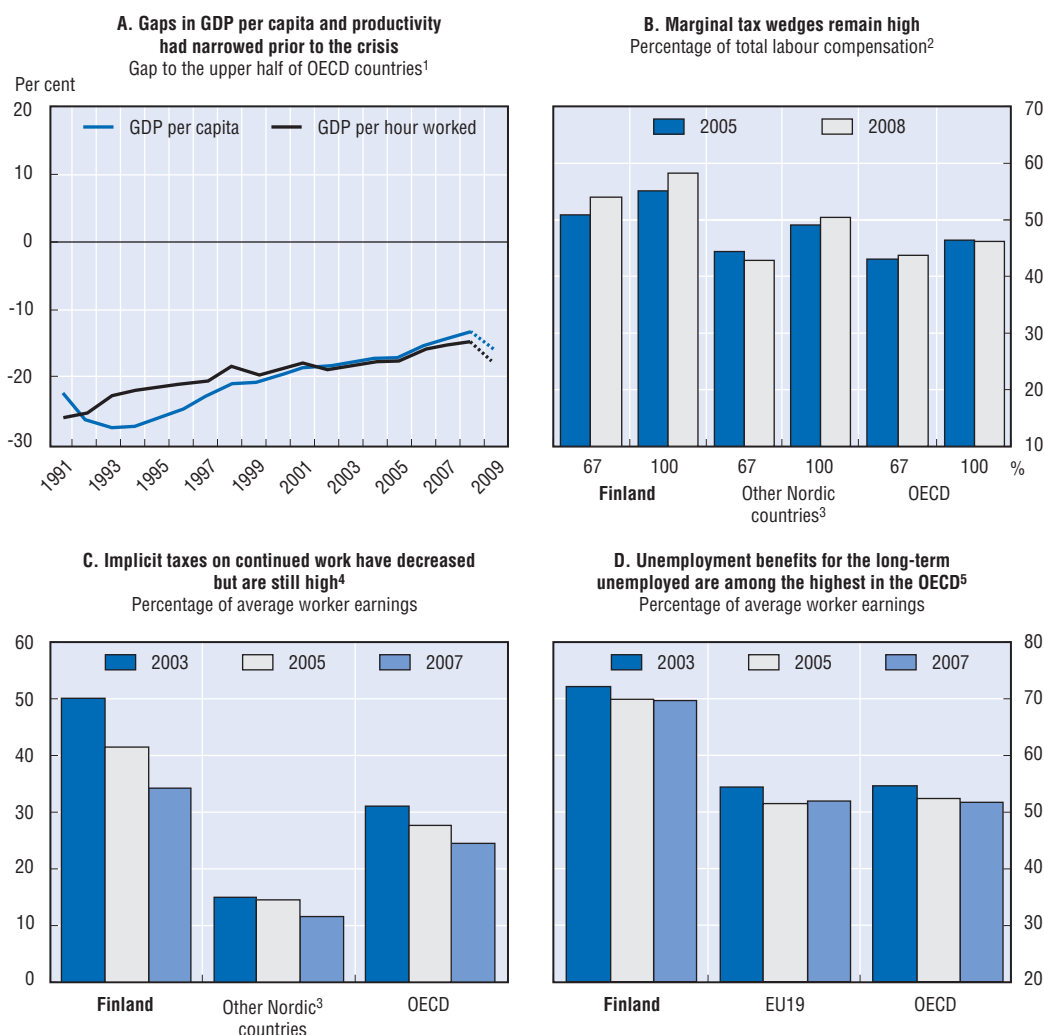
Reform tertiary education entrance system (2009)

Recommendations: Streamline the interface between high school graduation and tertiary entrance in order to reduce long waiting times (matriculation backlog). Address long study times at university by introducing university fees backed by increased availability of income-contingent student loans.

Actions taken: No action taken.

FINLAND

- In recent years Finland has been catching up with its Nordic neighbours in terms of GDP per capita. Relative to the best performing OECD countries the per-capita-income gap is largely explained by lower labour productivity, while labour utilisation has been improving steadily since the recession of the early 1990s.
- In key priority areas, the government has cut income tax rates and social contributions. Access to early retirement pathways has been somewhat restricted but further reductions are needed. Little or no progress has been made on reforming the wage setting framework, the tertiary education entrance system and unemployment benefits.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.
2. Evaluated at 67% and 100% of average earnings for a single person with no child.
3. Average of Denmark, Iceland, Norway and Sweden.
4. Implicit tax on continued work in early retirement route, average for 55 and 60-year-old workers.
5. Average of net replacement rates for unemployed persons who earned 67% and 100% of average worker earnings after five years of unemployment.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *Taxing Wages Database*; Chart C: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", *OECD Economics Department Working Papers*, No. 370 and OECD calculations; Chart D: OECD, *Benefits and Wages Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

FRANCE

Priorities supported by indicators

Reduce the minimum cost of labour (2005, 2007, 2009)

Recommendations: Limit future increases in the minimum wage so as to allow the minimum cost of labour to fall in relative terms. In parallel, increase work incentives facing low-wage earners.

Actions taken: Increases in the minimum wage have been limited to the statutory adjustment since 2007, and the government has recently created an independent commission to make recommendations on minimum wage changes. The implementation of the new general scheme for social benefits (*Revenu de solidarité active*) may improve work incentives, but the coverage of the earned-income tax credit remains too broad.

► **Reform employment protection legislation (2005, 2007, 2009)**

Recommendations: Relax the rules applying to fixed-term and, especially, permanent contracts. Increase the predictability of dismissal costs.

Actions taken: Firing laws have been simplified somewhat in 2008 through the possibility of mutually agreed termination of permanent contracts. More flexible contracts for small firms (*Contrats nouvelles embauches*) were abrogated in June 2008, after having been ruled as inconsistent with legal commitments at ILO. Plans to create a similar contract for young workers and (more recently) a single employment contract have been abandoned.

► **Reduce regulatory barriers to competition (2007, 2009)**

Recommendations: Remove regulatory entry barriers in potentially competitive sectors. Ease restrictions to price competition in the retail sector, to setting-up new stores and to Sunday shop opening.

Actions taken: A new competition authority was created in 2009. In retail distribution, distributors have been granted more flexibility to negotiate prices with suppliers, and zoning restrictions have been eased somewhat. EU directives for network industries continue to be gradually implemented, reducing entry and access barriers.

► **Reduce the implicit taxes on continued work at older ages (2005, 2007, 2009)**

Recommendations: Phase out the Delalande contribution which imposes an additional penalty for firms dismissing workers over 50 years. Remove the job-search exemption when receiving unemployment benefits at older ages and improve incentives to pursue activity.

Actions taken: The Delalande contribution is being phased out, and the job-search exemption progressively removed. The number of contribution years required for a full pension has been increased and financial incentives to work beyond have been raised; however, the implicit taxes on continued work remain high.

Other key priorities

Improve the quality and efficiency of the tertiary education system (2007, 2009)

Recommendations: Boost private funding for tertiary education and extend the autonomy of universities.

Actions taken: Public funding has been raised significantly, and universities have been given more autonomy in managing budgets and staff recruitment, but they still have limited leeway on remuneration. No action has been taken on student selection and tuition fees.

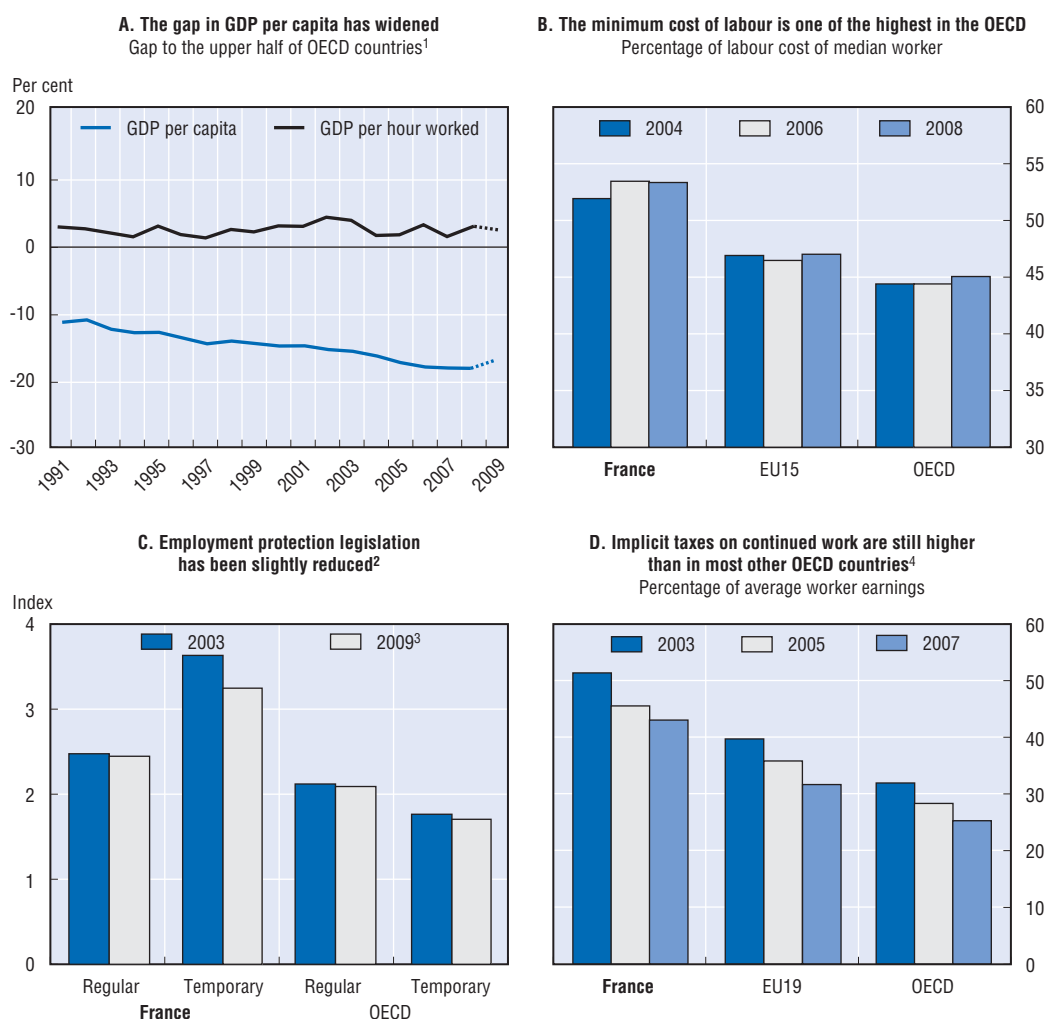
Improve the regulatory environment (2005)

Recommendations: Simplify the regulatory structure in areas such as the administration of social welfare.

Actions taken: *Pôle-emploi*, the newly created one-stop shop for the implementation of labour-market policy, has been operational since 2009.

FRANCE

- The income gap relative to the upper half of OECD countries has widened since the early nineties because of weak labour utilisation outcomes, especially for youths and older workers, as well as relatively short annual hours worked. The slightly positive productivity gap has been stable over the past two decades.
- In key priority areas, the rise in the (relative) minimum labour cost has been stopped, disincentives to continue working at older ages have been reduced and employment protection legislation has been eased at the margin, but labour-market dualism remains deeply ingrained. Some regulatory barriers to competition have been removed, especially in retail distribution, and universities have been given more autonomy. Overall, reforms have been broad in scope but their depth has been limited.
- Some reforms in other areas have taken place recently in local business taxation, health care, barriers to individual entrepreneurship and pre-school education.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.

2. Index scale of 0-6 from least to most restrictive.

3. 2008 for OECD.

4. Implicit tax on continued work in early retirement route, average for 55 and 60-year-old workers.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *Taxing Wages and Minimum Earnings Databases*; Chart C: OECD, *Employment Outlook Database*; Chart D: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", *OECD Economics Department Working Papers*, No. 370 and OECD calculations.

StatLink <http://dx.doi.org/10.1787/786611566183>

GERMANY

Priorities supported by indicators

Reduce average tax wedges on labour income (2005, 2007, 2009)

Recommendations: Reduce social security contribution rates further.

Actions taken: Unemployment insurance contribution rates have been lowered significantly in several steps since 2007, though the last decrease is set to be reversed in 2011. The increase in contributions for health care in early 2009 was taken back in mid-2009.

► **Reduce regulatory barriers to competition (2005, 2007, 2009)**

Recommendations: Lower professional requirements to open a crafts business, and abolish the compulsory membership in associations for liberal professions. Facilitate non-discriminatory entry into network industries.

Actions taken: The government has taken various measures, including the introduction of incentive-based regulation in the electricity and gas market, the facilitation of private equity stakes in the state controlled railway company, an easing of entry barriers in some protected handicrafts and further steps to reduce bureaucratic obstacles.

Improve education outcomes (2005, 2007, 2009)

Recommendations: Strengthen early childhood education, make schools and teachers more accountable for outcomes, reduce tracking in the school system, and increase input flexibility for universities.

Actions taken: School and teacher accountability has been strengthened through greater use of external exit exams. Several states have combined the *Hauptschule* and *Realschule* tracks into one school type and others have taken steps in this direction. Some states introduced the right for universities to select students and to introduce tuition fees, raising input flexibility.

Other key priorities

Reduce impediments to full-time female labour force participation (2007, 2009)

Recommendations: Remove tax disincentives for full-time female labour force participation by lowering the marginal tax burden for second earners. Improve access to childcare places and full-day schooling.

Actions taken: The government is subsidising a sharp increase in the number of childcare places, with the share of children in childcare facilities expected to treble to 35% by 2013. The government is also promoting full-day schools, and the proportion of children in such schools is rising quickly, albeit from a low base.

► **Ease job protection (2009)**

Recommendations: Promote regular work contracts by relaxing employment protection legislation.

Actions taken: No action taken.

Improve the placement of the long-term unemployed into jobs (2007)

Recommendations: Assign administrative responsibilities related to job placement more effectively, strengthen the conditionality of benefits on willingness to take up work, and revisit the level of benefit, beyond the 2005 Hartz reforms.

Actions taken: No actions have been taken since the 2007 introduction of wage subsidies for the low-skilled who face particular problems entering the labour market.

Reduce disincentives to work at older ages (2005)

Recommendations: Abolish preferential benefit eligibility conditions for older workers and cut subsidies for working time reductions in order to remove obstacles to employment at older ages.

Actions taken: The duration of unemployment benefits for the older unemployed was significantly reduced in 2006, although this was partially offset by a subsequent increase. The subsidised part-time employment scheme for older employees (*Altersteilzeit*) was phased out by end-2009.

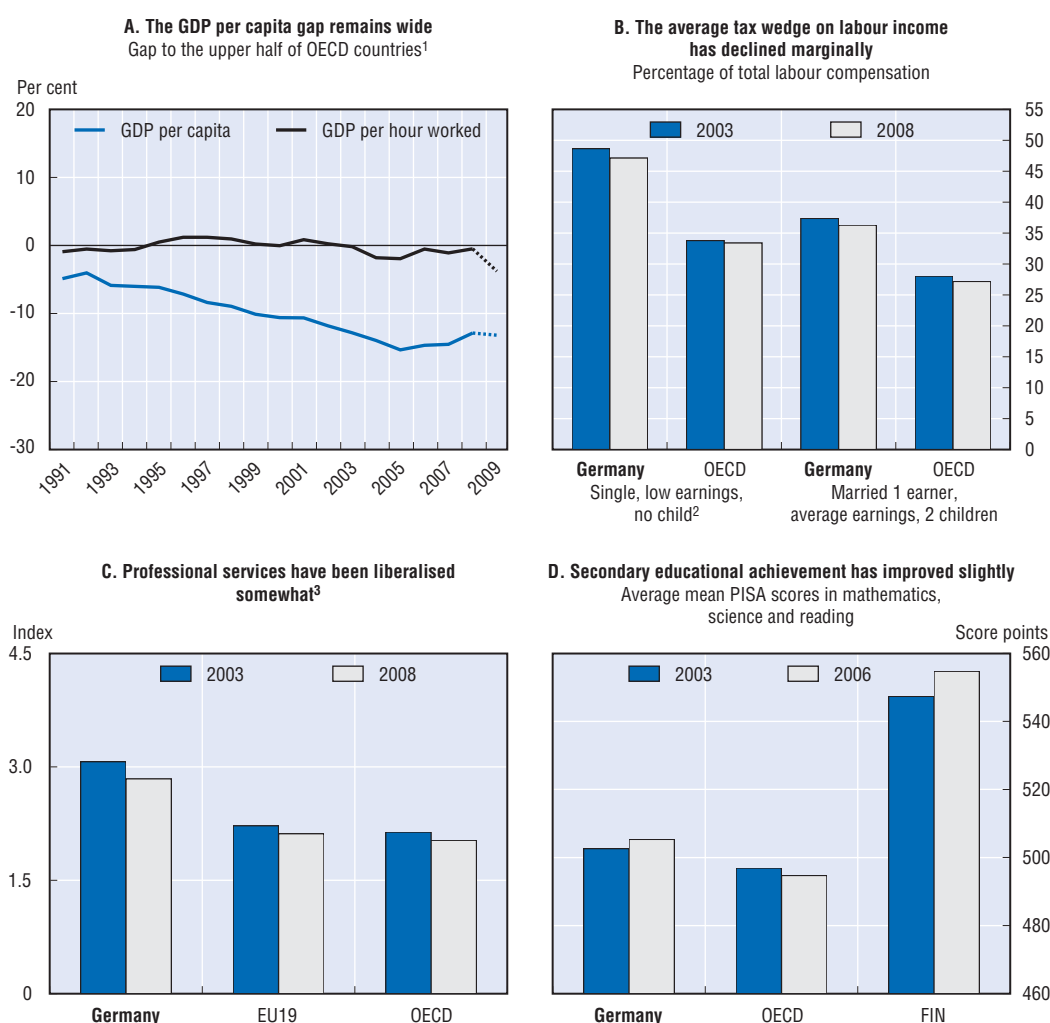
Increase competition in government procurement (2005)

Recommendations: In order to increase the efficiency of government procurement, publication of contracts should be widened, rules across the states be simplified and the role of business associations in setting these rules eliminated.

Actions taken: A 2009 amendment to procurement legislation implements EU guidelines, simplifies procedures and strengthens the role of medium-sized companies, although rules still differ across the states.

GERMANY

- The GDP per capita gap relative to the upper half of OECD countries has widened since the mid-nineties, some recent narrowing notwithstanding. It reflects foremost weaker labour utilisation, as the lower relative number of hours worked per employed person has more than offset the increase in overall employment.
- In key priority areas, labour tax wedges have been lowered, anti-competitive regulations liberalised, and the education system revamped; however, these areas remain core priorities. In other priority areas, relaxing employment protection legislation remains unaddressed.
- Some reforms in other areas have taken place recently in health care and corporate taxation.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Low earnings refer to two-thirds of average earnings.

3. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Taxing Wages Database; Chart C: OECD, Product Market Regulation Database; Chart D: OECD, PISA 2003 and 2006 Databases.

StatLink  <http://dx.doi.org/10.1787/786611566183>

GREECE

Priorities supported by indicators

► **Reduce the implicit taxes on continued work at older ages (2005, 2007, 2009)**

Recommendations: Reduce incentives for early retirement by narrowing the list of arduous occupations and applying stricter eligibility criteria for disability pensions. Link benefits to lifetime contributions.

Actions taken: The 2008 pension reform increased the minimum age at which certain beneficiaries can retire and reduced financial disincentives to continue to work. The list of professions falling under arduous occupations is being redefined. A public consultation on pension reform began in late 2009.

Reduce barriers to entry in network industries (2005, 2007, 2009)

Recommendations: Proceed with privatisation and foster competition in network industries.

Actions taken: A large number of public enterprises have been privatised in recent years, including Olympic Airways in 2009. The powers and responsibilities of the Competition Committee have been increased. The electricity sector has been further liberalised in 2007 and the role of the energy sector regulator enhanced. Supervisory interventions to ensure competition in the telecommunications market have been intensified.

Reform employment protection legislation (2005, 2007)

Recommendations: Ease employment protection by bringing the high severance costs for white-collar workers more in line with those incurred for blue-collar workers.

Actions taken: No action taken.

Reduce the tax wedge on labour income (2009)

Recommendations: Tax wedges should be reduced to curtail tax evasion and informality.

Actions taken: Personal income taxes have been reduced, accompanied by measures to curtail social security evasion through the creation of a national social security register in 2008.

Reduce administrative burdens on start-ups (2005)

Recommendations: Reduce the substantial barriers to entrepreneurship.

Actions taken: Registration and licensing procedures for new businesses have been simplified. A high-level Working Group was created in 2008 to monitor and make recommendations on administrative burden measurement. Measures to simplify business start-up procedures should be submitted to Parliament in early 2010.

Other key priorities

Improve the efficiency and quality of the education system (2007, 2009)

Recommendations: Improve teaching quality and enhance the flexibility of school curricula. Enhance competition in tertiary education by allowing the entry of private universities. Link the funding of tertiary institutions to indicators of performance, proceeding at a later stage with deeper reforms to finances.

Actions taken: Legislation passed in 2007 included measures to improve the governance and accountability of universities, limit the duration of academic studies and raise loan provision.

Ease entry into the labour market (2007, 2009)

Recommendations: Minimum wages setting should take more account of high youth unemployment.

Actions taken: No action taken.

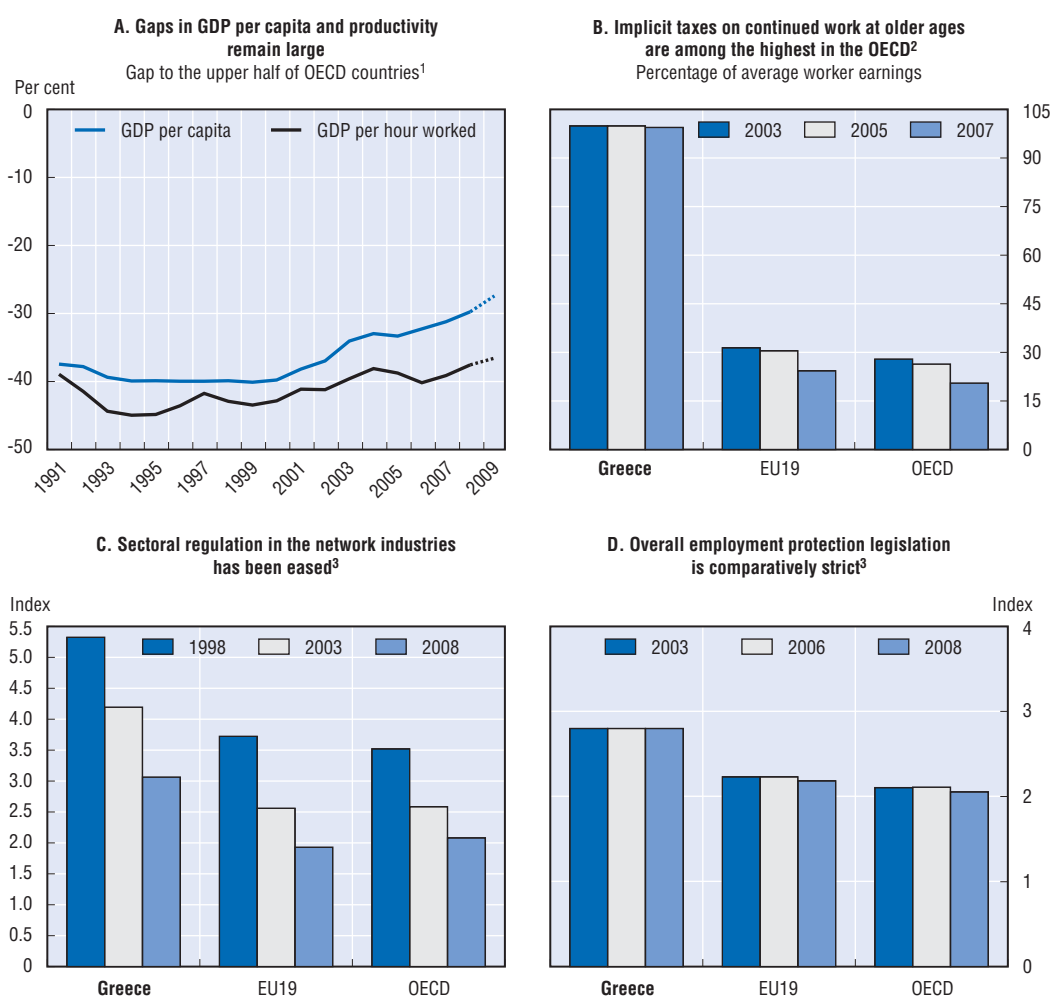
Further simplify the tax system (2005)

Recommendations: Make the tax system less complex to reduce compliance costs.

Actions taken: The structure of the tax system has been simplified since 2005 by reducing the number of tax brackets, removing certain exemptions, and adopting a less complex regime for property taxation. A comprehensive reform aiming at simplifying the tax system should be submitted to Parliament in March 2010.

GREECE

- The income gap vis-à-vis the best performing countries has narrowed rapidly over the past decade, but it remains large, reflecting a major shortfall in productivity. There is also scope to improve labour utilisation by reducing youth unemployment and boosting female labour force participation.
- In key priority areas, measures have been taken in recent years to reduce incentives for early retirement, lower labour tax wedges and enhance competition in network industries; however, these areas remain core priorities. Reforms are needed to ease labour market entry.
- In other areas, some reforms have been introduced recently in health care.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Implicit tax on continued work embedded in the regular old-age pension scheme for 60-year-olds.

3. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", OECD Economics Department Working Papers, No. 370 and OECD calculations; Chart C: OECD, Product Market Regulation Database; Chart D: OECD, Employment Outlook Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

HUNGARY

Priorities supported by indicators

Reduce the tax wedge on labour income (2005, 2007, 2009)

Recommendations: Lower tax wedges by reducing social charges. Continue efforts to replace tax allowances and deductions with earned-income tax credits.

Actions taken: In 2009, employer social contributions were cut substantially and personal income taxes lowered. Further reductions in personal income taxes were decided, effective from 2010.

Phase out exit routes from the labour force via disability benefits and early retirement (2005, 2007, 2009)

Recommendations: Encourage continued work of older workers by raising the standard age of retirement and through further adjustment of pensions for early and late retirement. Tighten eligibility for disability benefits by focusing on remaining abilities and rehabilitation.

Actions taken: The statutory retirement age will be gradually increased to 65 years from 2012. From 2009, eligibility conditions for early retirement programmes are tightened and from 2011 early retirees cannot retire on a full pension. Retirement with active insurance status is no longer possible. Eligibility criteria for disability benefits have been tightened, and more focus is to be put on the possibility of reintegration into the labour market when assessing the extent of disability.

➤ Ease business regulations (2005, 2009)

Recommendations: Further limit state involvement in the operations of network industries by reducing price controls. Lift remaining constraints preventing freedom of choice between telecommunications service suppliers.

Actions taken: Stronger forms of vertical separation have been introduced and price subsidies for household consumption have been lowered in the energy sector. The government fully privatised the rail freight segment of the national railway company in 2008. The national airline company was privatised in 2007 but is currently in the process of being re-nationalised.

Reduce administrative burdens on start-ups (2005)

Recommendations: Introduce on-line registration and standardised documents, cut fees for business registration and simplify legal procedures for setting up a business.

Actions taken: Steps have been taken to streamline the registration system, and online possibilities for business to fulfill administrative requirements have increased.

Other key priorities

Improve the efficiency of the education system and make it more equitable (2007, 2009)

Recommendations: Make the education system more efficient and equitable by postponing early tracking of students and reforming teacher education and training. Strengthen vocational training by making it more relevant for the labour market. Introduce university student fees backed by greater loan availability.

Actions taken: From September 2008, more students were to pay a contribution to tuition costs, but a 2008 referendum abolished such contributions altogether. Market forces will play a more significant role in the allocation of teaching funds to providers.

Increase public sector efficiency (2007, 2009)

Recommendations: Ensure cost-efficient delivery of services. Provide more effective incentives for municipalities to exploit economies of scale. Also, facilitate the monitoring and evaluation of goal achievement by public administrations.

Actions taken: Cuts have been made in the number of ministries and regional public offices. From 2009, a new law on government agencies passed to increase their accountability and make their operations more transparent. Mechanisms to encourage the joint provision of municipal services are being improved.

Reduce shadow-economy activity (2007)

Recommendations: Access to health care services should be tied to the payment of contributions, social benefits should be rebalanced towards more employment-friendly forms, and sanctions against abuse should be raised to deterrence levels.

Actions taken: Health care reform, notably the new tiered coverage based on social security contributions, should help to bring more workers into registered activities. The campaign against shadow activities has intensified, including more checks on individuals whose lifestyle appears inconsistent with their personal income declarations.

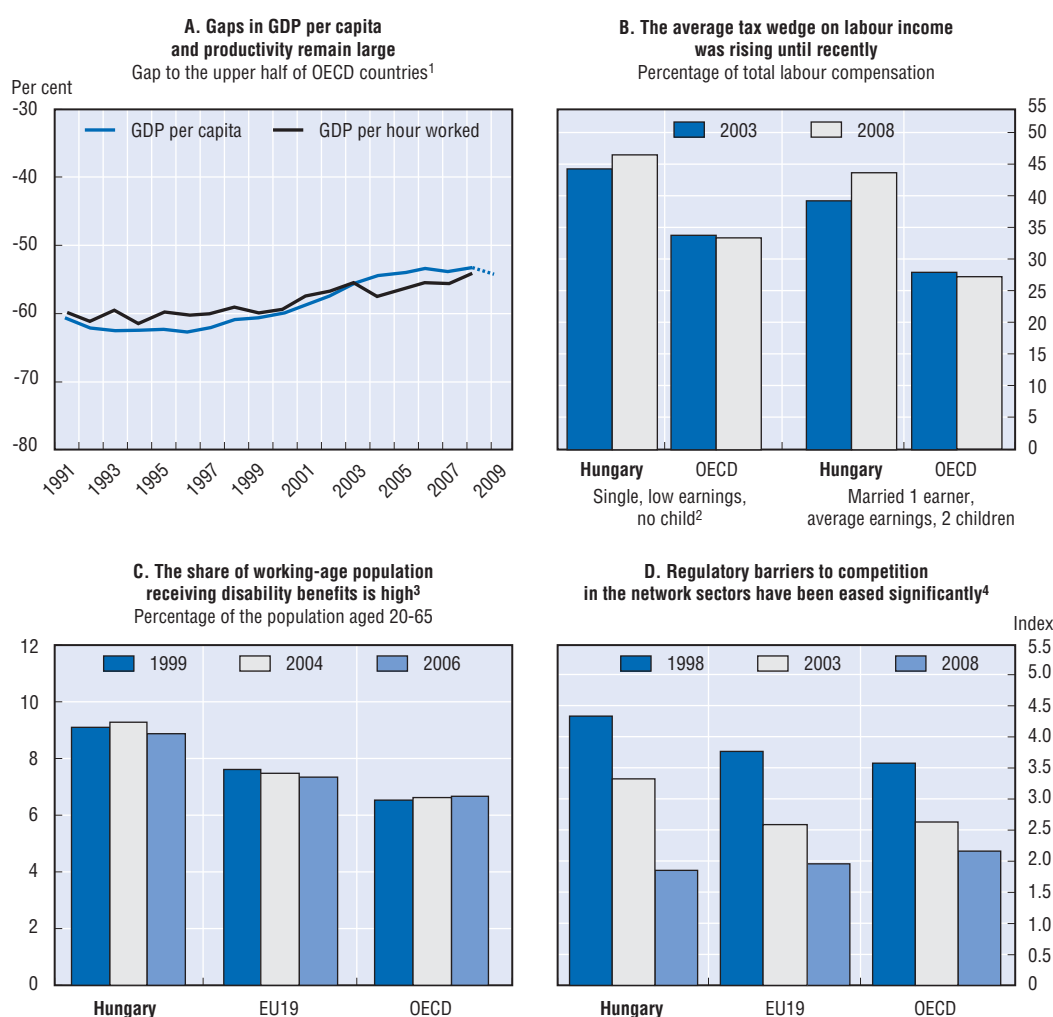
Further downsize housing-loan subsidies (2005)

Recommendations: Downsize further housing-loan subsidies to reduce distortions in housing markets and increase labour mobility.

Actions taken: The housing subsidy programme was abolished as of end-June 2009 to be replaced by a more restricted new system in the fall of 2009. Subsidies are being made portable, which may foster labour mobility.

HUNGARY

- The closing of the income and productivity gap has slowed in recent years, even before the global recession. Labour utilisation remains low mainly owing to low registered employment rates.
- The policy actions taken to lower tax wedges (as part of a comprehensive tax reform), tighten disability benefit, further restrain shadow-economy activity and reform the pension system should help to raise labour utilisation. Reform efforts in other key priority areas have also been strong.
- Reform measures also covered several other areas, such as improving work incentives for second earners, simplifying the tax system and strengthening financial supervision.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the *OECD Economic Outlook*, No. 86.
2. Low earnings refer to two-thirds of average earnings.
3. Disability benefits include benefits received from schemes to which beneficiaries have paid contributions (contributory), programmes financed by general taxation (non-contributory) and work injury schemes.
4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *Taxing Wages Database*; Chart C: OECD (2003), *Transforming Disability into Ability* and OECD estimates; Chart D: OECD, *Product Market Regulation Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

ICELAND

Priorities supported by indicators

Improve education outcomes (2005, 2007, 2009)

Recommendations: Improve the quality and cost efficiency of pre-tertiary education.

Actions taken: Secondary education programmes were adapted to the European Credit Transfer units system in 2009. This will enable about 40% of students to complete upper secondary education in three years instead of the current four by 2011. The new upper secondary school law also offers incentives for new and shorter study programmes to counter high dropout rates.

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Reduce agricultural support, notably by lowering tariffs and abolishing import quotas on agricultural products, and by reducing other forms of producer support and delinking it from production.

Actions taken: Excise taxes on imported food (other than sugar and sweets) were abolished in 2007 and the general import tariff on imported meat products was lowered significantly.

► **Lower barriers to entry for domestic and foreign firms (2005, 2007, 2009)**

Recommendations: Reduce foreign ownership restrictions in the fisheries and energy sectors, and consider privatising the generation activities of the National Power Company.

Actions taken: A committee was formed to study this matter but ceased work in late 2008 owing to opposition to reducing ownership restrictions in the fisheries industry.

Other key priorities

Accelerate public sector reform (2005, 2007, 2009)

Recommendations: Introduce outcome-based budgeting, performance measurement and management reforms in the public sector.

Actions taken: No action taken.

Reduce government support to housing (2005, 2007)

Recommendations: Charge the Housing Finance Fund a fee for its government guarantee so as to enhance competitive neutrality in the provision of financial services and reduce incentives for over-investment in housing.

Actions taken: No action taken.

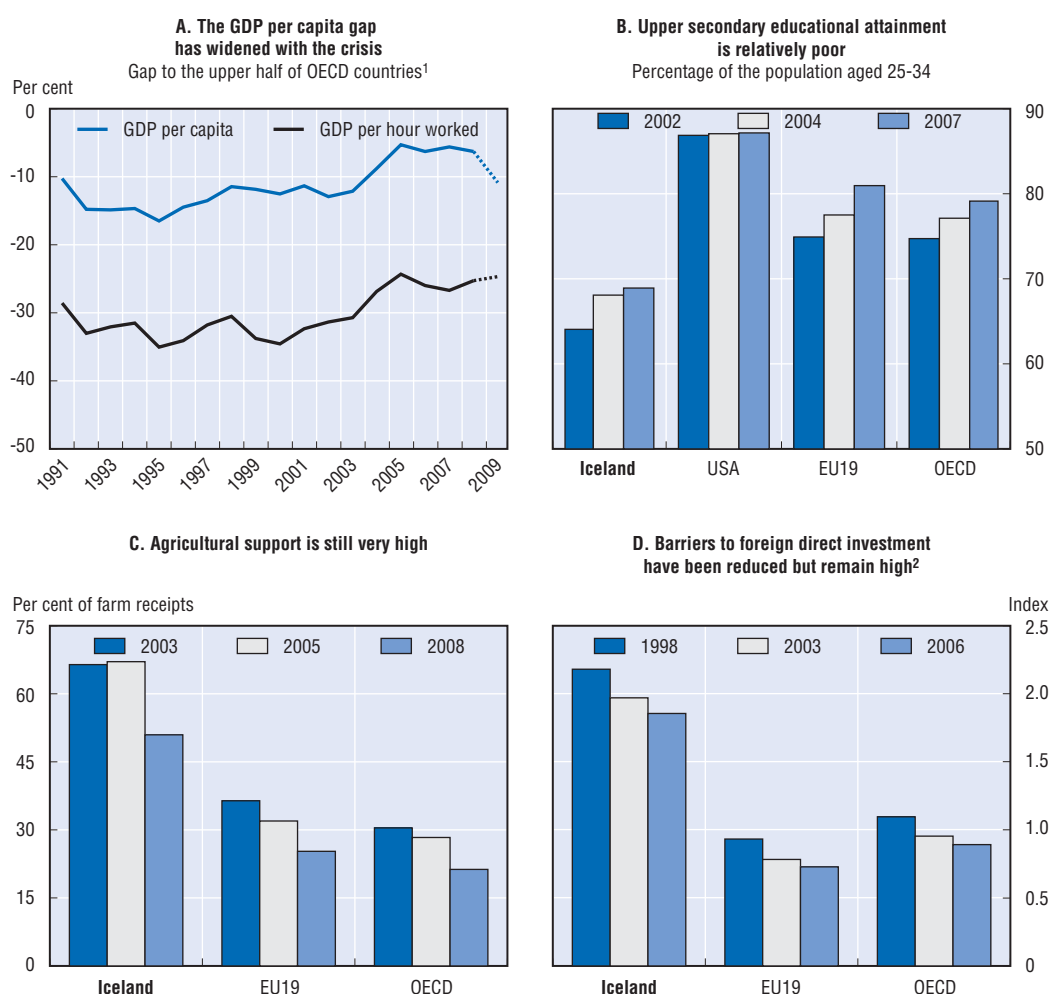
► **Improve financial sector regulation and supervision (2009)**

Recommendations: Give the macro-prudential supervisor a legal basis to restrain bank behaviour and tighten micro-prudential supervision rules and practice on large exposures, connected lending and quality of owners.

Actions taken: The authorities are considering reforms in the light of the Jännäri Report recommendations for improving prudential regulation and supervision.

ICELAND

- After some convergence in the early 1990s, the GDP per capita gap relative to the average of the upper half of OECD countries had stabilised at low levels after 2005, but it has widened again as a result of the crisis. This income gap reflects relatively low labour productivity partially offset by one of the highest rates of labour utilisation in the OECD.
- In key priority areas, little reform has been achieved. Most progress has been made in education, although there is still considerable scope to improve efficiency by reducing teacher-student ratios. Agricultural support has declined owing to higher market prices but remains the highest in the OECD. Public-sector managers still do not respect budget limits.
- No major reform has occurred in other areas, although reforms have been made in health care to strengthen the purchasing role of the state and to reduce pharmaceutical costs through increased competition and greater use of generics.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD (2009), *Education at a Glance*; Chart C: OECD, *Producer and Consumer Support Estimates Database*; Chart D: Koyama and Golub (2006), "OECD's FDI regulatory restrictiveness index: revision and extension to more economies", OECD Economics Department Working Papers, No. 525

StatLink <http://dx.doi.org/10.1787/786611566183>

IRELAND

Priorities supported by indicators

Strengthen work incentives for women (2005, 2007, 2009)

Recommendations: Improve access to childcare and reconsider how second earners are taxed.

Actions taken: The number of childcare places has increased substantially, and the Early Childhood Care and Education scheme introduced in 2009 extends pre-school education, although this is a measure not targeted specifically at working parents. More families were taken out of income taxation but marginal tax and social contribution rates have increased from 2009.

► **Strengthen competition in non-manufacturing sectors (2005, 2007, 2009)**

Recommendations: Increase competition in the utilities and services sectors.

Actions taken: The government liberalised the electricity market and is upgrading interconnection with the United Kingdom grid, although ownership of the grid remains with the main generator. The Groceries Order, restricting food prices, was abolished in 2006. The pharmacy sector was partly reformed in 2007.

Enhance R&D spending and innovation (2007, 2009)

Recommendations: Improve incentives for R&D and streamline funding for public institutions.

Actions taken: The rate of deduction for R&D was increased in the 2008 Supplementary Budget. Research funding has been increasingly allocated towards centres of excellence.

Improve access to education and increase tertiary education funding (2007, 2009)

Recommendations: Extend pre-primary education, and introduce university tuition fees, accompanied by a system of student loans with income-contingent repayments.

Actions taken: Pre-primary education is being extended through the Early Childhood Care and Education scheme. Overall spending on education has increased over recent years.

Ease the regulatory burden on business operations (2005)

Recommendations: Implement the White Paper on Better Regulation.

Actions taken: The White Paper was introduced in June 2005 and has been implemented.

Other key priorities

Further improve infrastructure (2007, 2009)

Recommendations: Close infrastructure gaps in a cost-effective way. Speed up the planning process. Introduce user-charges to ensure efficient use of infrastructure.

Actions taken: Public investment has been raised to around 5% of national income in recent years. Cost-benefit analysis has been strengthened and extended to all large projects, and the planning process has been streamlined. User-charges are not widespread, although water metering is in place for non-domestic users, and there are some toll roads. Public investment is scheduled to fall substantially in future years.

Avoid excessive house price increases and volatility (2005)

Recommendations: Phase out deductibility of mortgage interest payments.

Actions taken: Mortgage interest relief has been increasingly focussed on first-time buyers and was abolished for all others in 2009. Further reforms are intended in this area.

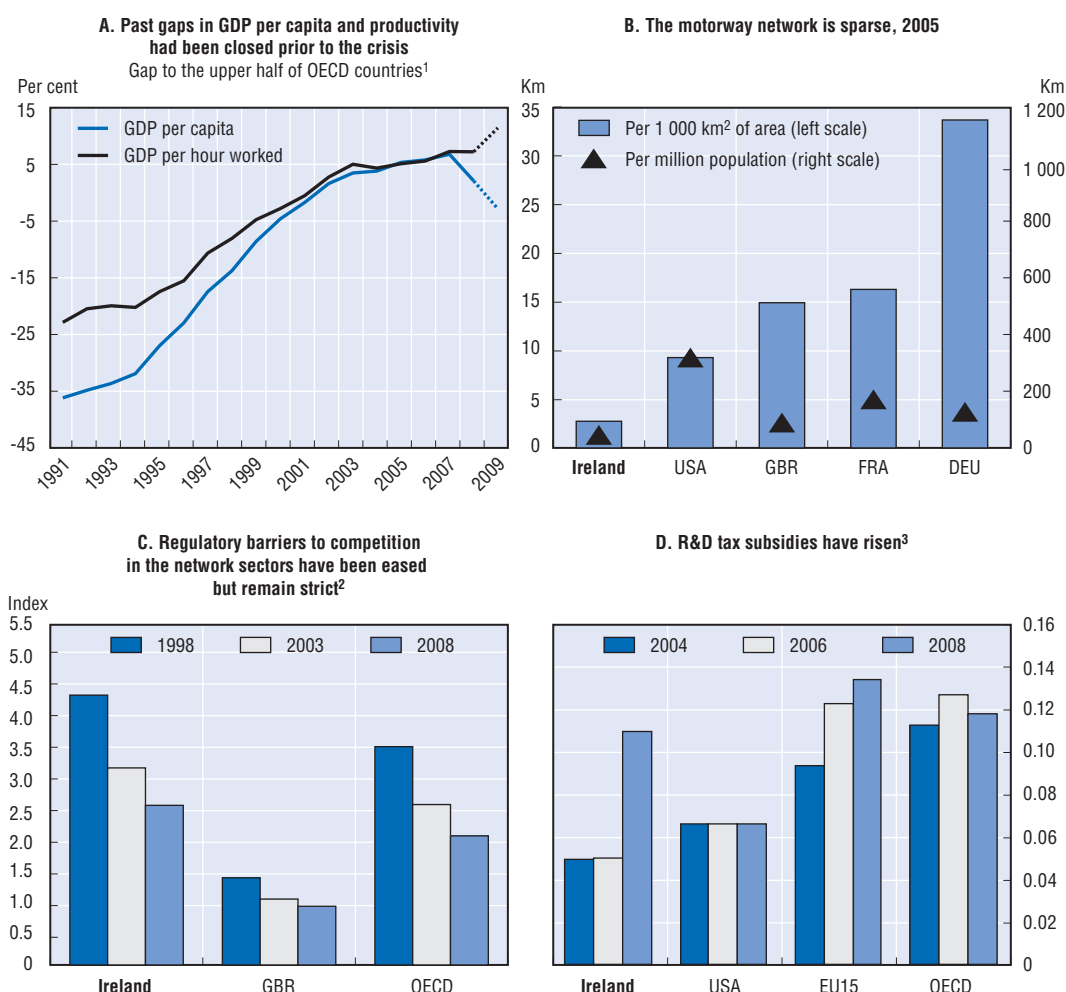
Strengthen the enforcement of competition policy (2005)

Recommendations: Improve the enforcement of competition law.

Actions taken: The Competition Authority now has more resources and some successful criminal prosecutions have been mounted, although fines overall remain low and a small number of sectors have been exempted from competition law.

IRELAND

- As a result of the economic crisis, Ireland has experienced a severe set-back in living standards that is likely to have permanent effects. Nevertheless, Ireland's per-capita income is now close to the average of the upper half of OECD countries.
- Progress has been made in most key priority areas, although it has been incremental and incomplete. Improvements in childcare and infrastructure have been recorded but necessarily take time to build up. Slow progress in increasing competition in the services and utilities sectors has contributed to sub-par productivity performance.
- The National Development Programme has provided the framework for a wide range of measures aimed at building a stronger economic and social base, including the priority areas alongside programmes and objectives related to enterprise, increasing social inclusion and environmental protection.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Index scale of 0-6 from least to most restrictive.
3. Measures the generosity of tax incentives to invest in R&D, on the basis of the pre-tax income necessary to cover the initial cost of one dollar R&D spending and pay corporate taxes on one dollar of profit (B-index). A value of zero on the chart would mean that the tax concession for R&D spending is just sufficient to offset the impact of the corporate tax rate.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: European Commission (2007), *Panorama of transport and New Chronos Database*; Chart C: OECD, Product Market Regulation Database; Chart D: OECD (2009), *OECD Science, Technology and Industry Scoreboard*.

StatLink <http://dx.doi.org/10.1787/786611566183>

ITALY

Priorities supported by indicators

Reduce public ownership (2005, 2009)

Recommendations: Reduce state involvement in business by accelerating privatisation and abolishing golden shares, especially in electricity, gas, post and transport, and enterprises that provide local services.

Action taken: Privatisation has continued but the long process of partial privatisation of Alitalia illustrated that public involvement is still an issue in some sectors. The role of golden shares is now restricted to electricity, gas and airlines.

► **Reduce regulatory barriers to competition (2007, 2009)**

Recommendations: Further strengthen regulators and the antitrust authority. Further deregulate the network industries and services sector, by removing entry barriers and price restrictions.

Action taken: Liberalisation laws in 2007 and 2008, and incorporation of EU directives, notably on full liberalisation of the internal electricity market, have reduced barriers. Many remain in professional and local services. Public tendering for local public services was made compulsory in 2008; in 2009, provisions were introduced for class action law suits against poor quality services, and oversight of efficiency by the Court of Auditors was introduced.

Improve access to and graduation from tertiary education (2005, 2007, 2009)

Recommendations: Decentralise university finance, and increase the share of private finance, with professional managers and higher student fees along with income-contingent student loans. Introduce performance-related career advancement for teachers.

Action taken: Some changes in recruitment procedures have been introduced but not yet fully implemented. A 2008 decree allows universities to become private sector foundations, though none have yet taken up the option.

Reduce the tax wedge on labour income (2005, 2007, 2009)

Recommendations: Reduce marginal income tax rates and pension contributions, and expand deductions for wage costs in business value added tax (IRAP). Finance tax reductions with improved tax enforcement, end use of tax amnesties.

Action taken: Tax enforcement has improved, but a relatively generous, temporary, partial tax amnesty for repatriated funds held abroad was introduced. No significant cuts have been made in tax rates, but deductions for IRAP have been expanded and income tax reductions for pay increases related to productivity gains and overtime work have been introduced.

Other key priorities

Reform corporate governance (2005, 2007)

Recommendations: Strengthen independent directors and minority shareholder rights. Reform the bankruptcy law by strengthening creditor rights and reducing borrower penalties in case of insolvency. Fully implement the 2006 financial market supervision reform.

Action taken: Bankruptcy and financial market supervision reforms have been implemented. New Bank of Italy rules clarify the identification of supervisory and management authority in management bodies of banking institutions.

Decentralise wage bargaining (2005, 2007, 2009)

Recommendations: The public sector should take a lead in decentralising wage bargaining arrangements, taking into account regional differences in both productivity and cost of living.

Action taken: No action has been taken on decentralisation. A programme to introduce transparency and productivity-related rewards in the public administration has been introduced.

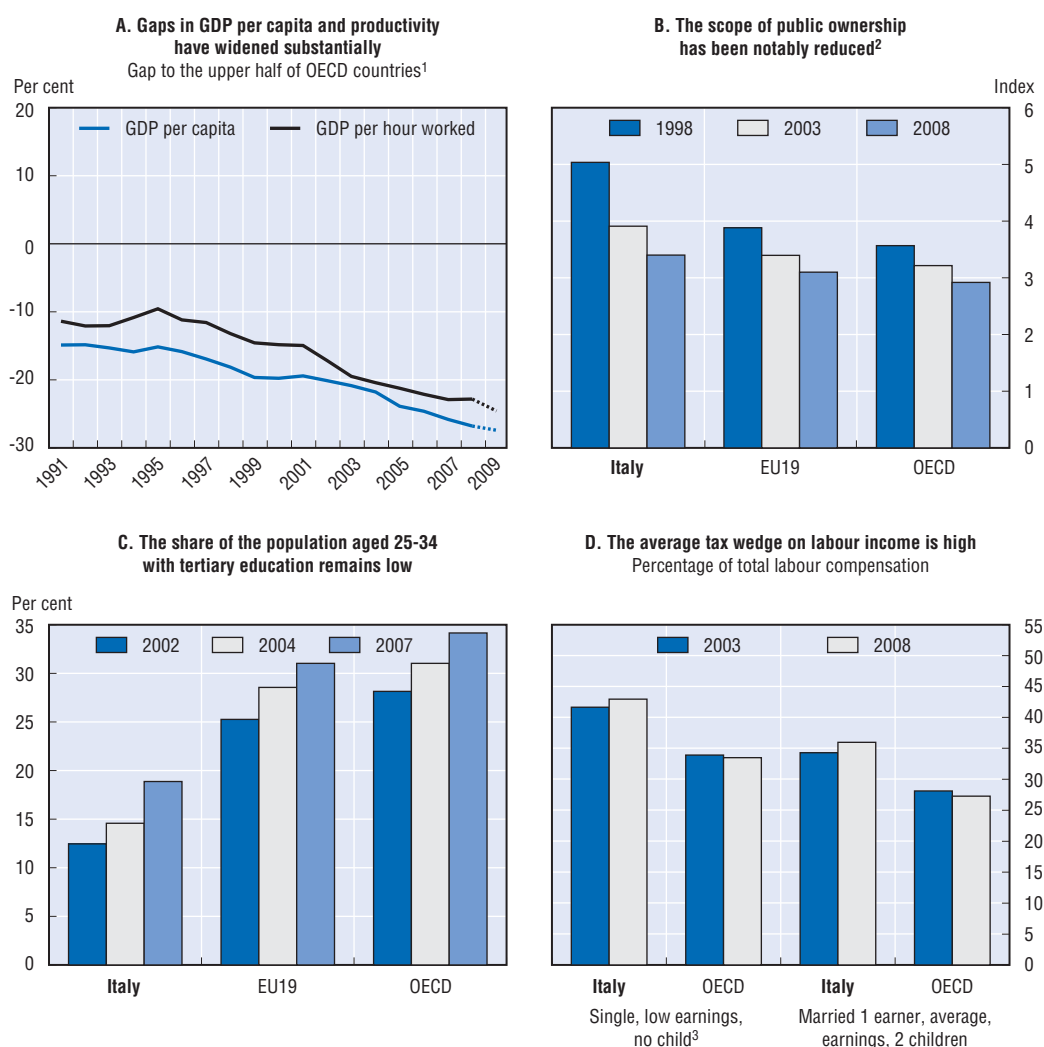
Strengthen incentives for innovation (2009)

Recommendations: Foster R&D expenditure through careful use of tax incentives. Promote research partnerships between industry and universities. Make public sector recruitment procedures for researchers more transparent.

Action taken: Tax credits for R&D have been introduced, and increased when related to universities. Tax incentives for Italian researchers working abroad to return to Italy were introduced in 2008.

ITALY

- Italy's productivity performance has remained poor, and the income gap relative to the upper half of OECD countries has widened. However, labour market performance, in terms of both participation and the unemployment rate had been improving steadily until the financial and economic crisis hit the economy.
- Liberalisation and the strengthened climate for competition have improved the outlook for productivity growth, though there is evidence that reforms that remain to be done would have more impact than those implemented so far. Professional services and local public services are key areas where reform efforts are still needed.
- In other areas, reforms of the public administration to improve its performance orientation have advanced, though they will need to be sustained in order to produce significant gains.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

3. Low earnings refer to two-thirds of average earnings.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Product Market Regulation Database; Chart C: OECD (2009), Education at a Glance; Chart D: OECD, Taxing Wages Database.

StatLink <http://dx.doi.org/10.1787/786611566183>

JAPAN

Priorities supported by indicators

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Scale back the level of support to agriculture, while shifting its composition away from market price support towards direct support for farmers, to reduce distortions to production.

Actions taken: The government introduced three direct payments in 2007, including support based on historical planted area, output payments (differentiated according to product quality) and compensation for income loss, as part of the effort to concentrate support on more efficient farms.

► **Reform employment protection legislation for regular employment (2005, 2007, 2009)**

Recommendations: Reduce employment protection for regular workers while expanding the coverage of social insurance to include more non-regular workers, thus reducing the gap in labour costs.

Actions taken: A 2008 law aims at more balanced treatment with regular workers, although it may discourage their hiring.

► **Further liberalise services (2005, 2007, 2009)**

Recommendations: Strengthen competition policy and impose heavier penalties for violations. Ease entry restrictions and zoning regulations. Promote competition in network industries by improving the interconnection framework, unbundling vertically-integrated activities and creating independent regulatory bodies. Facilitate the entry of foreign workers.

Actions taken: A strengthened anti-monopoly act took effect in 2006. Two agreements in 2008 allow some foreign nurses and care workers to work in Japan on a temporary basis. However, new zoning regulations limit the entry of large stores in suburban areas. No action taken on network industries.

Other key priorities

► **Remove restrictions on foreign investment (2005, 2007, 2009)**

Recommendations: Ensure that the M&A market is fully open to all firms and limit foreign ownership restrictions based on national security and strategic reasons.

Actions taken: The revision of the Corporation Law and the decision to permit the deferral of related capital gains taxes in 2007 is facilitating cross-border M&As by allowing “triangular mergers”.

Reform the tax system (2009)

Recommendations: The tax system should rely more on indirect taxes to generate revenue, while cutting the corporate tax rate, broadening the base of direct taxes and strengthening property taxation.

Actions taken: No action taken.

Improve the framework for innovation (2007)

Recommendations: Encourage innovation by improving framework conditions. Upgrade the education system by further reducing regulation and removing entry barriers for foreign universities.

Actions taken: The 2007 “Innovation 25” plan enhances the mobility of researchers, expands the use of competitive research grants and extends visas for foreign researchers.

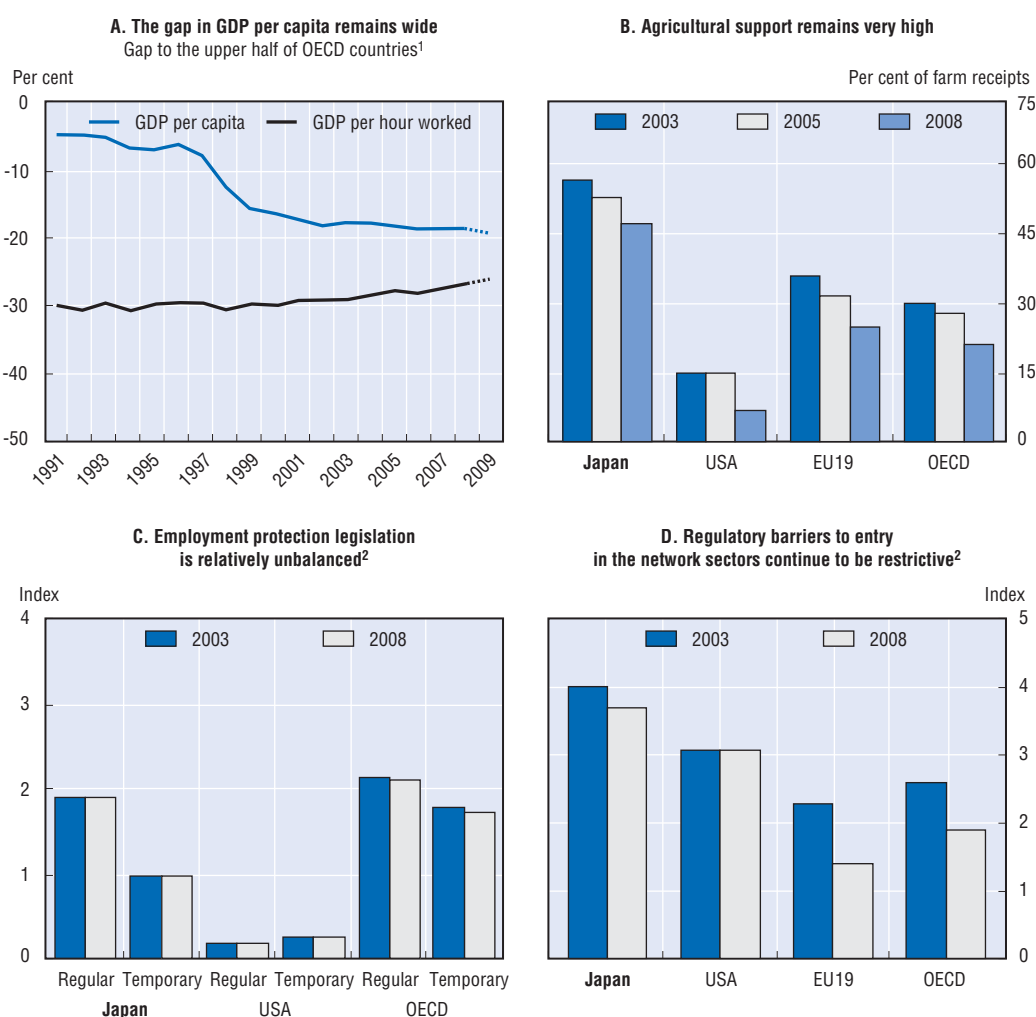
Reform the financial sector (2005)

Recommendations: Resolve the non-performing loan (NPL) problem, require banks to strengthen their capital and reduce the role of public financial institutions.

Actions taken: Major banks significantly reduced NPLs. Five public financial institutions were combined into the “Japan Finance Corporation” in 2008, and their activities were scaled back prior to the financial crisis.

JAPAN

- The income gap relative to the best-performing countries has continued to widen somewhat as gains in productivity have been offset by a fall in labour input.
- There has been some progress in priority areas. Direct payments to farmers have been introduced and the anti-monopoly act has been strengthened. In addition, there have been steps to facilitate cross-border M&As and improve the innovation framework. However, little has been done in the areas of taxation and regulation of network industries. Overall, the pace of reform has been slow.
- Some reforms in other areas have taken place recently in the financial sector.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.

2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *Producer and Consumer Support Estimates Database*; Chart C: OECD, *Employment Outlook Database*; Chart D: OECD, *Product Market Regulation Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

KOREA

Priorities supported by indicators

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Shift the composition of assistance from market price support to direct payments, while lowering the overall level of support. Eliminate remaining restrictions on farm size.

Actions taken: Several direct payment schemes, such as fixed payments for paddy fields, have been introduced and expanded since 2005. The government abolished its purchases of rice and subsidies on chemical fertilisers in 2005. Consumers were allowed to purchase imported rice from 2005.

► **Reform employment protection legislation for regular workers (2005, 2009)**

Recommendations: Reduce incentives to hire non-regular workers rather than regular workers by easing protection for the latter, and expand the coverage of the social insurance system for the former.

Actions taken: Advance notice period for collective dismissals of regular workers was shortened in 2007, but another law aims at preventing excessive use of non-regular workers by requiring workers on temporary contracts to become regular workers after two years.

► **Lower barriers to entry for domestic and foreign firms (2005, 2007)**

Recommendations: Further reduce entry barriers through regulatory reform, particularly in non-manufacturing. Extend the FDI incentives in the three Free Economic Zones to the rest of the country.

Actions taken: The government designated three more Free Economic Zones in 2008.

Ease regulation in network industries (2007, 2009)

Recommendations: Reduce the foreign ownership ceiling in network industries, create independent electricity distribution companies and establish independent sectoral regulators.

Actions taken: The creation of the Korea Communications Commission in 2008 was an important step toward an independent regulatory body for telecommunications and broadcasting. In 2008, the foreign ownership ceiling on satellite broadcasting was increased from 33% to 49%.

► **Further liberalise the services sector (2005)**

Recommendations: Promote greater competition in services, especially in professional services.

Actions taken: The Regulatory Reform Task Force implemented 558 regulatory reforms in the non-manufacturing sector during 2004-07. The Korea-US Free Trade Agreement, completed in 2007, will foster a competitive environment in a number of professional services once it is implemented.

Other key priorities

Improve the innovation system (2007, 2009)

Recommendations: Upgrade the quality of universities through greater competition and deregulation.

Actions taken: Supervision of university admissions was transferred to a private-sector council and regulations on the number of students and management were eased in 2008. Competition was strengthened through the mandatory disclosure of information in 2008.

Increase the role of private childcare facilities (2007, 2009)

Recommendations: Eliminate the ceiling on fees and provide vouchers to parents.

Actions taken: The government introduced vouchers in 2009 that provide free childcare to children under the age of five in families with incomes below the average (urban employee) level.

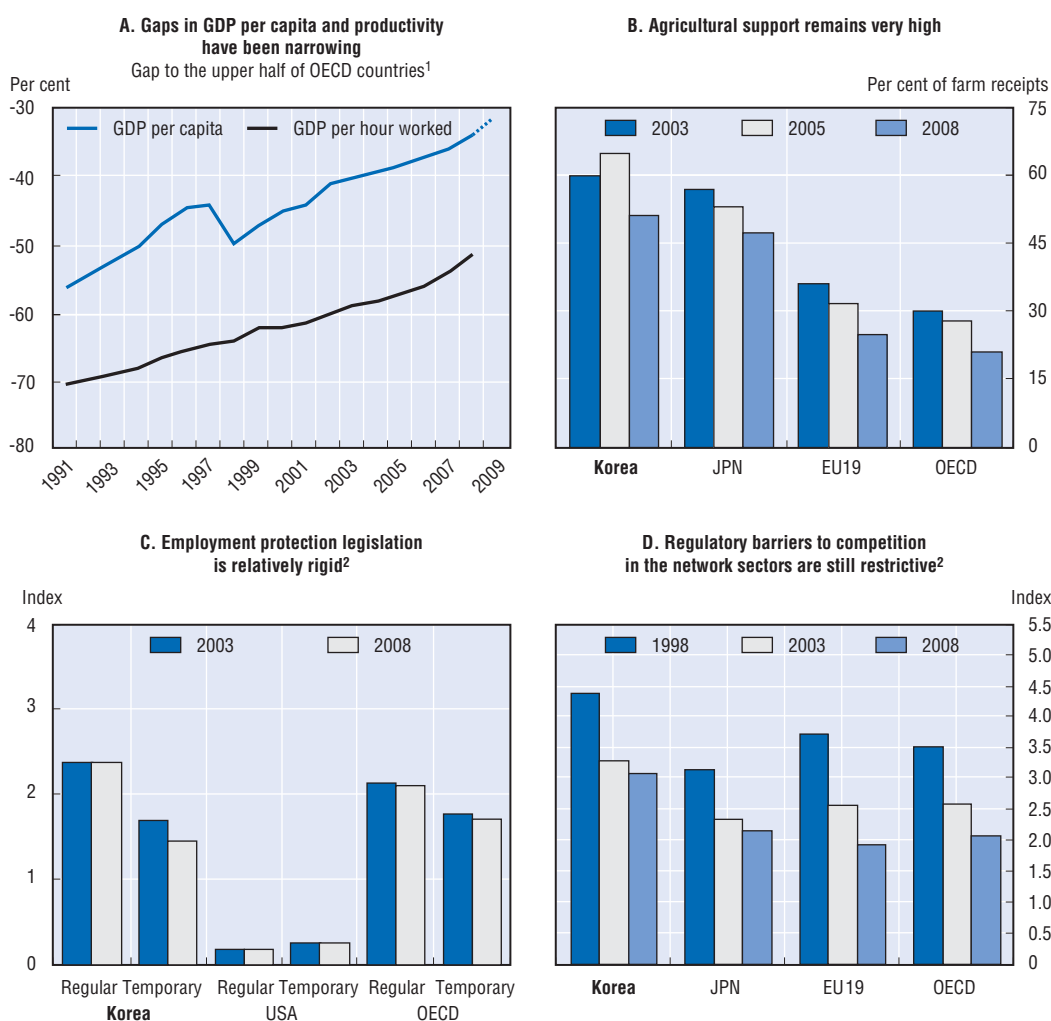
Improve the functioning of the financial sector (2005)

Recommendations: Improve the soundness and functioning of the financial system by extending privatisation and strengthening supervision, notably for credit card companies.

Actions taken: The Capital Markets Consolidation Act of 2009 integrated seven laws governing capital markets and investment services, thereby allowing firms to provide a broader range of services.

KOREA

- GDP per capita has converged steadily toward the best performing countries and the rate of labour utilisation remains the highest in the OECD. Nevertheless, the income gap remains large due to shortfalls in productivity, which are largest in the services sector.
- Recent structural policy measures have focused on accelerating regulatory reforms and strengthening competition, particularly in services. While significant progress has been achieved in a number of areas, further action is needed to reduce support to agriculture and make it less distortionary, increase competition in network industries and address the factors responsible for labour market dualism.
- Some reforms in other areas have taken place recently in income taxation, regulation of large business groups and the creation of holding groups.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Producer and Consumer Support Estimates Database; Chart C: OECD, Employment Outlook Database; Chart D: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

LUXEMBOURG

Priorities supported by indicators

Improve job-search incentives (2005, 2007, 2009)

Recommendations: Job-search incentives should be strengthened and exit routes from the labour market closed by tightening eligibility conditions for unemployment benefits and reducing replacement rates.

Actions taken: No action taken on reforming the unemployment benefit system. Indexation of birth allowances, parental leave allowances and education allowances was suspended until end-2009.

Improve achievements in primary and secondary education (2005, 2007, 2009)

Recommendations: Improve educational outcomes by facilitating track switching. Increase school autonomy to allow headmasters and teachers to adjust programmes to student needs. Rebalance language education and make school education better reflect labour market requirements.

Actions taken: In 2005, a language action plan was put in place that aims at reinforcing language capacity in Luxembourgian for younger children. Public education is phasing in at pre-school age (three-years old) and making pre-school mandatory from age four onwards. In 2007, a series of reforms aiming at improving language education and reducing class repetition was enacted and is now being implemented.

Reduce the implicit taxes on continued work at older ages (2005, 2007, 2009)

Recommendations: Make pension benefit adjustments more actuarially neutral for early and late retirement and reduce the high replacement rates for old-age pensions through a better realignment of pensions and lifetime contributions.

Actions taken: No action taken on actuarial adjustment of pension benefits. Indexation of old-age pensions to inflation is now applied with a lag, implying a modest one-off reduction in replacement rates.

Other key priorities

► **Reduce barriers to competition in professional services (2007, 2009)**

Recommendations: Boost competition in professional services by easing conduct regulation and lowering licensing and education requirements.

Actions taken: No action taken.

► **Ease employment protection (2007, 2009)**

Recommendations: Ease the strict employment protection, notably by simplifying rules for individual dismissals.

Actions taken: No action taken.

Raise public-sector efficiency (2005)

Recommendations: Enhance public-sector efficiency through greater use of cost-benefit and cost effectiveness analyses, further expand the role of e-government, increase managerial independence and accountability, and simplify administrative procedures.

Actions taken: No action taken.

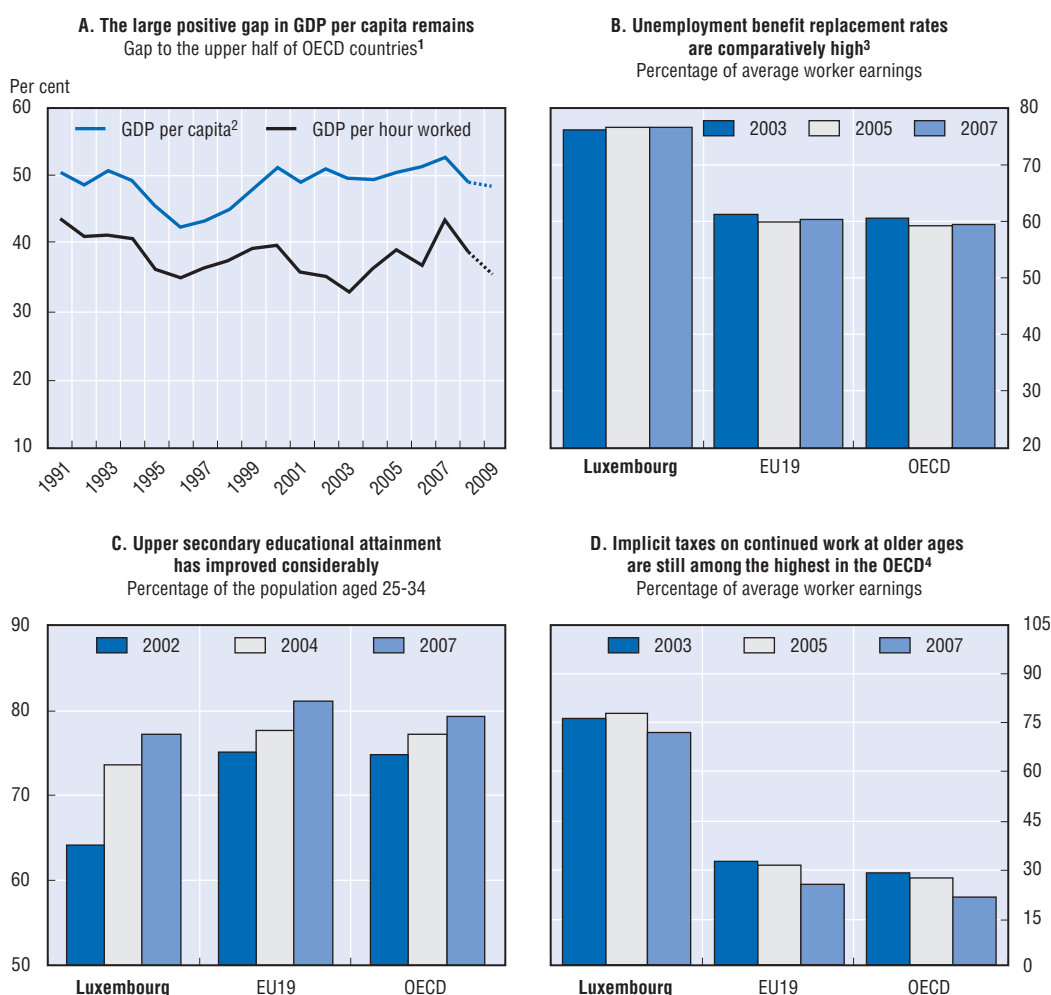
Reduce barriers to competition in broadband services (2005)

Recommendations: Reduce barriers to competition in broadband services by imposing lower access charges to the local loop and restrict the scope for the incumbent telecommunications company to cross-subsidise other activities.

Actions taken: No action taken.

LUXEMBOURG

- The positive GDP-per-capita gap relative to the upper half of OECD countries has remained wide. However, labour force participation of some groups remains low and human capital formation does not appear well suited to the present highly knowledge-based growth trajectory.
- In key priority areas, measures have been taken to improve language education and reduce class repetition, although more needs to be done to address the serious problems in the education sector. Marginal labour market reforms have been implemented. Overall, progress has been well below the OECD average.
- Outside key priority areas, Luxembourg now has 12 bilateral tax agreements and thus has substantially implemented the internationally agreed tax standard.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.
2. The population is augmented by the number of cross-border workers in order to take into account their contribution to GDP.
3. Average of replacement rates for short and long term unemployed persons who earned 67% and 100% of average worker earnings at the time of losing job.
4. Implicit tax on continued work embedded in the regular old-age pension scheme for 60-year-olds.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *Benefits and Wages Database*; Chart C: OECD (2008), *Education at a Glance* and OECD, *PISA 2006 Database*; Chart D: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", *OECD Economics Department Working Papers*, No. 370 and OECD calculations.

StatLink  <http://dx.doi.org/10.1787/786611566183>

MEXICO

Priorities supported by indicators

Raise achievement in primary and secondary education (2005, 2007, 2009)

Recommendations: Reallocate education resources towards non-wage spending. Review incentives for teachers to enhance students' learning outcomes.

Actions taken: As part of the framework of the Alliance for Quality Education between the government and the main teachers' union, spending on school infrastructure has been increased and 10 000 schools have been renovated. In 2008, new teachers were selected for the first time through a centralised entry exam, and a major reform is underway to link teachers' career progression more closely to performance and student learning outcomes, rather than to their seniority and initial education.

Reduce barriers to entry in network industries (2005, 2007, 2009)

Recommendations: Increase the effectiveness and enforceability of competition-enhancing access regulations. Remove legal obstacles to private investment in the electricity sector and fixed line telephony.

Actions taken: Assisted by the OECD, the government launched in 2007 a process for strengthening competitiveness in Mexico to promote regulatory and competition policy reform. One outcome is the launch of an online one-stop shop that reduces the time to start a new business to one day. Authorities have initiated phone number portability and given permits to commercialise or resell mobile phone services.

► Reduce barriers to foreign ownership (2005, 2007, 2009)

Recommendations: Ease restrictions on foreign direct investment in services and infrastructure, especially in the electricity sector and fixed line telephony.

Actions taken: A new law reducing ownership restrictions in telecommunications has been approved in the lower chamber of Congress. Approval in the upper chamber is pending.

Other key priorities

Improve the "rule of law" (2005, 2007, 2009)

Recommendations: Improve the rule of law by clarifying property rights and ensuring more effective and predictable law enforcement.

Actions taken: No action taken.

Reform the tax system (2005, 2007)

Recommendations: Simplify the tax system and broaden the VAT tax base to raise labour productivity by facilitating tax administration and reducing distortions.

Actions taken: The tax system was reformed in 2007. It introduced an effective minimum tax on businesses (IETU), which can be offset against income tax liabilities, and a tax on cash deposits, which is deductible against both the income tax and the IETU.

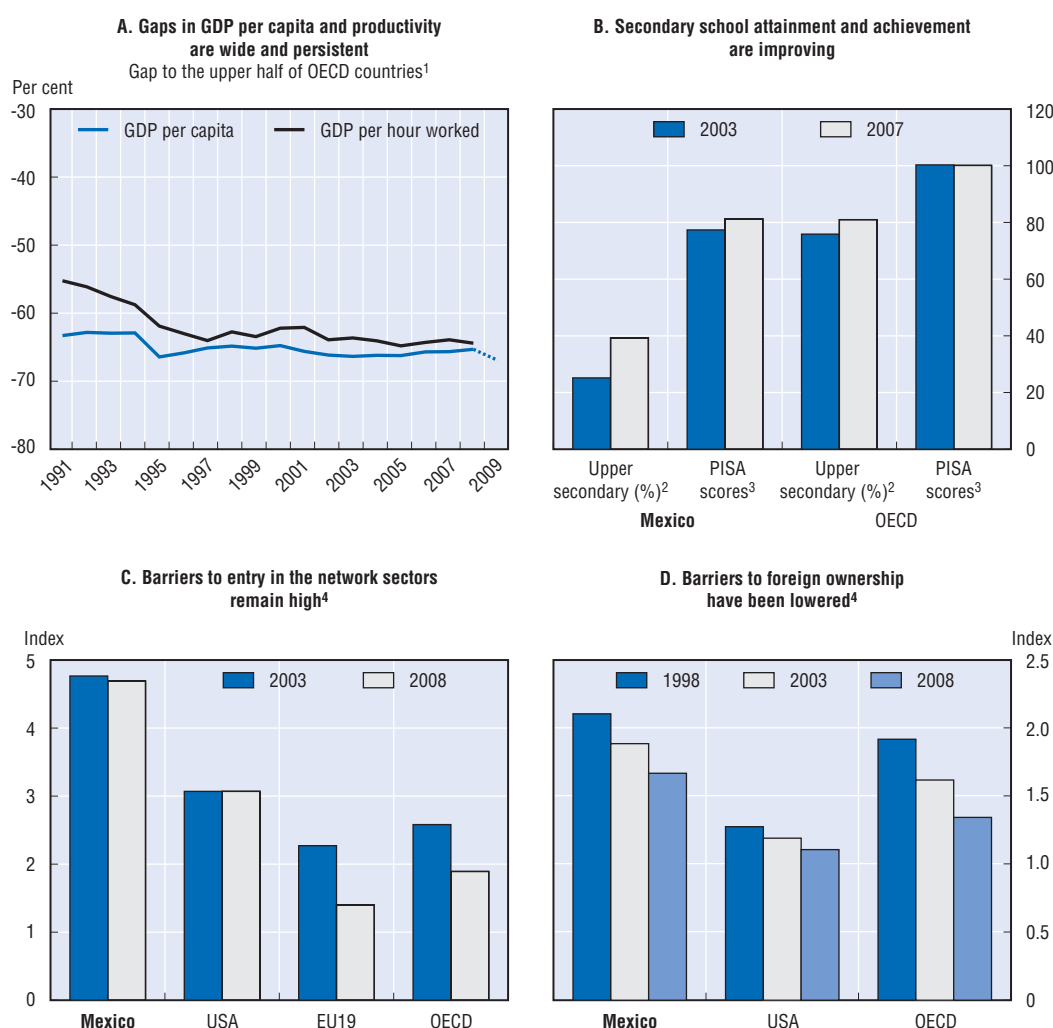
Reform the state-owned oil company (2009)

Recommendations: Improve the governance of PEMEX by lifting investment constraints and strengthening accountability for efficient operation. Facilitate risk and profit sharing with other companies so as to facilitate access to technologies.

Actions taken: A comprehensive energy sector reform was launched in 2008, which will gradually increase the independence and accountability of PEMEX, and allow cash incentives for contractors that meet pre-specified performance objectives. However, profits and property rights on hydrocarbons will not be shared.

MEXICO

- While the overall macroeconomic framework has been substantially improved over the last fifteen years, not least through balanced budgets and an independent inflation-targeting central bank, growth in Mexico is lower than in dynamic emerging markets, preventing catch-up to the leading OECD economies.
- In key priority areas, an important reform of basic education is underway, and reforms have been passed for both the tax system and the state oil company. Entry restrictions into the telecommunications sector have been eased, and a rapid business start-up system has been introduced.
- Some reforms in other areas have taken place, including a significant unilateral reduction in import tariffs.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the *OECD Economic Outlook*, No. 86.
2. Percentage of population aged 25-34 that has attained at least upper-secondary education.
3. Average mean score of student performance in mathematics, science and reading in 2006. Index OECD = 100.
4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Charts B: OECD (2009), *Education at a Glance* and OECD, *PISA 2006 Database*; Charts C and D: OECD, *Product Market Regulation Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

NETHERLANDS

Priorities supported by indicators

Lower marginal effective tax rates (2005, 2007, 2009)

Recommendations: Reduce social transfers and tax subsidies for owner-occupied housing and broaden VAT tax base to finance lower labour income taxes. Phase out or reduce measures which increase the marginal effective tax for second earners.

Actions taken: The government has taken measures to reduce the effective cost of childcare for workers. Employer contributions to childcare were made compulsory in 2007 and the transferability of the tax credit for non-working partners is being phased out over a 15-year period.

Reform disability benefit schemes (2005, 2007, 2009)

Recommendations: Improve assessment of regional social security offices' performance. Reform periodic medical reassessment of disability recipients and extend it to persons above age 50. Phase out the dependency of initial disability benefits on previous earnings and exclude the benefits from wage agreements.

Actions taken: Medical gate-keeping has been improved through stricter claim assessment and reassessment of existing cases. Eligibility conditions for disability leave have been tightened somewhat, and economic incentives for hiring partially disabled workers have been strengthened through an in-work wage subsidy based on the hypothetical earnings capacity of benefit recipients. However, in 2007, the maximum age for medical reassessment was lowered to age 46.

Strengthen competition in network industries (2005, 2007)

Recommendations: Secure effective vertical separation in local-government owned network industries, privatise such activities and introduce cost-based access pricing. Adopt a "silence is consent" rule for issuing licenses.

Actions taken: Full ownership separation of the energy distribution networks from the supply companies is being implemented from 2008 and is to be completed by the end of 2010. Competitive tenders have opened up public transport activities to private operators.

► Ease employment protection legislation for regular contracts (2009)

Recommendations: Simplify the dismissal system, including appeal procedures. Clarify the rules governing layoffs. Reduce severance payment rights of older workers to the levels of other workers.

Actions taken: Courts have adopted new guidelines to determine the amount of severance payments.

Simplify administrative procedures (2005)

Recommendations: Simplify and publicise procedures and regulation, extend one-stop shop services to accepting notification and issuing permits.

Actions taken: Since 2005, significant simplifications to administrative procedures have been implemented.

Other key priorities

► Promote competition in retail distribution services (2005, 2007, 2009)

Recommendations: Liberalise retail distribution by phasing-out restrictions on shop-opening hours, relaxing the regulation for large scale outlets and easing zoning regulations.

Actions taken: In 2005, restrictions on large outlets and decision-making powers were decentralised.

Reform residential zoning regulation (2005, 2007)

Recommendations: Ease land-use zoning restrictions to stimulate housing supply.

Actions taken: In 2006 the government moderately eased zoning restrictions and decentralised decision-making.

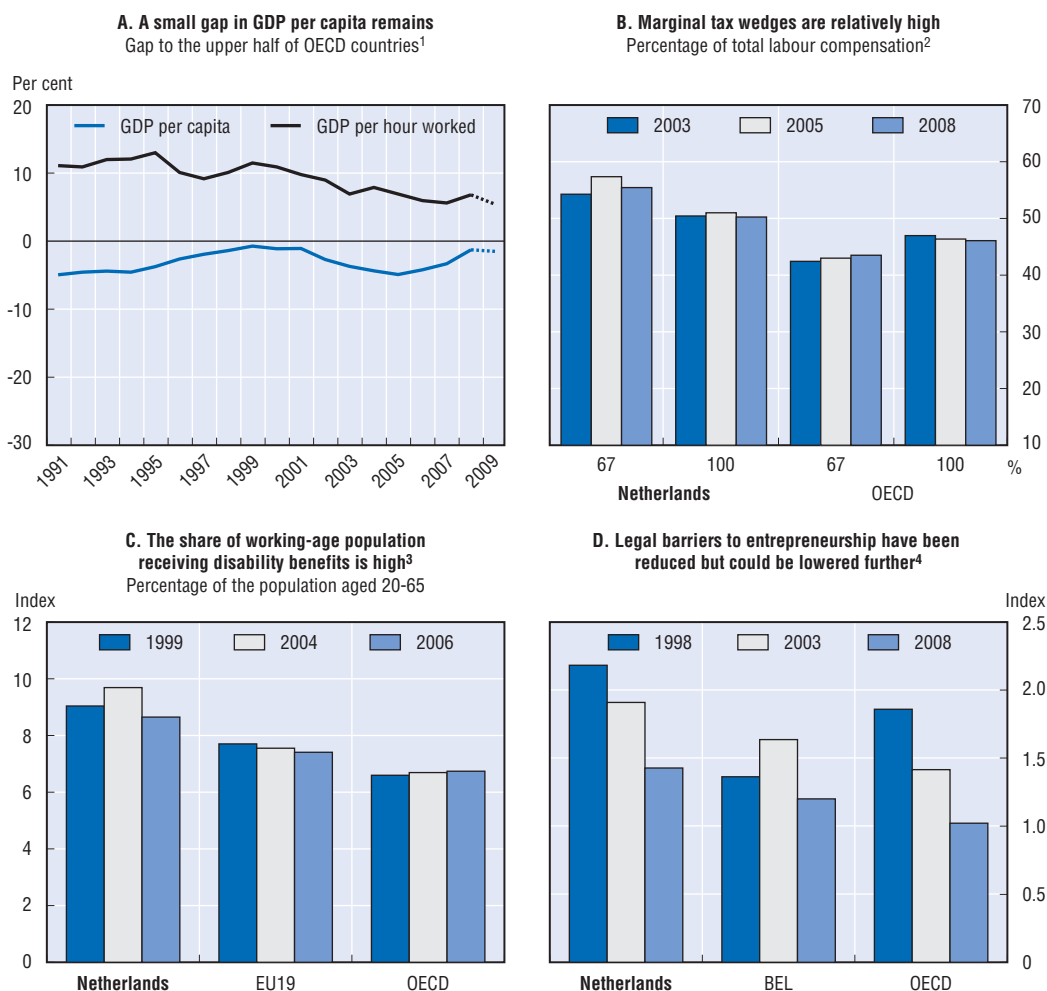
► Reduce incentives for the long-term unemployed to stay inactive (2009)

Recommendations: Strengthen activation policies for the long-term unemployed and shorten the duration of unemployment benefits.

Actions taken: No significant action taken.

NETHERLANDS

- The small income gap vis-à-vis the top performing OECD countries remains at par, reflecting lower average working hours offset by relatively high productivity.
- Reforms have reduced disincentives to work longer hours, particularly for second earners. The administrative burden has been notably reduced, and reforms in network sectors have been implemented. However, employment protection legislation remains overly strict, restrictions on shop opening hours continue to hinder competitive pressures, and excessive unemployment benefit duration undermines the job-search incentives of the long-term employed.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Evaluated at 67% and 100% of average earnings for a single person with no child.
3. Disability benefits include contributory, non-contributory and work injury benefits.
4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Taxing Wages Database; Chart C: OECD (2003), Transforming Disability into Ability and OECD estimates; Chart D: OECD, Product Market Regulation Database.

StatLink <http://dx.doi.org/10.1787/786611566183>

NEW ZEALAND

Priorities supported by indicators

Reduce educational under-achievement among specific groups (2005, 2007, 2009)

Recommendations: Link teachers' pay and career advancement to professional development and to improving achievement of minorities and low-income groups.

Actions taken: A new school qualification system, the National Certificate of Educational Achievement (NCEA), was introduced in 2002. By 2008, the number of school leavers achieving NCEA Level 2 increased substantially, especially among minority groups.

Facilitate access to childcare for working parents (2007)

Recommendations: Improve access to childcare, especially for the disadvantaged and three and four-year-olds.

Actions taken: The government increased subsidies for childcare and early childhood education over the last 5 years.

Reduce barriers to competition in network industries (2007, 2009)

Recommendations: Clarify the regulatory and competition framework in most network industries. Divest public ownership and dismantle entry barriers in international air transport and rail.

Actions taken: The government has amended the regulatory framework for electricity transmission, gas pipelines and specified airports. The performance and governance of the electricity market and local telecom services obligations are being reviewed. The government also passed emissions trading legislation in 2008 (reviewed in 2009). The rail network has been re-nationalised.

Raise the effectiveness of R&D support (2009)

Recommendations: Orient immigration, education and labour market policies to enhanced innovation skills. Examine the efficiency of research grants and consider replacing them in part by tax incentives.

Actions taken: The government cancelled a new R&D tax credit with the onset of the economic crisis and is looking at alternative instruments to support business R&D.

Strengthen incentives to move from welfare to work (2005)

Recommendations: Strengthen activation policies, and monitor the adequacy of the labour-supply response to *Working for Families* transfers. Consider back-to-work bonuses for long-term beneficiaries.

Actions taken: In 2007, the government introduced measures to support the transition to the labour market of sickness and disability benefit recipients with some ability to work. Activation policies for unemployment beneficiaries were reinforced by a new job search service. The government has announced a set of initiatives to help young people access employment, training and education during the crisis.

Reduce barriers to foreign ownership (2005)

Recommendations: Remove consent rules for foreign acquisitions of 25% or more of firms worth more than NZD 50 million, and find other ways of protecting "sensitive land".

Actions taken: The 2005 Overseas Investment Act increased the threshold to NZD 100 million, but in 2008 the government tightened entry barriers for investment in infrastructure on sensitive lands. In 2009, the government exempted a number of technical transactions from screening and delegated more decisions to speed up processing times.

Other key priorities

► **Deal with infrastructure bottlenecks, especially in transport and energy (2005, 2007, 2009)**

Recommendations: Change regulations to unblock investments. Use tolls and congestion pricing to restrain demand.

Actions taken: Increases in national user charges have funded large increases in transport investment. The first toll road opened in 2008. A National Infrastructure Unit has been established to set national infrastructure priorities. In 2005 and again in 2009, the government amended the Resource Management Act to streamline procedures for obtaining resource consent.

Improve efficiency in health and education (2007, 2009)

Recommendations: Increase incentives for public-sector managers to enhance efficiency. Continue to improve service access for minority groups.

Actions taken: The government has established national standards/targets in both health care and education, along with strengthened information systems and funding linked to national priorities. The Ministry of Health has announced changes to improve service planning, capital spending decisions and technology assessment. The Education Ministry has announced a plan to link tertiary the funding of tertiary institutions more closely to performance.

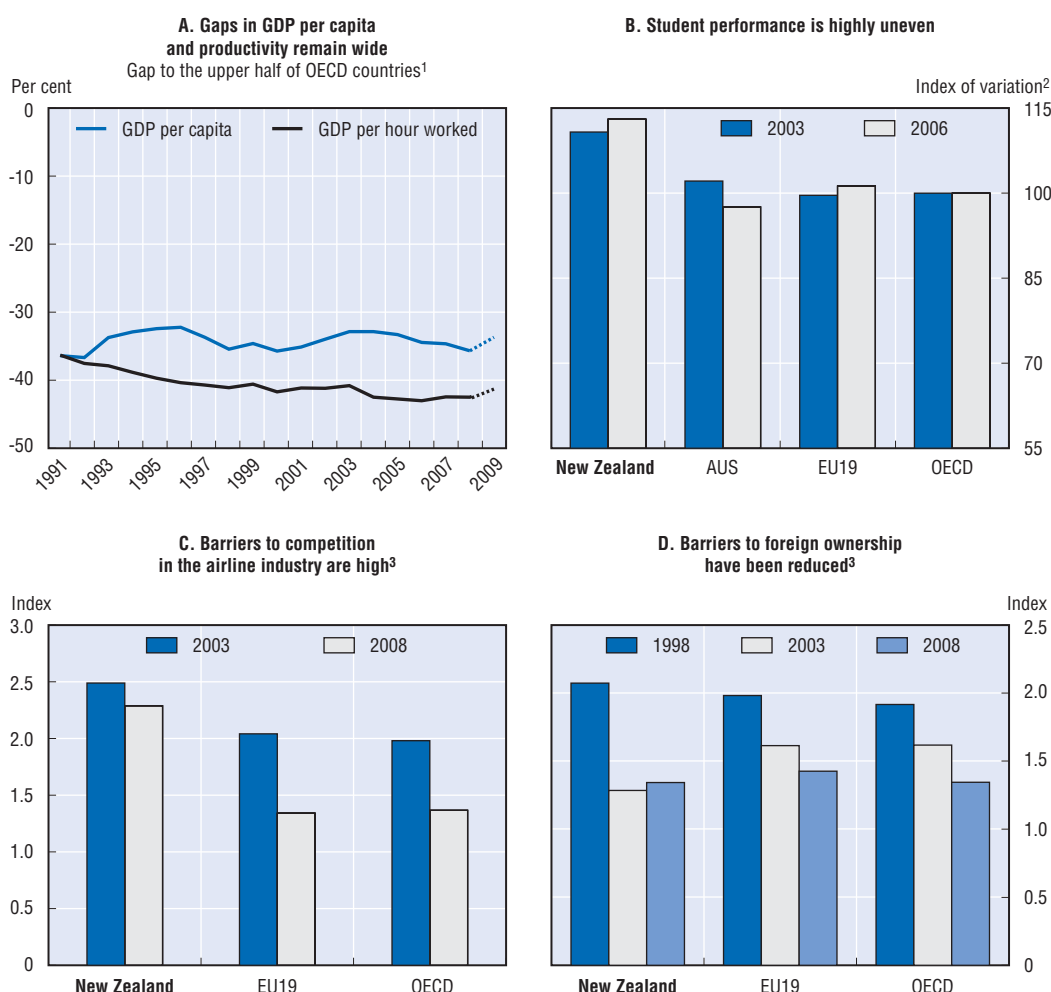
Ensure that employment relations legislation supports efficient labour-market outcomes (2005)

Recommendations: Reconsider the 2004 changes in the Employment Relations Act that raised labour costs.

Actions taken: The government amended the Act in late 2008, introducing a trial period of 90 days for new employees in businesses with fewer than 20 staff. A review of the employment relations legislation is currently underway.

NEW ZEALAND

- Robust labour utilisation and terms-of-trade gains in the years prior to the economic crisis have helped to offset the impacts of relatively subdued labour productivity growth on the wide per capita income gap relative to the upper half of OECD countries.
- Progress on key priority reforms has been mixed. Public spending, ownership and regulation of economic activity have expanded, with often adverse impacts on competition, investment certainty and foreign entry. Similarly little progress has been made on performance incentives for teachers and encouraging R&D. More positively, the government linked welfare benefits more closely to job search requirements.
- Reforms in other areas are progressing, notably output-based funding in health and education. The government has eased employment protection legislation, is committed to removing regulatory obstacles to infrastructure investments and resource management, and is examining the efficiency of all government spending. It has also legislated an ambitious emissions-trading scheme.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.
2. Standard deviation of average student performance in mathematics, science and reading.
3. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD, *PISA Databases 2003 and 2006*; Charts C and D: OECD, *Product Market Regulation Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

NORWAY

Reduce the scope of public ownership (2005, 2007, 2009)

Recommendations: Reduce state ownership in the telecommunications, banking and energy industries.

Actions taken: The state has reduced its ownership in some sectors but increased it in the petroleum sector and in the energy contracting and services industry. In addition, from 2008, new hydro power plants or reverted concessions are granted only to public companies.

► *Reform disability and sickness benefit schemes (2005, 2007, 2009)*

Recommendations: Tighten access to sickness and disability benefits, by mandating assessment to independent medical experts. With due allowance for work capacity, impose similar conditionality on partial disability benefit recipients as on the unemployed.

Actions taken: Measures ensuring that long-term sickness leave recipients are followed more closely were introduced in 2007. The ongoing merger of the welfare system and the employment services network is intended to improve coordination of these services.

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Cut tariffs on agricultural products and reduce production subsidies. Decouple support from production and move to a system of income transfers targeted to less well-off farmers and/or those in remote regions.

Actions taken: All forms of support have increased substantially since 2005.

Other key priorities

Implement a comprehensive pension reform (2005, 2007)

Recommendations: Raise the effective retirement age; enhance the actuarially neutral profile of the pension system.

Actions taken: A new pension system with longevity adjustment and a flexible retirement age from 62 onwards, based on actuarially neutral adjustments, will be phased in from 2011. The early retirement system has been reformed for the private sector, with however some costly concessions for the older cohorts. No agreement was reached to reform the early retirement system for the public sector.

Improve education efficiency and outcomes (2009)

Recommendations: Raise teacher training standards, increase accountability for teachers and principals. Merge small and medium-sized schools to gain economies of scale.

Actions taken: A 2008 White Paper recommended strengthening the in-service teachers with priority on training with formal accreditation, and proposed to reinforce the national evaluation system to increase accountability. The 2009 Budget law allocated resources to some of these measures.

Reduce marginal tax rates on labour income (2009)

Recommendations: Reduce the high marginal income taxes.

Actions taken: No action taken

Strengthen competition policy (2007)

Recommendations: Strengthen the independence of the competition authority, reduce state aid and promote competition.

Actions taken: The government amended the Competition Act in 2008 to simplify procedures for the government to reverse Competition Authority decisions against mergers on grounds other than competition. The amendment might weaken the opportunity to have an appeal scrutinised on competition grounds.

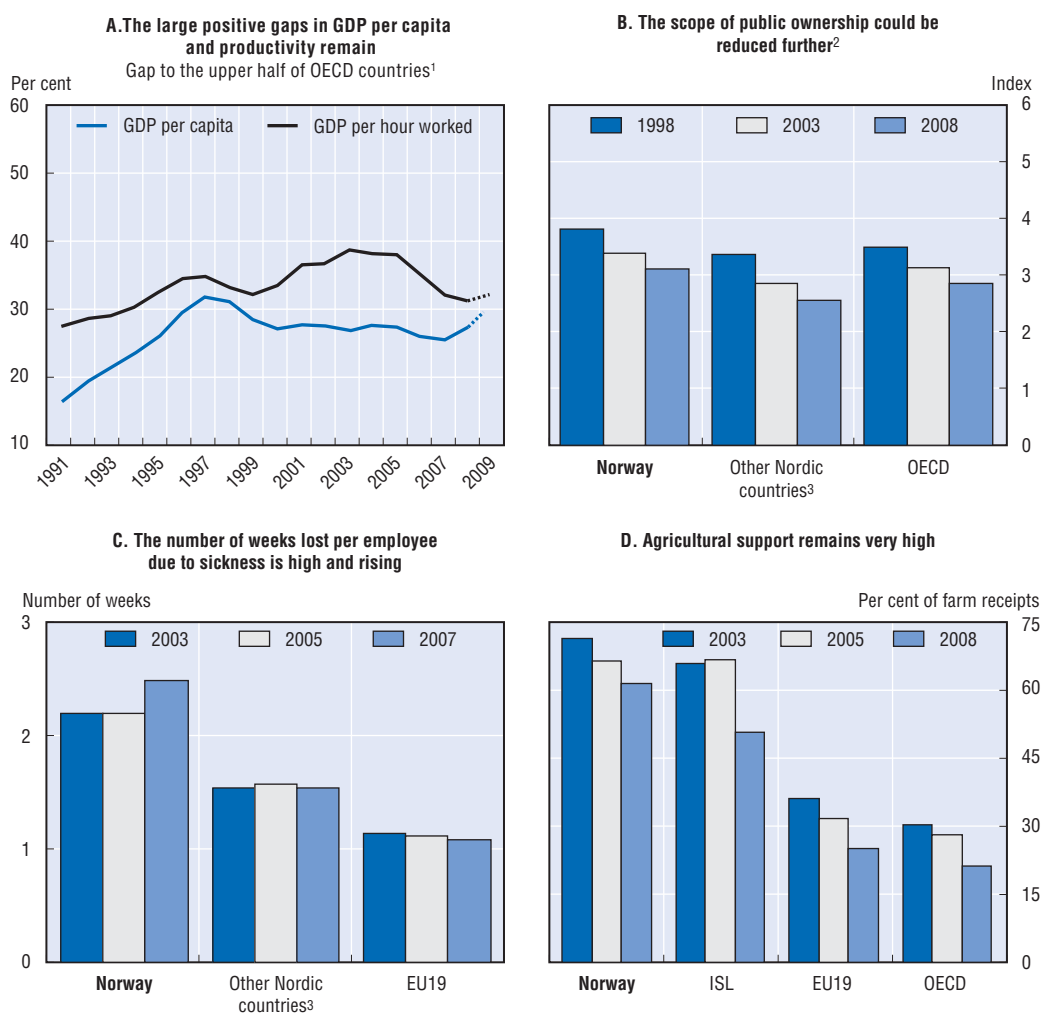
Improve transparency and cost-effectiveness of regional policy (2005)

Recommendations: Pursue regional policy goals by more transparent measures.

Actions taken: A general regional differentiation of employers' social security taxes was reintroduced from 2007, replacing less targeted measures.

NORWAY

- High productivity and a resource extraction rent make Norway one of the OECD countries with the highest income per capita; however labour utilisation is low due to low annual average hours worked.
- Progress has been made in reforming the pension system. However, the state has increased its control of “strategic industry”, and support for the small agricultural sector remains among the highest in the OECD. The Competition Authority has been weakened.
- In other areas, a major effort has been devoted to improving education outcomes, and some measures have been taken to raise spending efficiency.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

3. Average of Denmark, Finland, Iceland and Sweden.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Product Market Regulation Database; Chart C: OECD (2008), Employment Outlook; Chart D: OECD, Producer and Consumer Support Estimates Database.

StatLink <http://dx.doi.org/10.1787/786611566183>

POLAND

Priorities supported by indicators

► **Reduce public ownership (2005, 2007, 2009) and remove barriers to entrepreneurship (2009)**

Recommendations: Boost the privatisation process and reduce the administrative burden on firms.

Actions taken: Privatisation has been slow, but has accelerated recently to moderate the rising debt-to-GDP ratio. Barriers to entrepreneurship have recently been lowered with the creation of a one-stop-shop for start-ups and the possibility to suspend activity when needed.

Reform the tax and benefit system (2007, 2009)

Recommendations: Reduce the tax wedge and access to early retirement schemes.

Actions taken: Between 2007 and 2009 the average and marginal tax wedges were lowered through cuts in income taxes and social security contribution rates and the introduction of a child tax credit. In late 2008, the government significantly tightened eligibility criteria for early retirement schemes.

Improve the efficiency of the education system (2007, 2009)

Recommendations: Improve provision of free pre-school education at ages three to five; introduce tuition fees for full-time students in public higher education institutions, as well as more accessible systems of means-tested grants and student loans with income-contingent repayment.

Actions taken: No significant action taken.

Reform entitlement conditions in disability benefit schemes (2005)

Recommendations: Implement a stricter and regular re-evaluation of beneficiaries.

Actions taken: No significant action taken.

Reduce barriers to foreign ownership (2005)

Recommendations: Raise the statutory limit on foreign ownership of domestic shares and limit the use of government special voting rights that can be exercised in case of foreign acquisitions.

Actions taken: No significant action taken.

Other key priorities

Upgrade transport, communication and housing infrastructure (2005, 2007, 2009)

Recommendations: Enhance transport and communication infrastructure and improve urban planning.

Actions taken: Action taken, but the speed of absorption of EU funds should be improved.

Reform housing policies (2009)

Recommendations: Make the release of zoning plans by municipalities mandatory, introduce compulsory escrow accounts to protect buyers' advances and ease rent controls further.

Actions taken: A draft law has been prepared to revive the rental market through tax incentives and by creating a less protected segment of the market with reduced tenant protection and no rent controls.

Promote competition in professional services and telecommunications (2007)

Recommendations: Simplify regulations in professional services and facilitate third-party access to the network segment in telecommunications. Discriminatory access to the incumbent's infrastructure remains a serious issue in broadband Internet.

Actions taken: No action taken for professional services, but interventions by the regulatory authorities have significantly curbed the monopoly power of the incumbent operator in telecommunications.

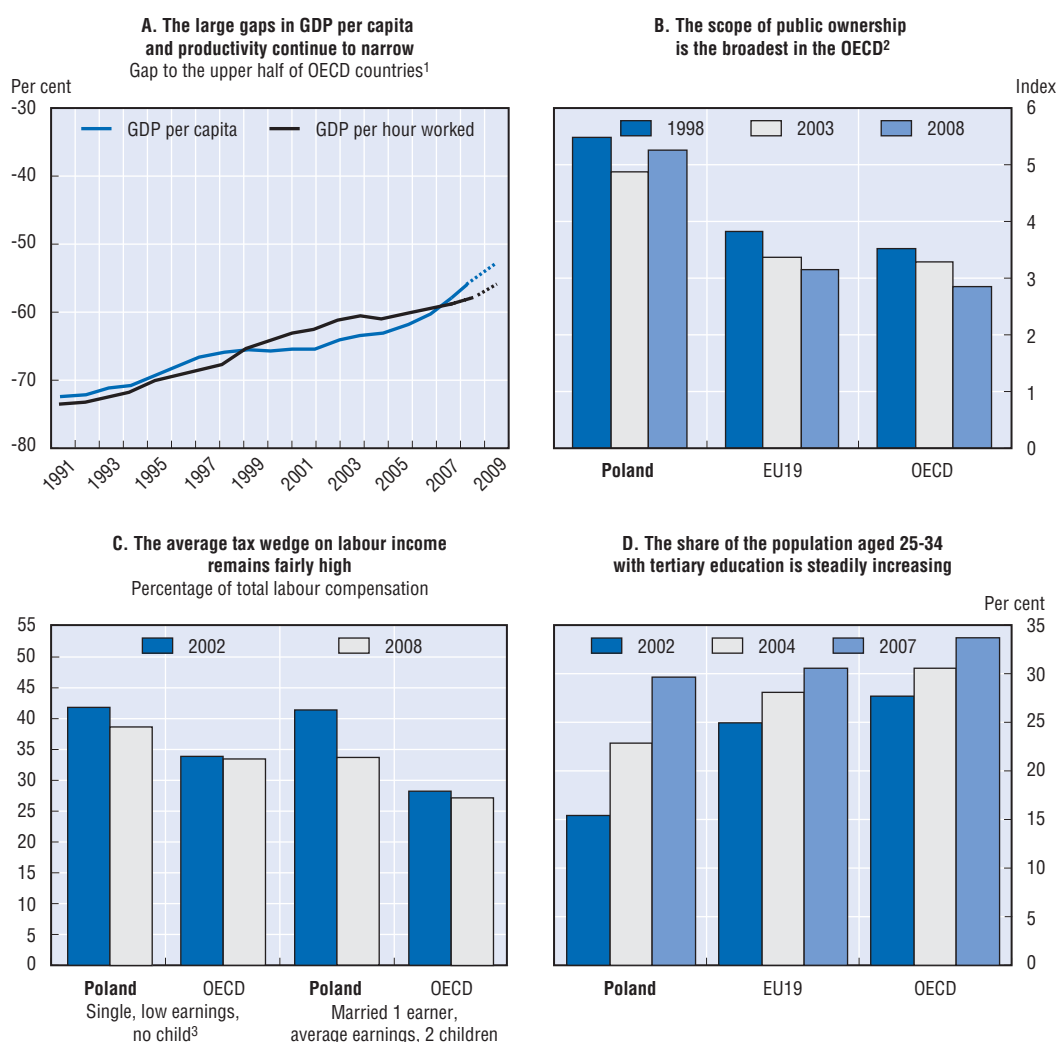
Reduce the minimum cost of labour (2005)

Recommendations: Introduce in-work benefits and ensure that the minimum wage does not rise significantly relative to the average wage.

Actions taken: The minimum wage has risen by 14% relative to the average wage since 2005 as a consequence of an indexation rule and additional discretionary increases in 2008 and 2009.

POLAND

- Strong trend growth has led to convergence in GDP per capita, but a large gap remains due to low labour productivity.
- In key priority areas, labour tax wedges have been lowered, eligibility for early retirement and disability pension schemes tightened, and barriers to entrepreneurship reduced. However, improving the efficiency of education and eliminating barriers to foreign ownership remain unaddressed priorities. In other priority areas, some progress has been made in upgrading transport infrastructure, but housing policies and regulations in professional services have not been overhauled, while increases in the relative minimum cost of labour have represented a step backward.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

3. Low earnings refer to two-thirds of average earnings.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Product Market Regulation Database; Chart C: OECD, Taxing Wages Database; Chart D: OECD (2009), Education at a Glance.

StatLink  <http://dx.doi.org/10.1787/786611566183>

PORTUGAL

Priorities supported by indicators

Improve secondary and tertiary education attainment (2005, 2007, 2009)

Recommendations: Monitor and assess the effectiveness of secondary and tertiary education reforms. Improve intergenerational educational mobility.

Actions taken: Since 2005, the government rationalised the school network in lower-secondary education, introduced of a national system of teacher performance evaluation (2007), and developed vocational education, for instance through the program *Novas Oportunidades* (launched in 2005). In 2009, the government raised the compulsory schooling age to 18. Since 2007, a major reform to modernise the tertiary education system has been implemented, including institutional autonomy on a voluntary basis.

► **Reduce administrative burdens on business (2009)**

Recommendations: Increase collaboration between central government and municipalities to fully implement reforms at the local level. Harmonise regulations with major trading partners.

Actions taken: The government has simplified administrative procedures and improved the efficiency and effectiveness of public services. The main programme in this area, SIMPLEX, was launched in 2005.

Reduce barriers to competition in network industries (2005, 2007, 2009)

Recommendations: Encourage stronger platform competition in telecommunications and ensure that mobile termination charges are not discriminatory. Minimise hurdles to building new electricity transmission capacity. Facilitate yard-stick competition in transport.

Actions taken: Electricity customers have been able to choose between electricity suppliers since 2006. The government unbundled the gas and electricity transportation networks and encouraged competition in electricity generation by creating conditions for new entry, by anticipating extinction of the energy acquisition contracts and by allocating licenses for the construction of new combined cycle power plants.

► **Reform employment protection legislation (2005, 2007, 2009)**

Recommendations: Employment protection legislation (EPL) reforms must be fully enforced and the delays and uncertainties associated with its implementation reduced. The easing of EPL should be accompanied by targeted measures to support affected workers while encouraging job search.

Actions taken: In 2008, the government introduced legislation to revise the labour code as well as measures to facilitate the application of the law. The main changes include reducing procedural inconveniences for individual dismissal of employees on regular contracts, increasing the trial period for all workers, and reducing notice and severance pay for no-fault individual dismissal. This implies a substantial easing of EPL on regular contracts, as reflected in the large drop in the latest OECD EPL index for 2009.

Other key priorities

Simplify the tax system and broaden the corporate tax base (2005, 2007, 2009)

Recommendations: Simplify the tax system and broaden the corporate tax base. Reduce tax expenditures and avoid frequent changes to the tax code.

Actions taken: Actions taken to reduce tax evasion and fraud include measures to fight fraudulent VAT reporting, invoices, and abusive tax planning in 2008.

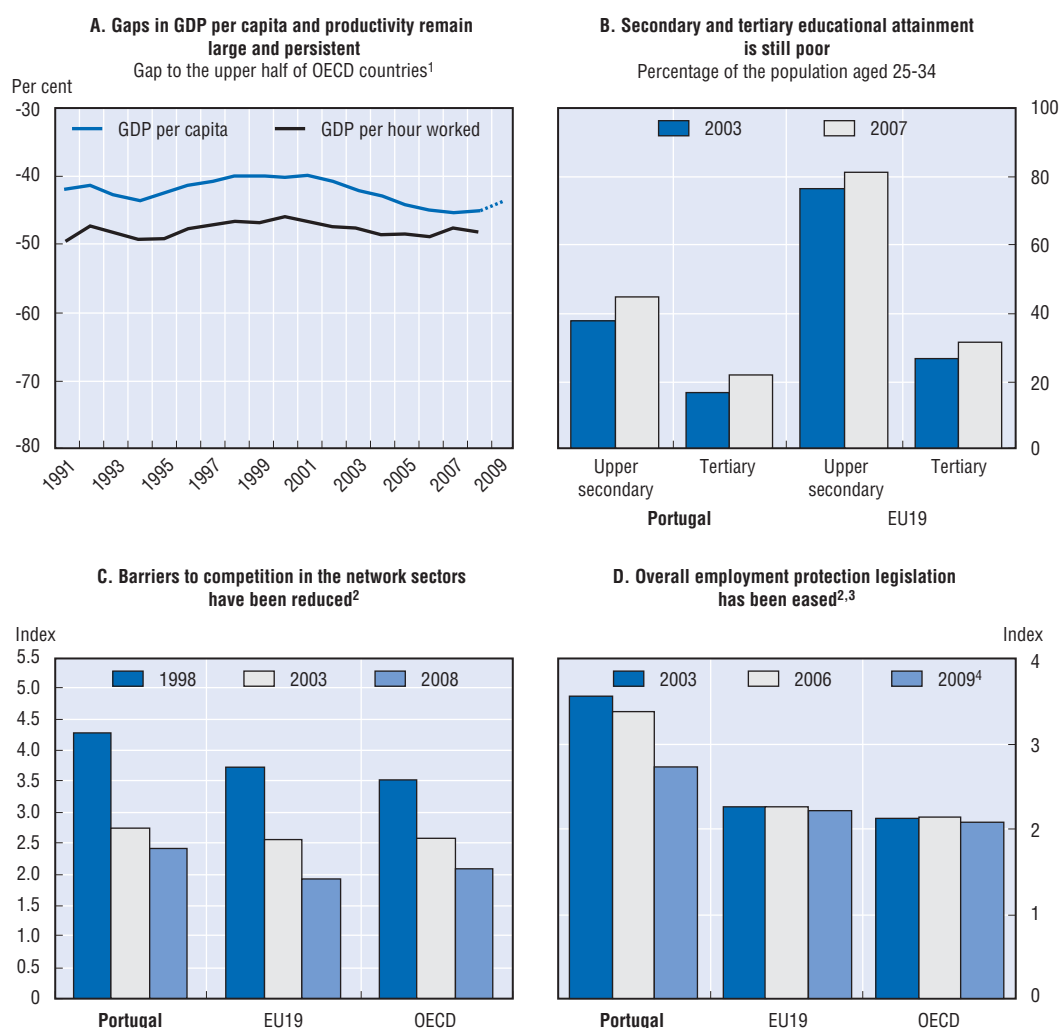
Reform public administration (2005, 2007)

Recommendations: Ensure full implementation and acceptance by civil servants of the new performance-based human resource management system and ensure that the mobility pool is effective and efficient.

Actions taken: Starting from 2005, the authorities have put in place an in-depth public administration reform. It includes the control of admissions and recruitment of civil servants and reforms to careers and remuneration.

PORTUGAL

- There has been no reduction in the large income gap vis-à-vis the upper half of OECD countries. The gap is almost entirely accounted for by a wide labour productivity gap.
- In key priority areas, network industries have been liberalised substantially and the business environment improved more broadly. A major easing of employment protection legislation has been implemented. Despite substantial efforts, the gap in educational attainment and performance vis-à-vis the rest of the OECD needs to be reduced further, and equality of educational opportunities improved.
- Reforms in other areas have included enhancing the sustainability of the social security and health systems, notably through pension reform.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the *OECD Economic Outlook*, No. 86.

2. Index scale of 0-6 from least to most restrictive.

3. Overall EPL is computed as a weighted sum of sub-indicators for regular contracts, temporary contracts and collective dismissals.

4. 2008 for EU19 and OECD.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD (2009), *Education at a Glance* and OECD, *PISA 2006 Database*; Chart C: OECD, *Product Market Regulation Database*; Chart D: OECD, *Employment Outlook Database*.

StatLink <http://dx.doi.org/10.1787/786611566183>

SLOVAK REPUBLIC

Priorities supported by indicators

Improve funding and effectiveness of the education system (2005, 2007, 2009)

Recommendations: Expand pre-school education, reduce stratification, provide additional funding for schools with high proportion of groups at risk of under-achievement, foster integration of Roma children, make vocational education more relevant to the labour market and introduce tuition fees backed by greater loan availability for all tertiary students.

Actions taken: Kindergarten is free of charge for five-year-olds since 2008. The government encouraged integration of technical and vocational secondary schools, and universities have been allowed to set tuition fees for part-time students since 2007.

Reduce the tax wedge for low-income workers (2005, 2007)

Recommendations: Reduce social security contribution rates for lower wage earners, ensure that the minimum wage remains sufficiently below the average wage, and introduce an in-work benefit.

Actions taken: An in-work benefit (employee bonus) was introduced in 2009 for workers on regular job contracts with salaries close to the minimum wage.

Reduce the implicit taxes on continued work at older ages (2005, 2007)

Recommendations: Further raise the retirement age in line with gains in life expectancy while making pension benefits adjustments for early and late retirement more actuarially neutral.

Actions taken: No action taken.

► Reduce regulatory barriers to competition (2005, 2009)

Recommendations: Facilitate the entry of new market participants in liberal professions and network industries, reduce the administrative burden on corporations and limit the use of special voting rights.

Actions taken: The government passed a law on unfair practices in commerce in 2008. The 2007 change in the regulatory framework in gas and electricity sectors laid down non-discriminatory rules for competition and gave network access possibilities to all new market entrants.

Eliminate barriers to female labour force participation (2009)

Recommendations: Shorten the duration of parental leave entitlements in favour of childcare subsidies and reduce the tax wedge on second earners.

Actions taken: No action taken.

Other key priorities

Reform housing markets (2007, 2009)

Recommendations: Strengthen competition in construction, improve targeting of housing subsidies, ease the rights of existing tenants and speed up resolution of tenancy disputes.

Actions taken: No action taken.

Strengthen the judicial and law enforcement systems (2005, 2007)

Recommendations: Improve accountability in the justice system and make greater use of transparent and open procedures for public procurement.

Actions taken: The requirement to publish a public procurement contract notice was made more widely applicable in 2008.

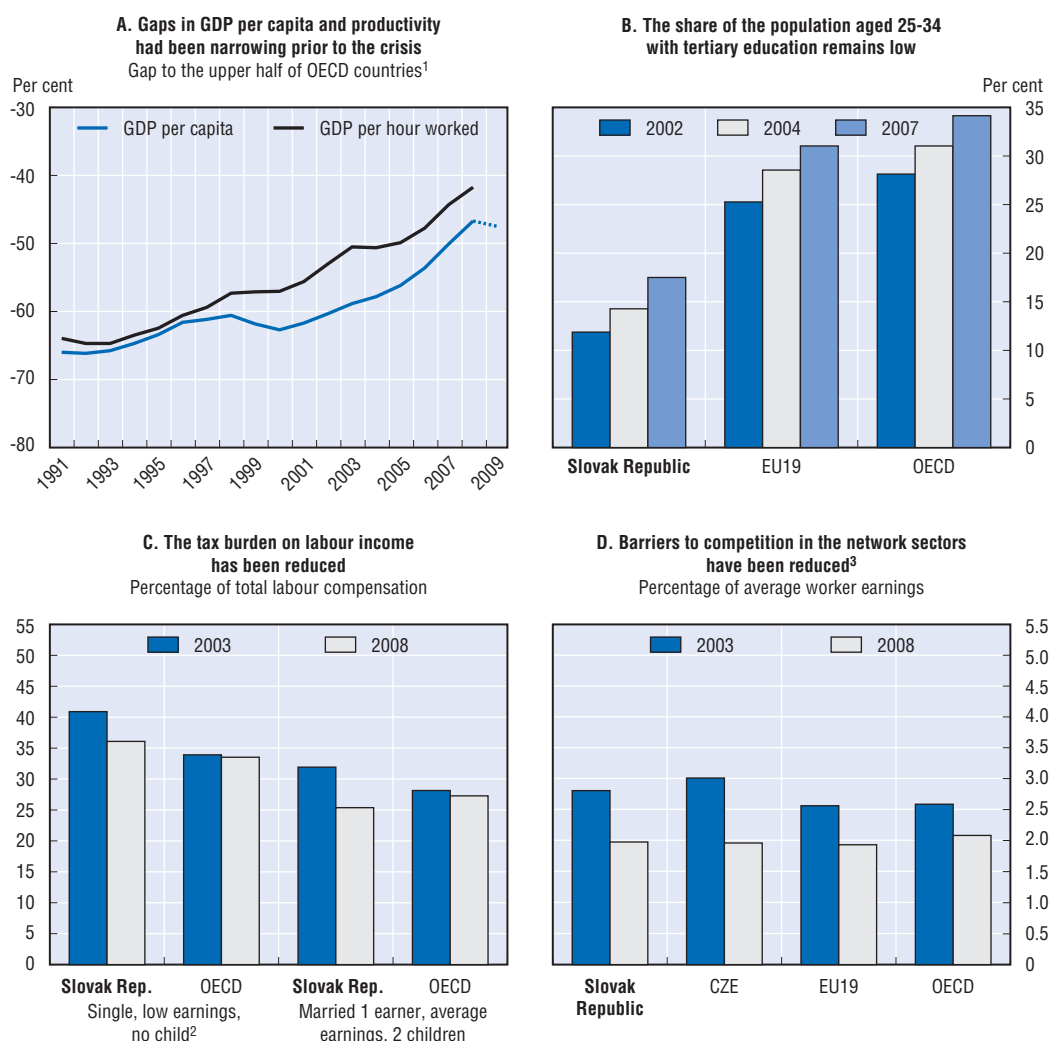
► Improve the activation of the long-term unemployed (2009)

Recommendations: Expand training measures, strengthen job search and job acceptance requirements, strengthen the capacity of the Public Employment Service (PES) and narrow the targeting of subsidised job creation to the long-term unemployed.

Actions taken: The Employment Services Act was enacted in 2008, extending the competency of the PES and tightening reporting requirements for job seekers in order to accelerate the turnover of the unemployed.

SLOVAK REPUBLIC

- The wide gap in GDP per capita relative to the upper half of OECD countries narrowed significantly before the recent crisis. This mainly reflected labour productivity convergence while labour input did not contribute.
- Progress has been made in some key priority areas. Notably, steps have been taken to enhance the effectiveness of the education system and to make product markets somewhat more flexible. In addition, labour tax wedges have been lowered for low-income earners. However, these remain core priority areas, as well as more broadly measures to raise labour participation of female and older workers. Little progress has been made to reform housing markets.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the OECD Economic Outlook, No. 86.
2. Low earnings refer to two-thirds of average earnings.
3. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD (2009), Education at a Glance; Chart C: OECD, Taxing Wages Database; Chart D: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

SPAIN

Priorities supported by indicators

Improve educational attainment in secondary education (2005, 2007, 2009)

Recommendations: Introduce standardised school testing in all regions, raise school autonomy, and limit conditions on moving up to higher grades only for core competencies.

Actions taken: Skill requirements have been raised for new school teachers (2009, legislated in 2006), as well as for early-childhood education (ongoing). Some regions have introduced centralised testing. Legislation, introduced in 2006, is being implemented to give public schools more autonomy.

Limit the extent of administrative extension of collective agreements (2005, 2007, 2009)

Recommendations: Allow firms to opt-out of the compulsory application of collectively bargained wages. Eliminate indexation of wages to past inflation.

Actions taken: No action taken.

► **Ease employment protection legislation for permanent workers (2005, 2007, 2009)**

Recommendations: Reduce the gap in protection between permanent and temporary workers by lowering severance payments for permanent contracts and curbing the allowed use of temporary contracts.

Actions taken: The successive use of temporary contracts was limited in 2006. The duration of fiscal support was extended for hires on permanent contracts with lower severance payments for targeted groups in the same year.

► **Strengthen competition in the retail distribution sector (2007, 2009)**

Recommendations: Eliminate the numerous barriers to the establishment of new hypermarkets and shopping centres put in place by regional governments.

Actions taken: New legislation is being prepared to lower entry restrictions for large surface retailers, but current proposals foresee retaining regional governments' powers to grant or refuse licenses.

Other key priorities

Remove distortions in the housing market (2005, 2009)

Recommendations: Shorten court procedures to resolve conflicts between landlords and tenants, and remove tax subsidies for owner-occupiers. Redirect assistance for low-income households away from social housing towards means-tested housing-related cash benefits.

Actions taken: The ceilings on tax subsidies were lowered slightly in 2006. Legislation is being considered to limit subsidies to low income households and equalise the tax treatment of owner occupied and rental housing. Fiscal support has been made available for rental contracts, and new courts and accelerated procedures have been introduced (with the most recent steps taken end-2009).

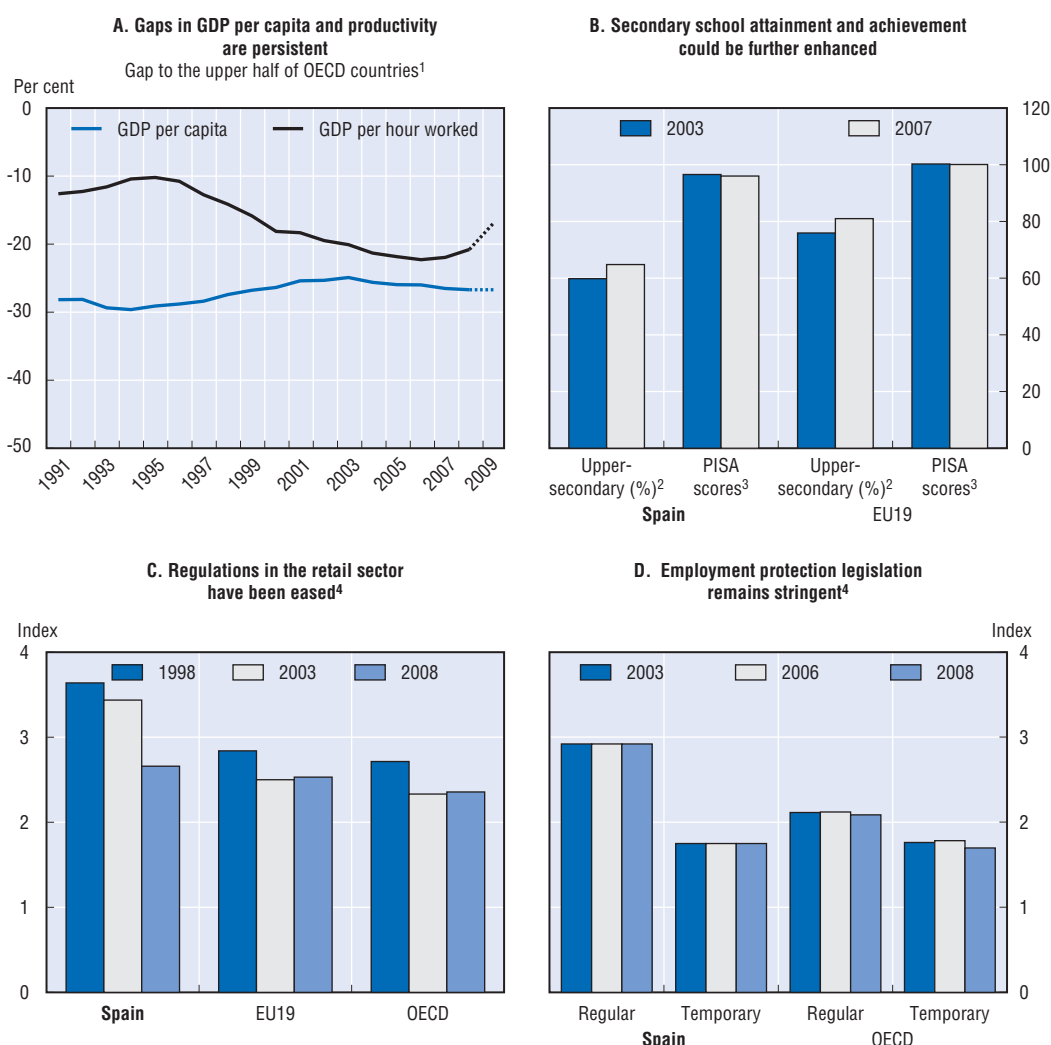
Reform the pension system (2005, 2007)

Recommendations: Pensions should become actuarially more neutral.

Actions taken: Partial retirement was restricted and the effective contribution period to acquire pension rights was increased modestly in 2007. Stronger incentives to extend work beyond the current age at which full pension rights can be acquired were introduced at the same time.

SPAIN

- Convergence in GDP per capita relative to the upper half of OECD countries has slowed though the picture is more favourable in current prices. Recently the productivity gap has begun to narrow.
- While significant progress has been made in most key priority areas, they remain core priorities. School dropout rates remain high and accountability is still weak. Housing market distortions and use of precarious employment contracts remain widespread. No progress has been made in reforming wage bargaining.
- In other areas, much progress has been made in making regulation in product markets more conducive to competition, including through a new competition law and reform in network industries.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Percentage of population aged 25-34 that has attained at least upper-secondary education.
3. Average mean score of student performance in mathematics, science and reading in 2006. Index OECD = 100.
4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Chart B: OECD (2009), *Education at a Glance* and OECD, PISA 2006 Database; Chart D: Venn, D. (2009), "Updating the OECD Employment Protection Indicators", OECD Social, Employment and Migration Working Papers, No. 89 and OECD analysis based on OECD Employment Outlook methodology.

StatLink  <http://dx.doi.org/10.1787/786611566183>

SWEDEN

Priorities supported by indicators

Reduce marginal taxes on labour income (2005, 2007, 2009)

Recommendations: Cut income taxes by raising the threshold for the state income tax or reduce its rate.

Actions taken: In 2009 the lower threshold for the state income tax was raised, employer social security contributions were reduced and the in-work tax credit was expanded through 2011.

Reform sickness and disability benefit schemes (2005, 2007, 2009)

Recommendations: Put a time limit on eligibility for sickness benefits without re-assessment and ensure that local insurance offices fully implement tightened rules.

Actions taken: Tighter administration, time limits on eligibility and measures for rehabilitation have lowered sickness absence rates. From mid-2008, receipt of sickness benefits can continue after six months only if the person is unable to do any work, and after one year the gross replacement rate falls from 80% to 75%.

► Reform employment protection legislation (2007, 2009)

Recommendations: Encourage regular employment by widening the definition of fair dismissal and lengthening the trial period of regular contracts.

Actions taken: No significant action has been taken on permanent contracts, but trial periods and the duration of temporary contracts have been extended. The social partners began to re-negotiate employment conditions, but negotiations stalled in March 2009.

Reduce the scope of public ownership (2005)

Recommendations: Ensure the application of competition law to public entities, clarify the role and competitiveness of local government entities, and strengthen the supervision of public procurement.

Actions taken: The scope of public ownership has been significantly reduced through privatisation at the central government level, such as in the pharmacy sector. The National Board for Public Procurement was made a part of the Competition Authority in 2007, and a new Public Procurement Act came into force in 2008.

Other key priorities

Reduce distortions in the housing market (2005, 2007, 2009)

Recommendations: Phase out rent regulation and ease planning restrictions. Reverse the housing taxation cut implemented in 2007.

Actions taken: Since 2006, rents on newly constructed dwellings have been exempt from rent regulations. In 2008, plans were announced to allow private sector rents to better reflect local supply and demand conditions. Outright ownership of owner-occupied apartments is being introduced for new apartment buildings. No action taken to reverse the 2007 tax cut on owner-occupiers.

Improve the efficiency of the education system (2007, 2009)

Recommendations: Improve learning outcomes in secondary school. Reduce the average age of entry into tertiary education and shorten completion times.

Actions taken: The government proposed a teacher accreditation system in 2008 and measures to raise the quality of vocational education in 2009. Tertiary admission will be reformed in 2010 and tuition fees are being considered for non-EU students. While the removal of the option to gain easier access to tertiary education through work experience should reduce the age of entry, the increase in grants, and broader-based access to them, may slow completion.

Boost working hours (2005)

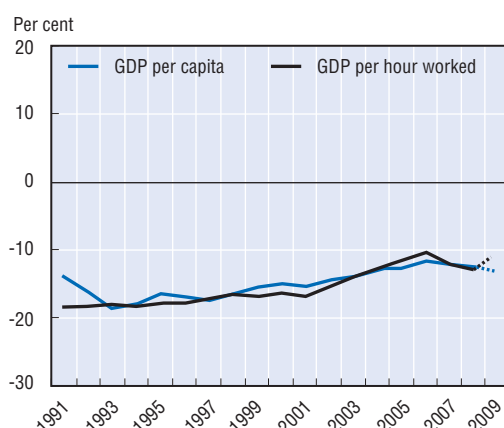
Recommendations: Reconsider plans to introduce a legal right to a sabbatical year and pilot schemes for reduced working hours.

Actions taken: The sabbatical leave scheme was terminated in 2006. Recent tax cuts and changes to sickness insurance arrangements are expected to boost working hours.

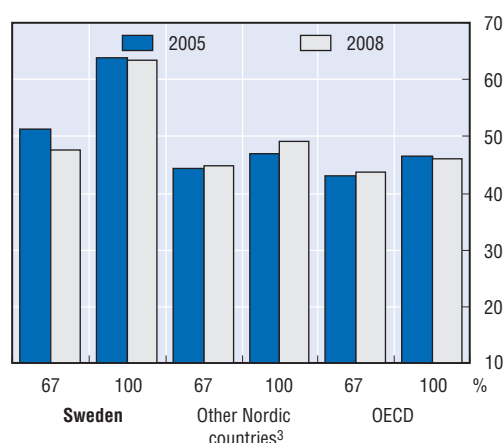
SWEDEN

- With gains in labour utilisation and productivity, the gap with the leading countries has narrowed, although the associated gain in real living standards has been somewhat muted by declining terms of trade.
- Significant progress has been made across most key priority areas. However, tax cuts have not focused on the top marginal rate, regular employment rules remain rigid and no action has been taken to reverse housing taxation cuts.
- In other areas, labour market reforms to reduce welfare dependency have been a key focus, with tax policy changes playing an important role.

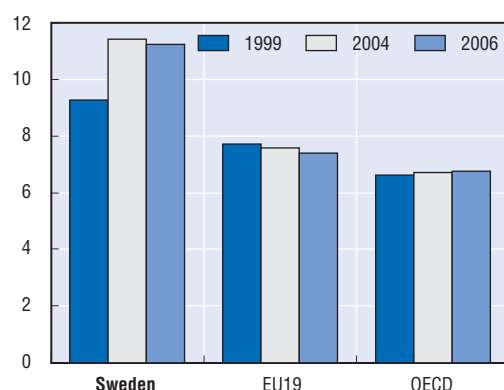
A. Gaps in GDP per capita and productivity linger
Gap to the upper half of OECD countries¹



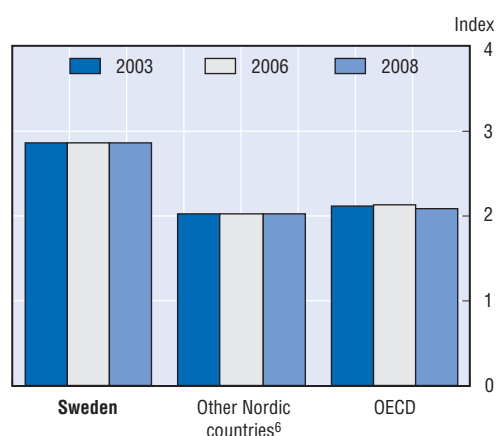
B. Marginal tax wedges remain high
Percentage of total labour compensation²



C. The share of the working-age population receiving disability benefits is very high⁴
Percentage of the population aged 20-65



D. Employment protection legislation for regular contracts is restrictive⁵



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Evaluated at 67% and 100% of average earnings for a single person with no child.

3. Average of Denmark, Finland, Iceland and Norway.

4. Disability benefits include benefits received from schemes to which beneficiaries have paid contributions (contributory), programmes financed by general taxation (non-contributory) and work injury schemes.

5. Index scale of 0-6 from least to most restrictive.

6. Average of Denmark, Finland and Norway. Iceland is excluded due to data availability.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Taxing Wages Database; Chart C: OECD (2003), Transforming Disability into Ability and OECD estimates; Chart D: OECD, Employment Outlook Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

SWITZERLAND

Priorities supported by indicators

► Remove barriers to competition in network industries (2005, 2007, 2009)

Recommendations: Remove legal restrictions on competitors' access to the incumbent's local loop network in telecommunications. Improve access of competitors to network infrastructure characterised by natural monopoly conditions.

Actions taken: Access to the local loop in fixed line telephony was opened subject to some restrictions in 2007. An independent sector regulator, legislation requiring non discriminatory access to the transmission grid and some vertical separation were introduced in the electricity industry in 2008. The scope of the legal monopoly for mail delivery has been reduced in several steps and the postal services regulator strengthened.

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Lower trade barriers and subsidies to producers, and decouple subsidies from production. Reform land law.

Actions taken: The government eliminated most export subsidies in 2007. Producer support will remain constant in nominal terms until 2011 and is being shifted to some extent to income support.

Facilitate full-time labour force participation for women (2007, 2009)

Recommendations: Improve provision of pre-school education and childcare at affordable prices.

Actions taken: Some regional governments have decided to reduce the compulsory education age to four. Differences in taxation between main and second income earners were reduced in 2007.

Further liberalise professional services (2005)

Recommendations: Remove limitations to the establishment of businesses stemming from differences in cantonal regulation.

Actions taken: The origin principle, which applies to cross-cantonal service flows and for businesses expanding across cantons, has been enforced by the competition regulator since 2006.

Other key priorities

Increase the efficiency of the health care system (2005, 2007, 2009)

Recommendations: Make insurers responsible for all hospital funding. Allow insurers more freedom to contract with individual providers, and widen the extent to which insurers are compensated for differences in risk characteristics among their insurees.

Actions taken: Reimbursements for pharmaceuticals were more closely benchmarked on lower prices of generic products in 2007. A parliamentary sub-committee recommended giving patients more freedom to choose their hospital, but the proposal has not been voted on.

Improve access to tertiary education (2009)

Recommendations: Develop quality assessments of universities, and introduce loans with income-contingent repayments while allowing universities to raise further resources through higher fees.

Actions taken: Parliament is considering legislation to introduce a new independent accreditation agency whose decisions will be linked to a review of universities' internal quality assessments. Regional governments are considering widening student loans somewhat.

Remove non-tariff trade barriers (2007)

Recommendations: Products conforming to EU standards should be accepted.

Actions taken: Implementation of the *Cassis de Dijon* principle, under which goods lawfully produced in a member EU state can be sold in any other EU state, was approved in 2009, subject to some exceptions, but barriers to food imports were tightened.

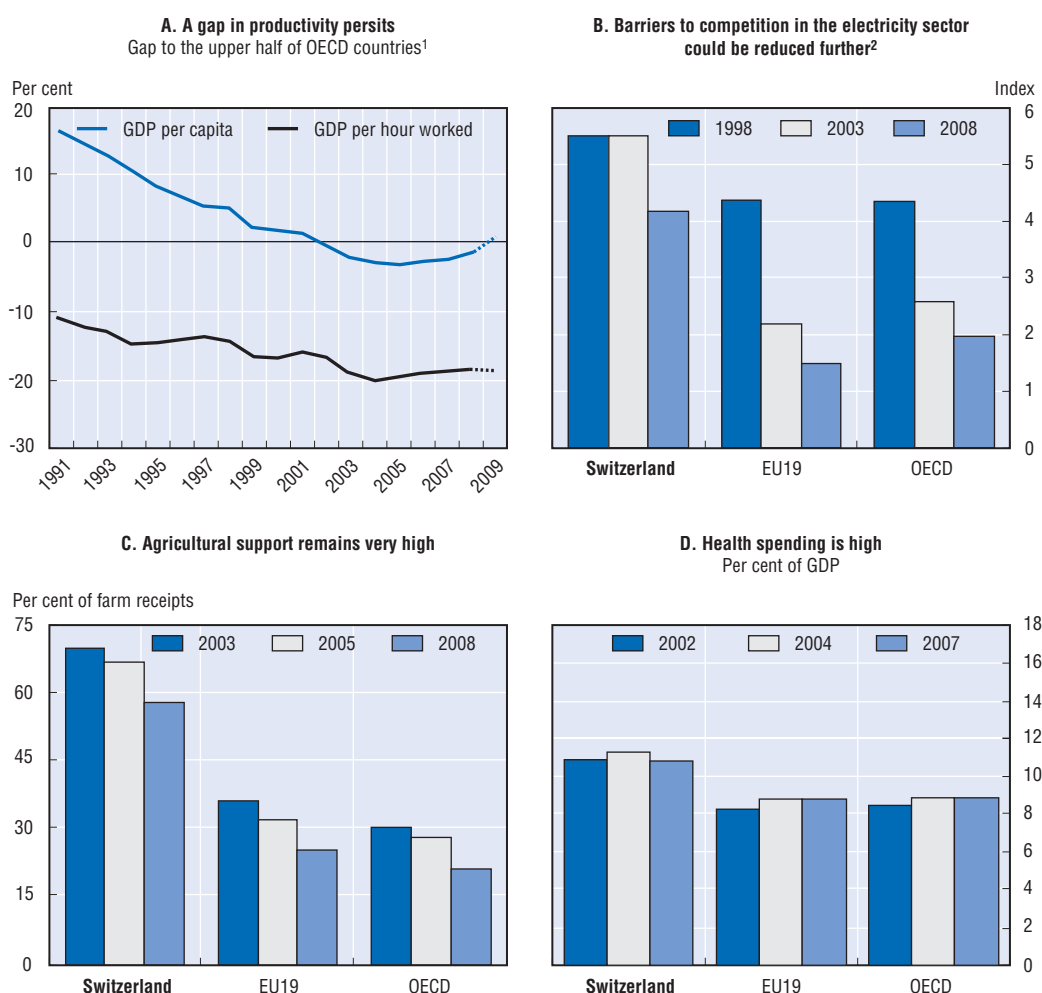
Curb the rising number of disability pensions (2005)

Recommendations: Reduce flows into disability insurance and increase outflows.

Actions taken: The early detection of disability risks has been continuously enhanced and measures easing re-entry into the labour market have been developed.

SWITZERLAND

- The fall in GDP per capita relative to best performing countries has been halted, though the wide labour productivity gap remains.
- In key priority areas, non-tariff barriers to trade have been reduced to a considerable extent. Progress in lowering protection of domestic agricultural production and the cost of health care provision has been slow. Framework conditions for competition in network industries have improved but the gap relative to best practice remains large. Supply of childcare facilities remains low.
- In other areas, reform of general competition law has moved Switzerland considerably closer to best practice, and administrative costs for businesses have been much reduced.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.

2. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, Product Market Regulation Database; Chart C: OECD, Producer and Consumer Support Estimates Database; Chart D: OECD, Health Database.

StatLink  <http://dx.doi.org/10.1787/786611566183>

TURKEY

Priorities supported by indicators

Improve educational achievement (2005, 2007, 2009)

Recommendations: Fully enforce minimum schooling rules, revise the education curricula according to labour market needs, increase spending on education financed by cuts in lower priority areas, fund schools on a per-pupil basis and provide them with more managerial responsibility.

Actions taken: A national campaign was launched to increase the school enrolment of girls in 2005. Education curricula in primary and secondary schools were thoroughly revised in 2006.

Reduce the minimum cost of labour (2005, 2007, 2009)

Recommendations: Reduce the minimum wage relative to the average wage. Cut the labour tax wedge, especially on low earnings, financed by rationalisation of spending.

Actions taken: A personal income tax allowance was introduced for low income workers in 2007. Social security contributions were also reduced for the early years of employment of young and female workers in 2008, and to a more limited extent for all workers. The Treasury is temporarily paying the social security contributions of newly hired workers in 2009 (for a period of 6-12 months).

► Reform employment protection legislation (2007, 2009)

Recommendations: Ease employment protection in the formal sector, both by reforming severance payments and by facilitating temporary work.

Actions taken: Manpower agencies were authorised to offer temporary work services in 2009.

Reduce the scope of public ownership (2005)

Recommendations: Facilitate the privatisation of national energy, telecommunications, transportation and banking enterprises by removing barriers to foreign ownership.

Actions taken: Foreign ownership caps were raised and/or waived and privatisation tenders were opened to foreign investors in 2006, leading to the acquisition of controlling shares by foreign investors in telecommunications, oil refining and petro-chemical firms.

Reduce administrative burdens on start-ups (2005)

Recommendations: Simplify regulatory requirements for small enterprises.

Actions taken: Regulations for registration and market entry of small enterprises were streamlined in 2006.

Other key priorities

► Simplify product market regulations (2007, 2009)

Recommendations: Streamline product market regulations, in particular the sectoral licensing rules. Encourage greater competition in network industries.

Actions taken: The Competition Authority initiated an investigation of competition conditions in the energy sector in 2008.

► Reduce early retirement incentives for workers in the formal sector (2007, 2009)

Recommendations: Reduce incentives for early retirement, and introduce a health insurance contribution for young retirees. Remove retiring workers' entitlement to severance payments.

Actions taken: No action taken.

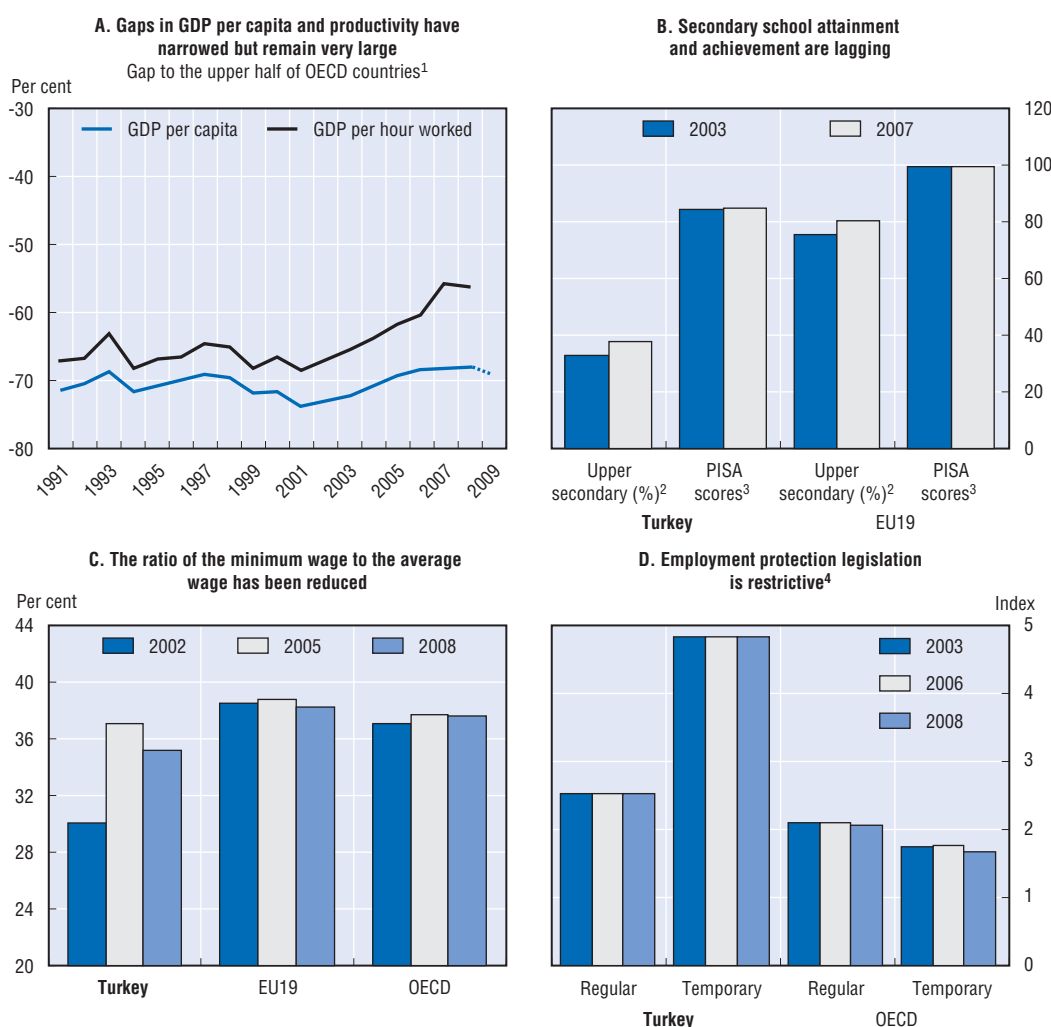
Implement results-oriented budgeting in core public services (2005)

Recommendations: Implement results-oriented budgeting in justice, education and health care.

Actions taken: A new law requiring the use of result-oriented budgeting was implemented in 2006, however with a limited practical effect so far.

TURKEY

- The income gap vis-à-vis the upper half of OECD countries started to narrow in the 2000s but remains very large, reflecting both low labour productivity and utilisation levels. Past catch-up reflected productivity gains, while labour utilisation deteriorated.
- In key priority areas, enterprise creation has been simplified by reducing administrative burdens. Large scale privatisations have reduced the scope of public ownership, and foreign direct investment has been stimulated. However, reforms to reduce labour costs and increase labour market flexibility have been very limited.
- Growth-enhancing actions in other areas included monetary and fiscal stabilisation after the 2001 crisis, the thorough restructuring and recapitalisation of the banking sector, and the opening of accession negotiations with the EU.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gap in GDP per capita for 2009 is an OECD estimate, based on the *OECD Economic Outlook*, No. 86.
2. Percentage of population aged 25-34 that has attained at least upper-secondary education.
3. Average mean score of student performance in mathematics, science and reading in 2006. Index OECD = 100.
4. Index scale of 0-6 from least to most restrictive.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Charts B: OECD (2009), *Education at a Glance* and OECD, *PISA 2006 Database*; Chart C: OECD, *Taxing Wages and Minimum Earnings Databases*; Chart D: OECD, *Employment Outlook Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

UNITED KINGDOM

Priorities supported by indicators

► **Further reform disability benefit schemes (2005, 2007, 2009)**

Recommendations: Extend the Pathway to Work scheme to all new and existing claimants. Limit inflow into the incapacity benefit scheme by early monitoring of the health status of applicants.

Actions taken: The Government has incrementally extended the Pathway to Work scheme, which now applies to all new and most existing claimants under 50. A new eligibility test is being introduced.

Improve the education achievement of young people (2005, 2007, 2009)

Recommendations: Put more emphasis on core literacy and numeracy skills. Ensure adequate support for weak students and schools. Expand vocational programmes for the young and adults.

Actions taken: The Government has introduced a number of schemes to improve standards of literacy and numeracy in primary school-aged children. Financial incentives for new teachers taking up posts in disadvantaged schools were introduced in 2009. By 2013 all suitably qualified young people will have a right to an apprenticeship.

Improve public infrastructure, especially for transport (2005, 2007, 2009)

Recommendations: Increase spending on public infrastructure in order to increase productivity. Introduce a national road pricing scheme.

Actions taken: The Government has significantly increased spending on public infrastructure since 2005. However, public investment is still relatively low compared with other OECD countries and is set to fall sharply after 2010 as part of current government plans to consolidate public finances. Road pricing trials are underway.

Other key priorities

Improve public sector spending efficiency (2005, 2007, 2009)

Recommendations: Improve the efficiency of health and other publicly-funded services so that higher expenditure results in higher standards of service delivery.

Actions taken: The government has introduced a number of reforms of the National Health Service in order to increase efficiency, such as Practice Based Commissioning (2005) and the World Class Commissioning initiative (2007).

Give greater weight to economic considerations in planning decisions (2005, 2009).

Recommendations: Release more land for commercial and housing development by reconsidering the boundaries of the “green belts” in fast-growing areas.

Actions taken: The Government and planning authorities are reviewing “green belt” boundaries.

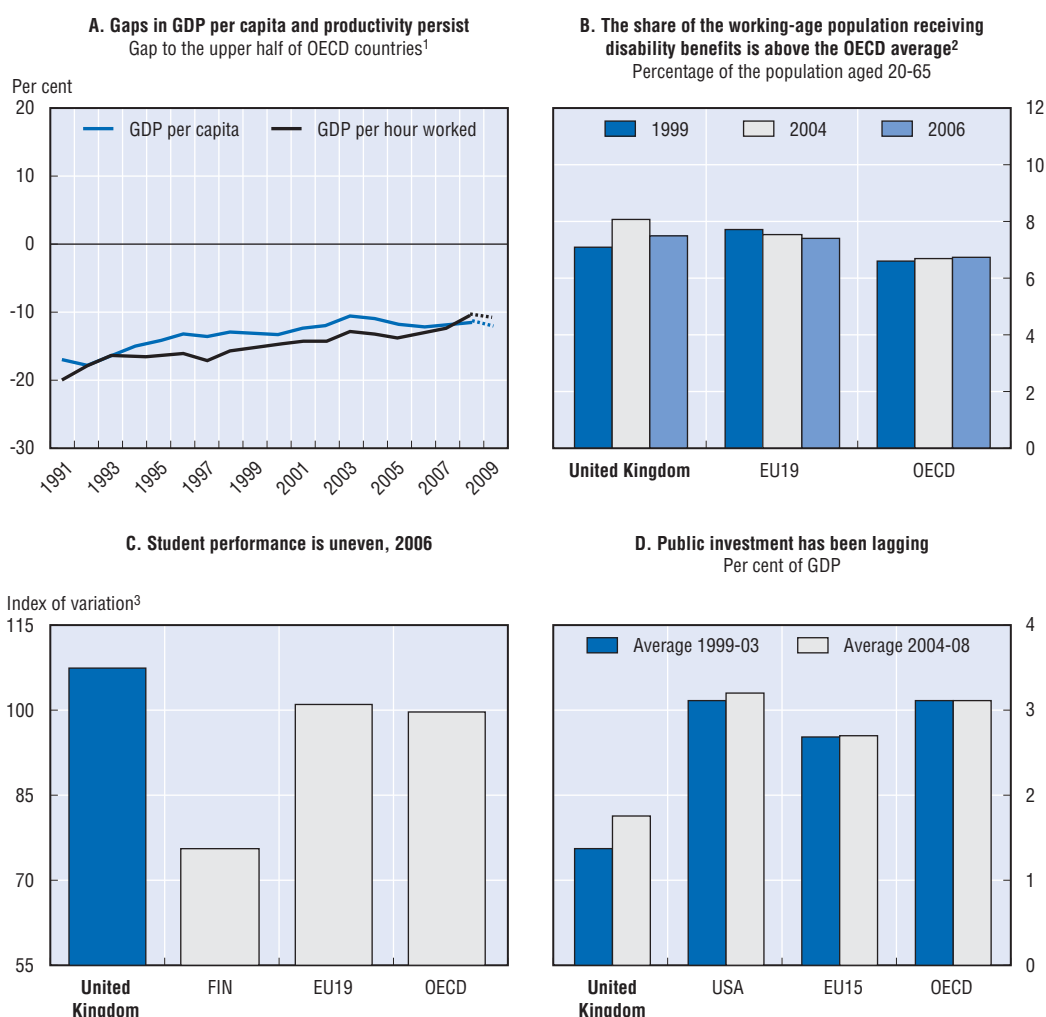
Improve work incentives for low-paid lone parents and second income earners (2007)

Recommendations: Lower marginal effective tax rates for lone parents in order to reduce disincentives to work longer hours or up-skill. Reduce childcare costs to encourage labour force participation of low-skilled second earners.

Actions taken: The Government increased the Working Tax Credit income threshold in 2008, although this affects participation rather than working hours. The childcare element of the Credit has increased incentives for second-earner labour force participation. Several pilot schemes have been introduced, including the Upfront Child Fund which covers advance childcare costs for lone parents.

UNITED KINGDOM

- The productivity gap relative to the upper half of OECD countries had narrowed somewhat prior to the crisis but remains significant. Labour utilisation is lower than in the best performing OECD countries.
- In key priority areas, infrastructure investment has been increased substantially in the last few years but is projected to fall. Although some reforms have been implemented, educational achievements and public spending efficiency progress have been limited so far and these areas remain core priorities. The disability benefit schemes have been reformed and childcare costs reduced, but further actions are warranted.
- Some reforms in other areas have been carried out, such as a reduction in the corporate tax rate and a simplification of the tax code.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the *OECD Economic Outlook*, No. 86.
2. Disability benefits include benefits received from schemes to which beneficiaries have paid contributions (contributory), programmes financed by general taxation (non-contributory) and work injury schemes.
3. Standard deviation of average student performance in mathematics, science and reading.

Source: Chart A: OECD, *National Accounts and Economic Outlook 86 Databases*; Charts B: OECD (2003), *Transforming Disability into Ability* and OECD estimates; Chart C: PISA 2006 Database; Chart D: *Economic Outlook 86 Database*.

StatLink  <http://dx.doi.org/10.1787/786611566183>

UNITED STATES

Priorities supported by indicators

Improve primary and secondary education (2005, 2007, 2009)

Recommendations: Complete implementation of “No Child Left Behind” and extend its framework to upper-secondary education. Pressures to lower performance standards should be resisted and students at under-performing schools should be free to choose alternative schools.

Actions taken: “No Child Left Behind” (enacted in 2002) was re-authorised in 2007. The Administration is committed to helping states strengthen their school assessment and accountability systems so that they provide information about the progress of individual students, and to improving the quality of early childhood education. The American Recovery and Reinvestment Act 2009 provided funding to support these objectives.

Restrain health care costs (2005, 2007, 2009)

Recommendations: Require community-rated and guaranteed issue policies and make health insurance compulsory. Introduce means-tested subsidies to help low-income persons afford health insurance. Cap or terminate the open-ended tax exclusion for employer-provided health insurance. Reduce cost per enrollee under Medicare.

Actions taken: The 2003 Medicare legislation increased competition and efficiency in health care delivery, but also included an expensive expansion of prescription drug benefits. The State Children’s Health Insurance Program, which provides free health insurance cover for children in low-income families, was renewed and expanded in February 2009. Legislation before Congress establishes state-based exchanges for individual health insurance policies, requires them to be issued on a community-rated and guaranteed-issue basis, provides means-tested subsidies for their purchase, makes health insurance coverage compulsory, and penalises employers that do not provide health insurance benefits.

Reduce producer support to agriculture (2005, 2007, 2009)

Recommendations: Reduce support for agricultural producers, notably tariffs on imported ethanol, and decouple support from specific inputs or outputs.

Actions taken: The Food, Conservation and Energy Act of 2008 was a backward action, as it maintained the existing agricultural subsidies through 2013 and provided new incentives for the local production of cellulosic biofuels. However, the Administration intends to cut direct payments to large farms and reduce other subsidies.

Other key priorities

Reform the tax system (2005, 2007, 2009)

Recommendations: Broaden the tax base and shift the weight of taxation from personal income towards consumption-based taxes, *inter alia* by raising current low taxes on carbon-based energy use.

Actions taken: No action has been taken but the Administration plans to limit itemised deductions for high-income earners so as to reduce the budget deficit. Legislation before Congress to cap greenhouse gas emissions would price carbon emissions more widely and yield revenue from the sale of emission permits if enacted.

► Improve and streamline financial regulation (2009)

Recommendations: Improve and streamline the regulatory framework to make it more unified and comprehensive. Systemically important financial institutions should be subject to strict and conservative prudential standards. Housing financing should be gradually turned over to a well-regulated private sector.

Actions taken: No action has been taken but the Administration has proposed an overhaul of financial supervision and regulation.

Reform disability benefits (2007)

Recommendations: Tighten eligibility criteria for the disability insurance system.

Actions taken: No action taken.

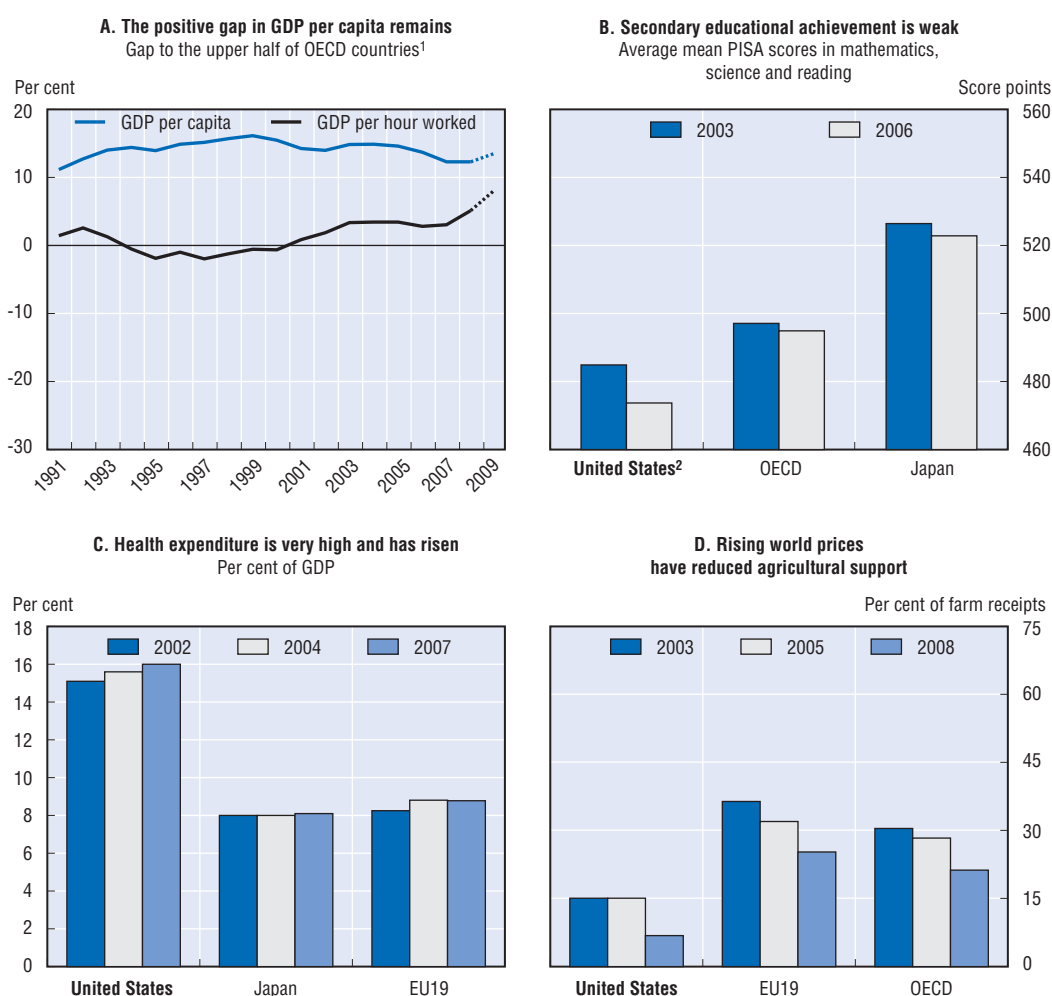
Continue corporate governance and accounting reforms (2005)

Recommendations: Promote transparency and accountability in corporate governance and accounting.

Actions taken: No action taken but the Administration intends to strengthen investor protection, especially in the financial sector.

UNITED STATES

- GDP per capita has declined somewhat relative to the upper half of OECD countries owing to declining labour utilisation, but remains high. Labour productivity has grown at a rapid pace relative to most other OECD countries and is also high. Income inequality is high and rising.
- In key priority areas, some minor efforts have been undertaken to contain health care costs and reduce agriculture support, leaving ample scope for further reforms. This also applies in education. The health care reform before Congress and the Administration's financial regulation reform plans should be swiftly implemented.



1. Percentage gap with respect to the simple average of the upper half of OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs). The gaps for 2009 are OECD estimates, based on the OECD Economic Outlook, No. 86.
2. Average in mathematics and science only in 2006.

Source: Chart A: OECD, National Accounts and Economic Outlook 86 Databases; Chart B: OECD, PISA 2003 and 2006 Databases; Chart C: OECD, Health Database; Chart D: OECD, Producer and Consumer Support Estimates Database.

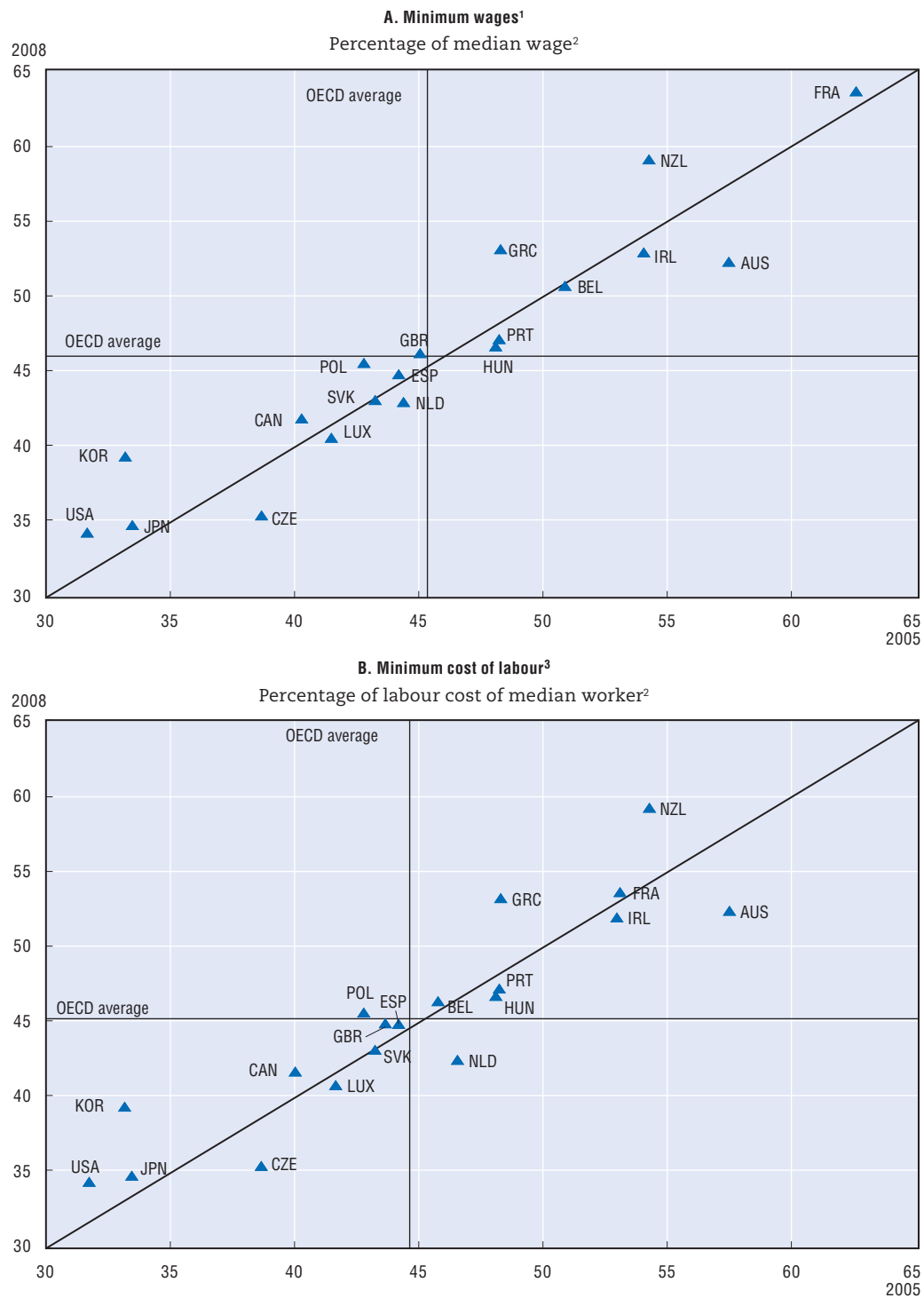
StatLink  <http://dx.doi.org/10.1787/786611566183>

PART I

Chapter 4

Structural Policy Indicators

Figure 4.1. Cost of labour

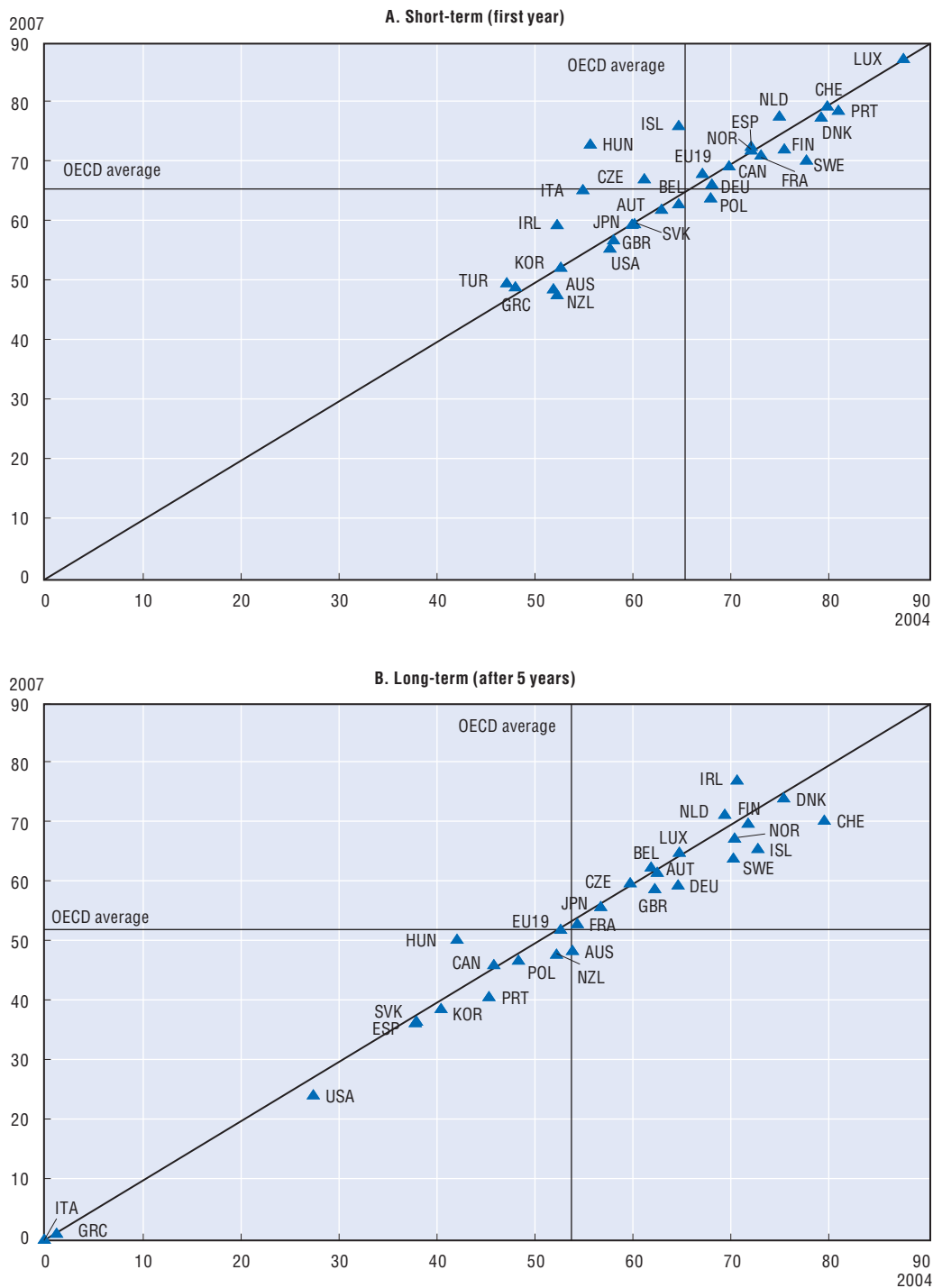


1. Missing countries do not have a statutory minimum wage except for Mexico and Turkey for which 2008 data are not available.
2. Exactly half of all workers have wages either below or above the median wage.
3. The cost of labour is the sum of the wage level and the corresponding social security contributions paid by employers.

Source: Chart A: OECD, Labour Force Statistics Database; Chart B: OECD (2009), OECD Employment Outlook and OECD, Taxing Wages Database.

Figure 4.2. **Net income replacement rates for unemployment**¹

Percentage of earnings

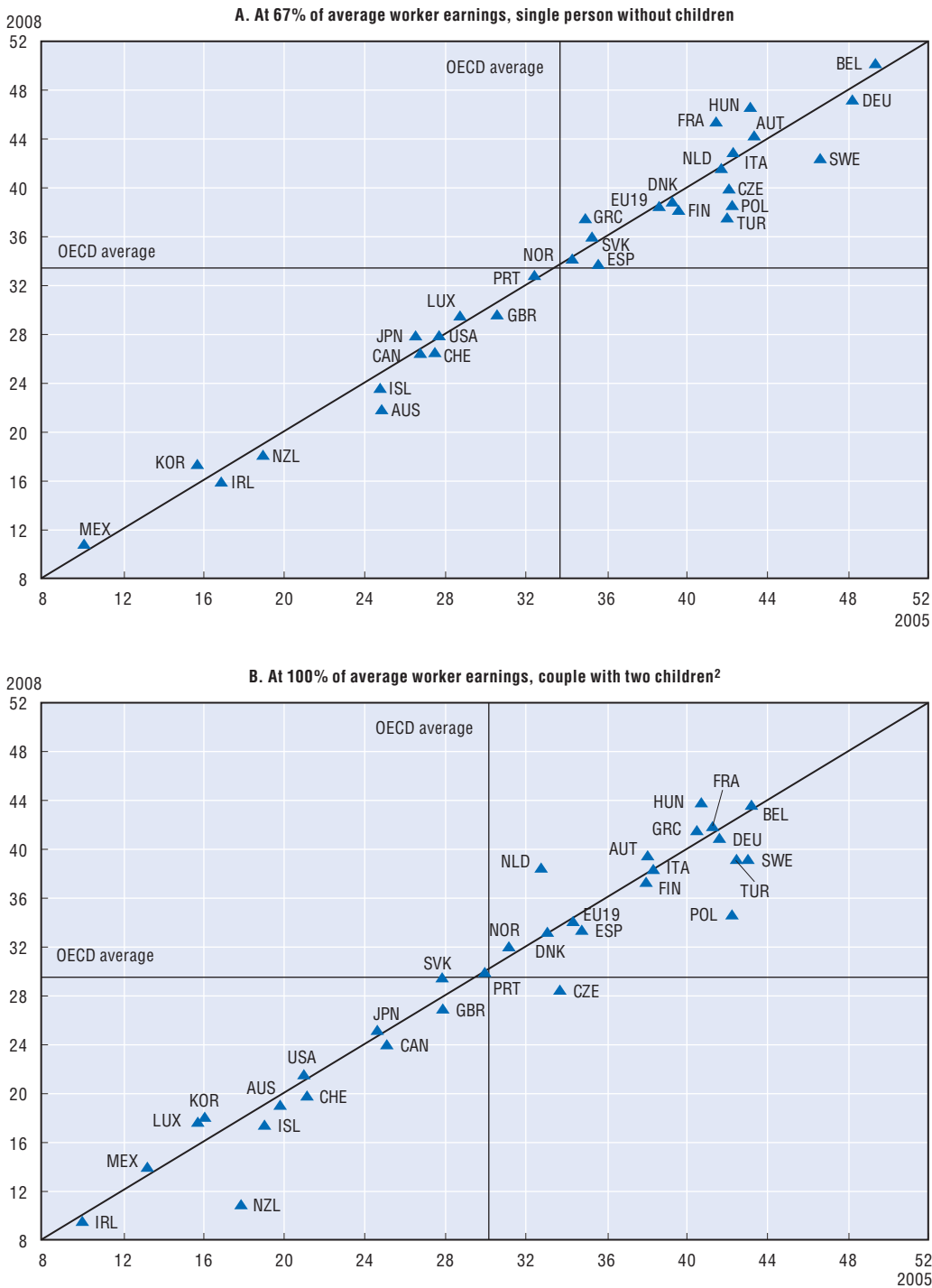


1. Average of replacement rates for unemployed persons who earned 67% and 100% of average worker earnings at the time of losing job.

Source: OECD, Benefits and Wages Database.

StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.3. **Average tax wedge on labour**¹
Percentage of total labour compensation

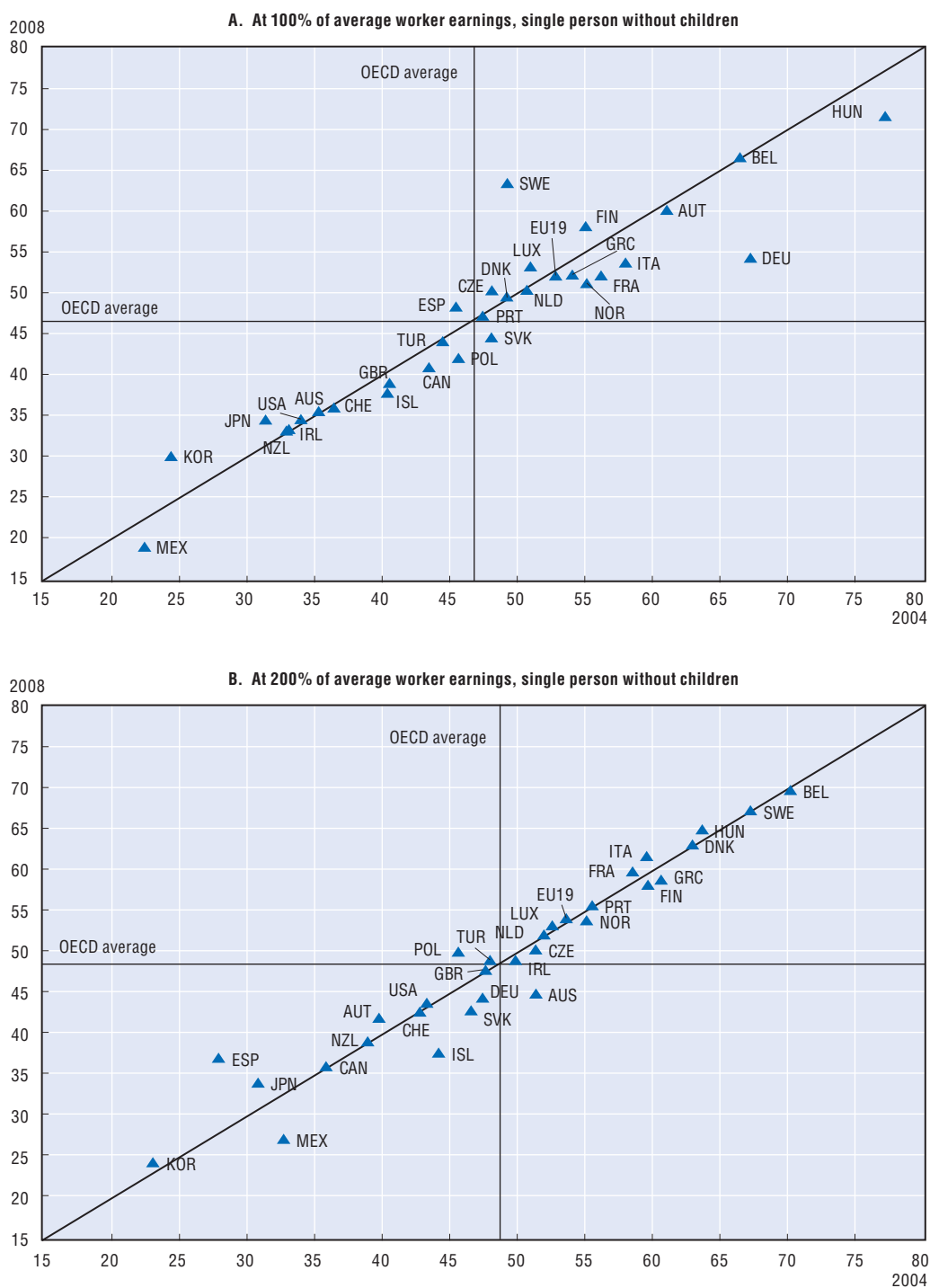


1. Measured as the difference between total labour compensation paid by the employer and the net take-home pay of employees, as a ratio of total labour compensation. It therefore includes both employer and employee social security contributions.

2. Average of three situations regarding the wage of the second earner.

Source: OECD, Taxing Wages Database.

Figure 4.4. **Marginal tax wedge on labour**¹
Percentage of total labour compensation

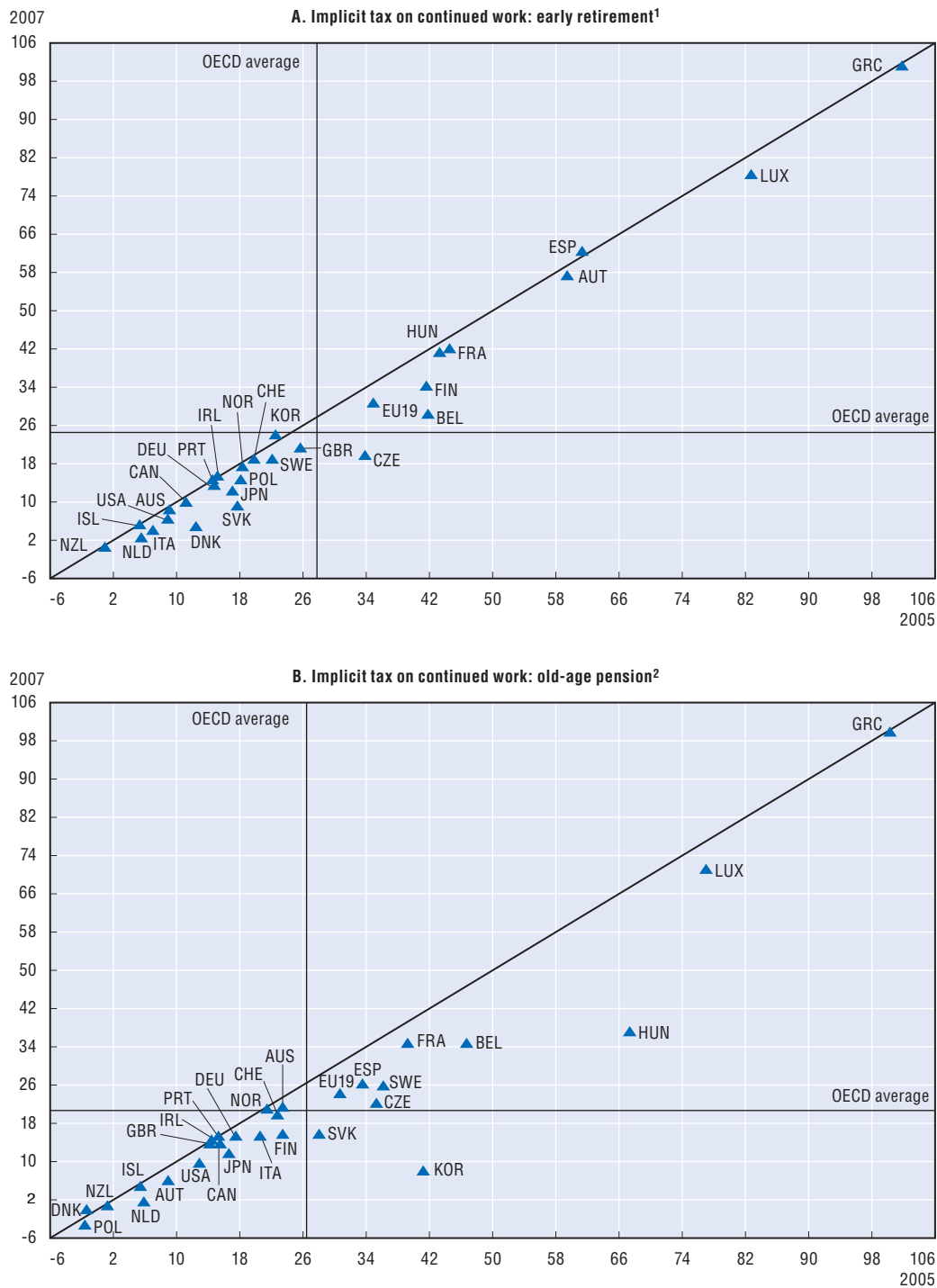


1. Measured as the difference between the change in total labour compensation paid by employers and the change in the net take-home pay of employees, as a result of an extra unit of national currency of labour income. The difference is expressed as a percentage of the change in total labour compensation.

Source: OECD, Taxing Wages Database.

StatLink  <http://dx.doi.org/10.1787/786626575743>

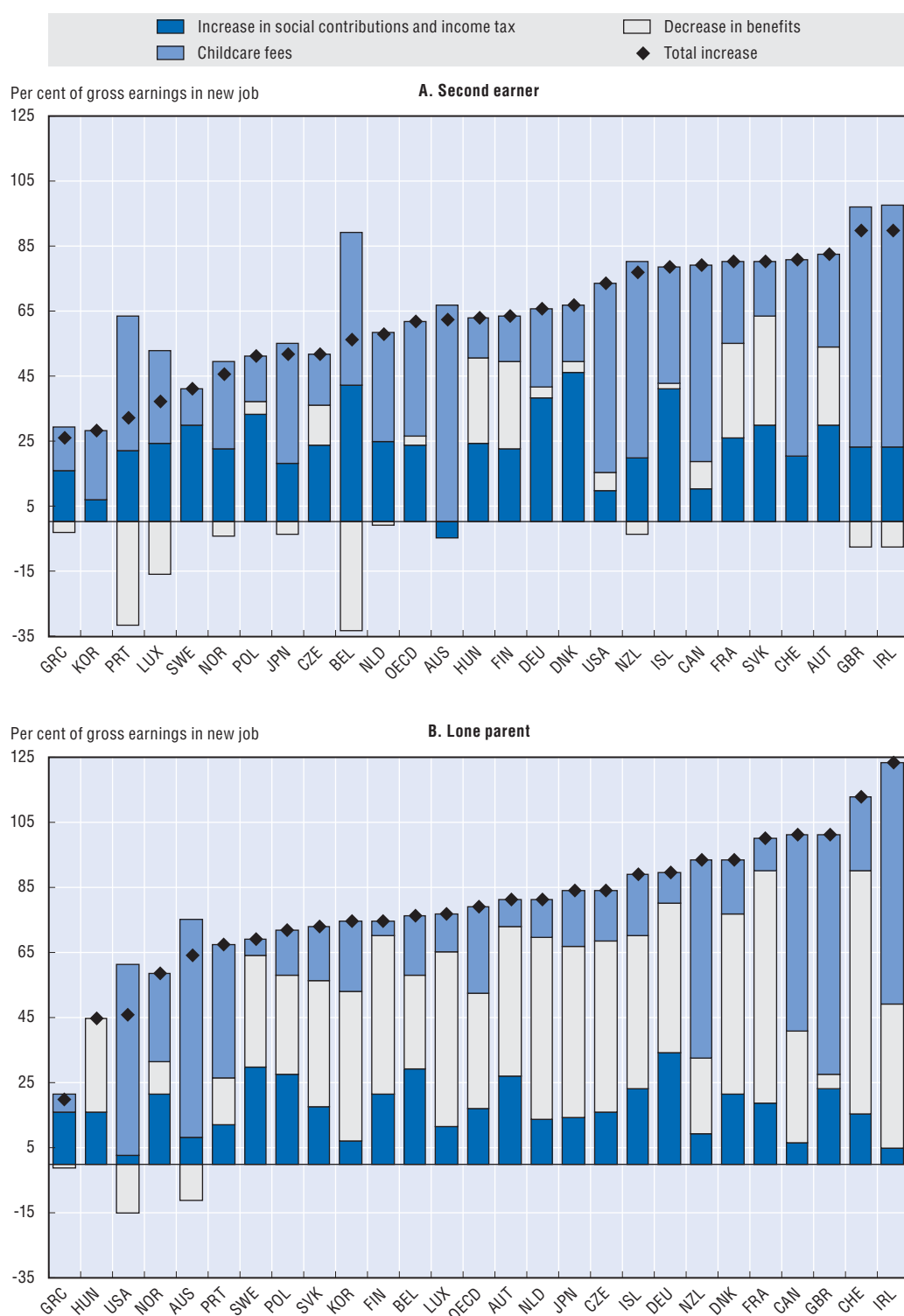
Figure 4.5. **Labour taxation**
Percentage of average worker earnings



1. Implicit tax on continued work in early retirement route, average for 55 and 60-year-old workers.
2. Implicit tax on continued work in regular old-age pension systems, for 60-year-olds. The 2005 estimates for Czech Republic, Finland, France, Japan and Slovak Republic have been revised.

Source: Duval, R. (2003), "The Retirement Effects of Old-Age Pension and Early Retirement Schemes in OECD Countries", OECD Economics Department Working Papers, No. 370 and OECD calculations.

StatLink  <http://dx.doi.org/10.1787/786626575743>

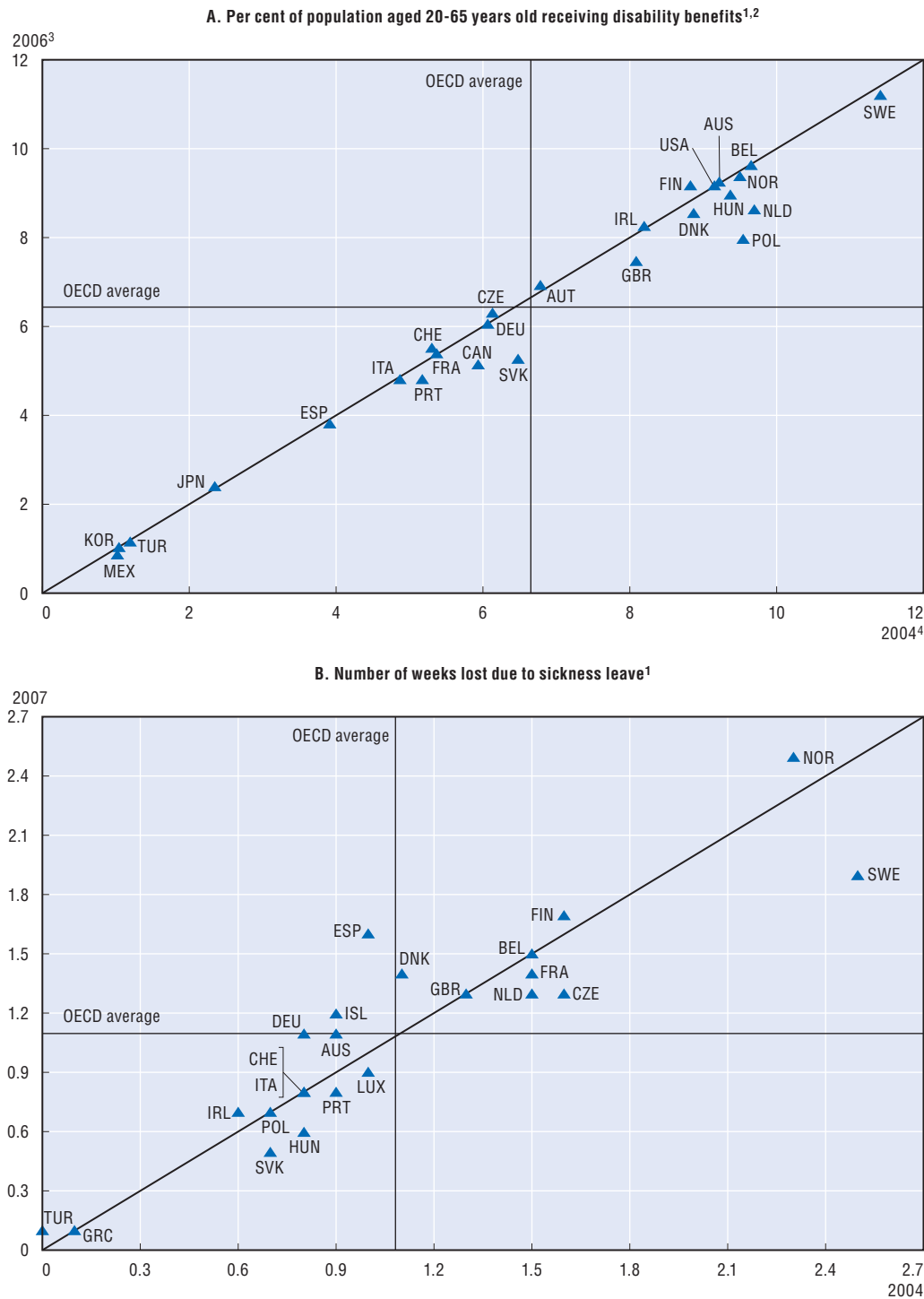
Figure 4.6. **Implicit tax on returning to work¹**

1. Taking into account childcare fees and changes of taxes and benefits in case of a transition to a job paying two-thirds of average worker earnings.

Source: OECD (2004), *Benefits and Wages: OECD Indicators*.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.7. **Income support for disability and sickness**



1. OECD average only for the countries shown on the graph.
2. Disability benefits include benefits received from schemes to which beneficiaries have paid contributions (contributory), programmes financed by general taxation (non-contributory) and work injury schemes.
3. Data for France, Germany and Korea are for 2004.
4. Data for Canada refer to 1999.

Source: Chart A: OECD (2003), *Transforming Disability into Ability and OECD estimates*; Chart B: OECD (2008), *OECD Employment Outlook*.

Figure 4.8. Employment Protection Legislation (EPL)

Index scale of 0-6 from least to most restrictive

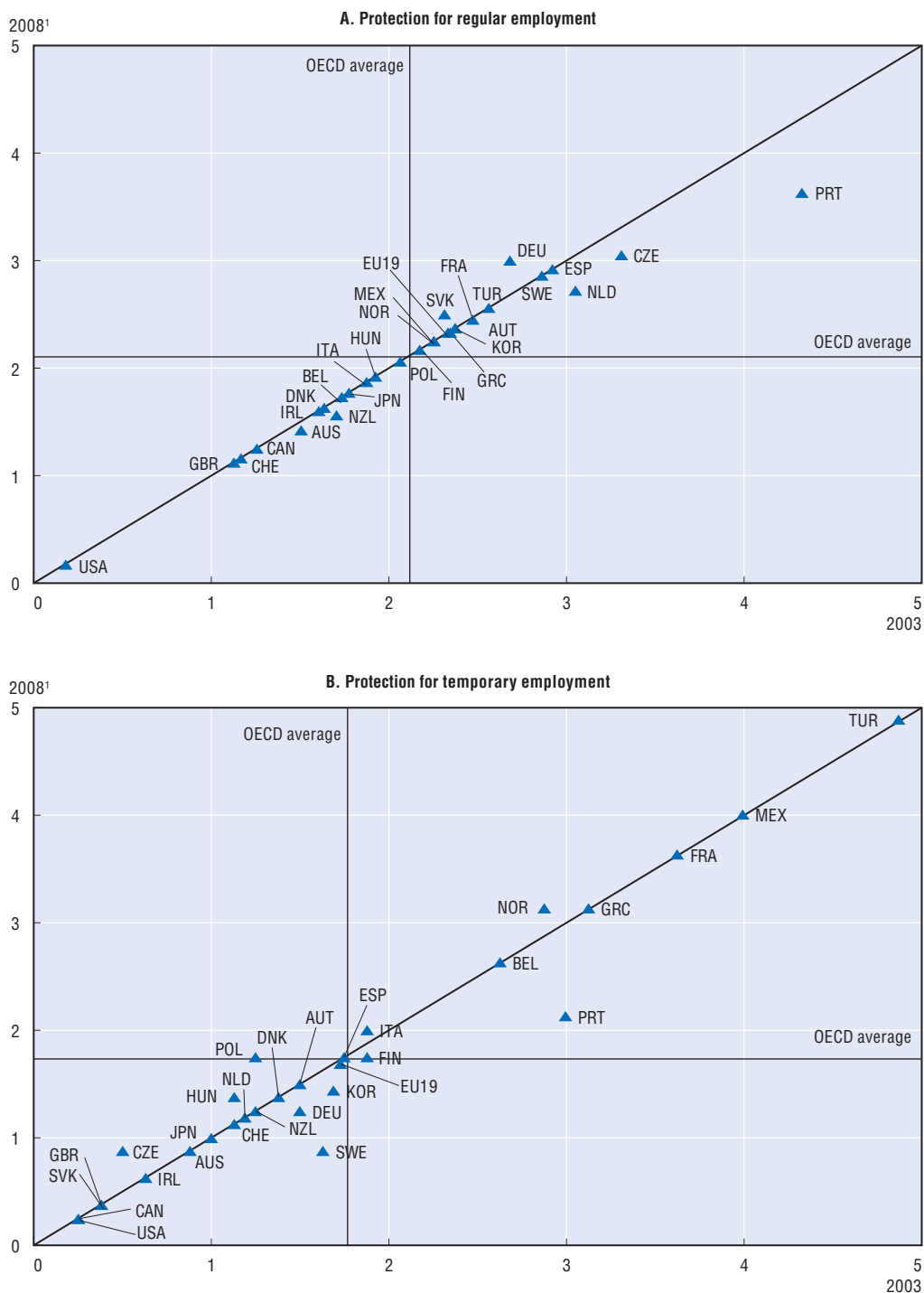


Figure 4.8. **Employment Protection Legislation (EPL)** (cont.)
Index scale of 0-6 from least to most restrictive

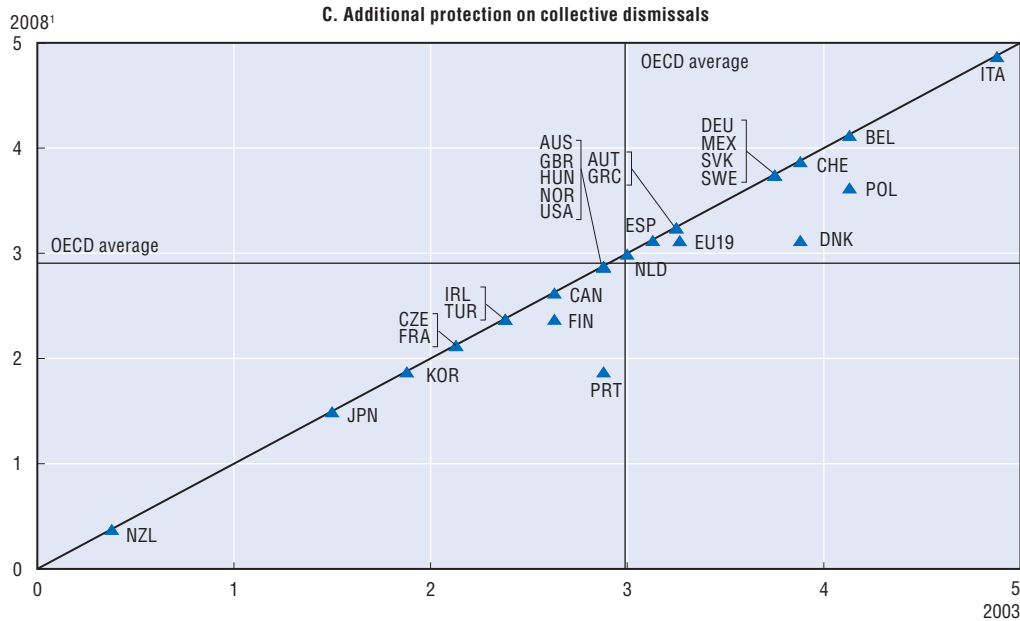


Figure 4.9. **Difference between coverage rates of collective bargaining agreements and trade union density rates**¹

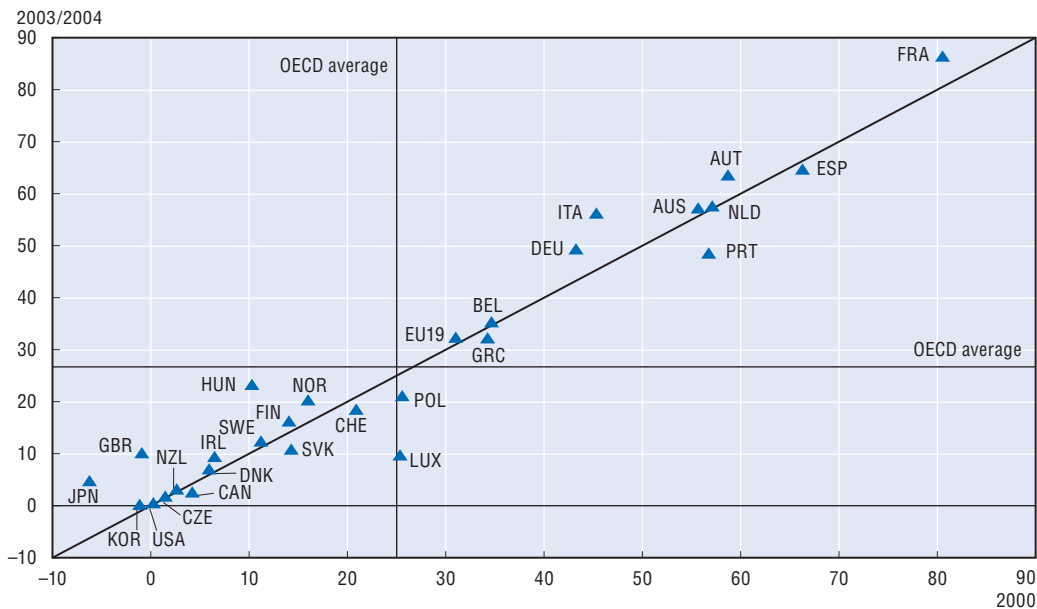
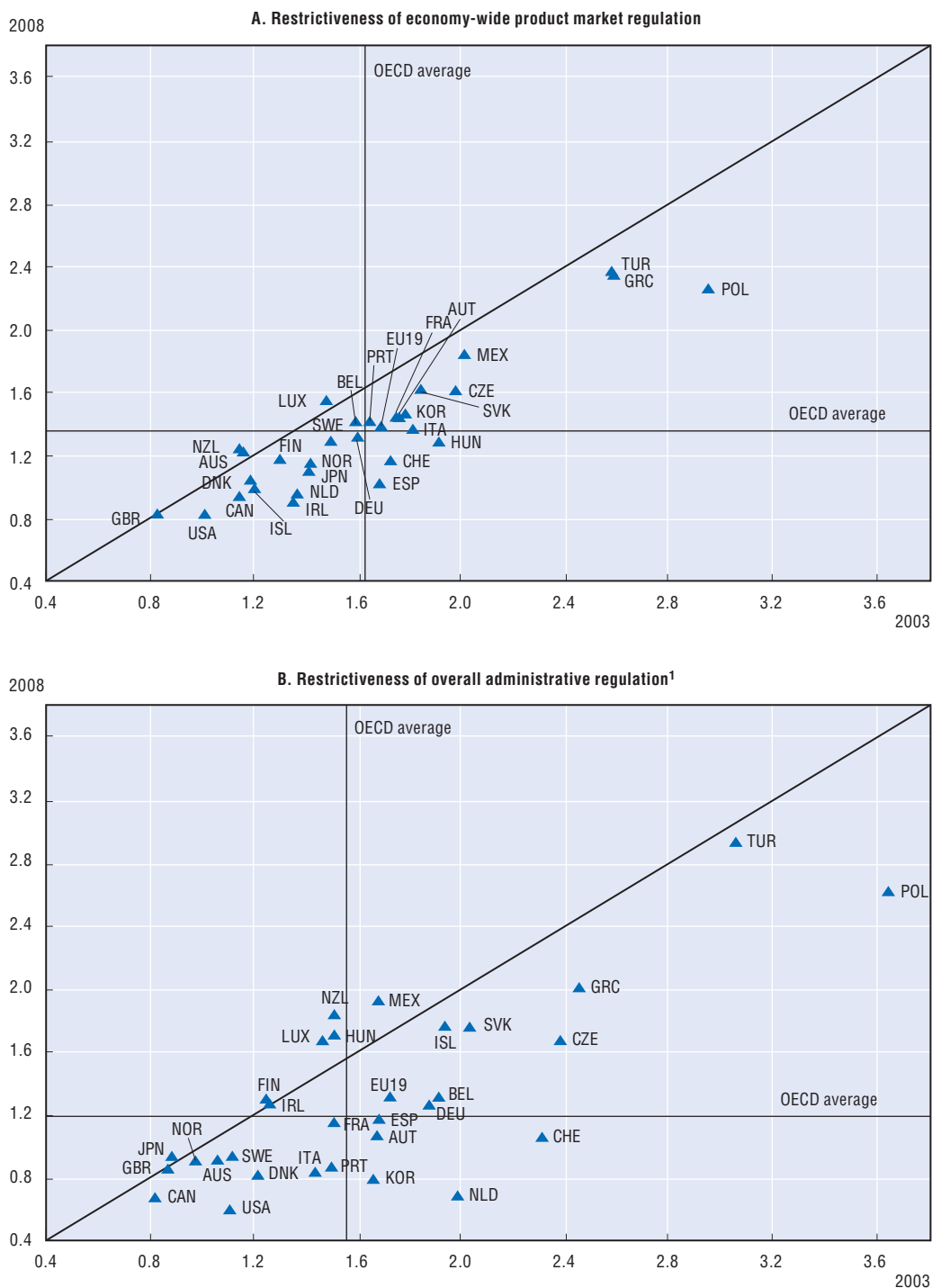


Figure 4.10. Product market regulation

Index scale of 0-6 from least to most restrictive



1. This is a simple average of the two indicators for regulatory and administrative opacity and administrative burdens on start-ups.

Source: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.11. **State control of business operations**
Index scale of 0-6 from least to most restrictive

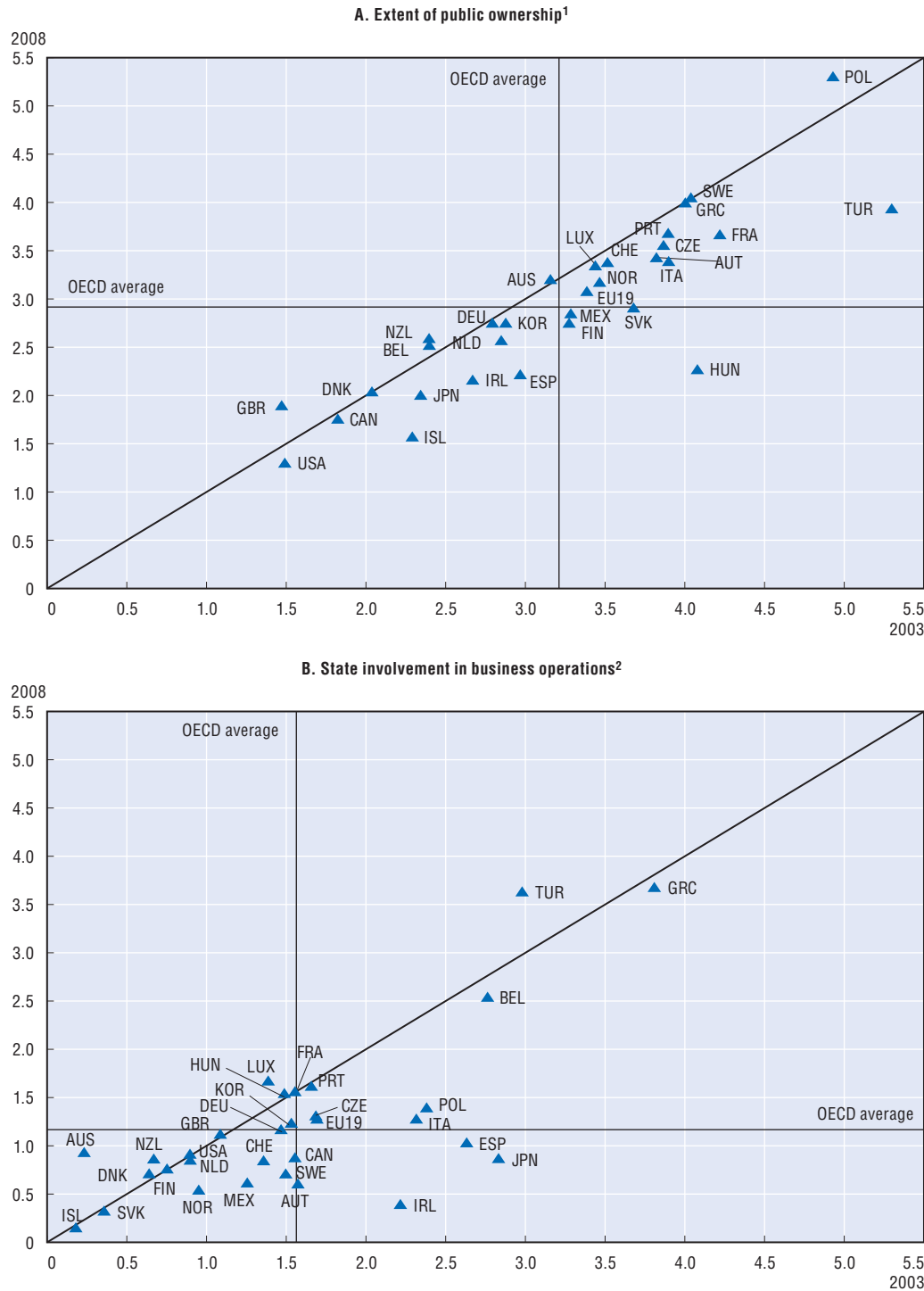
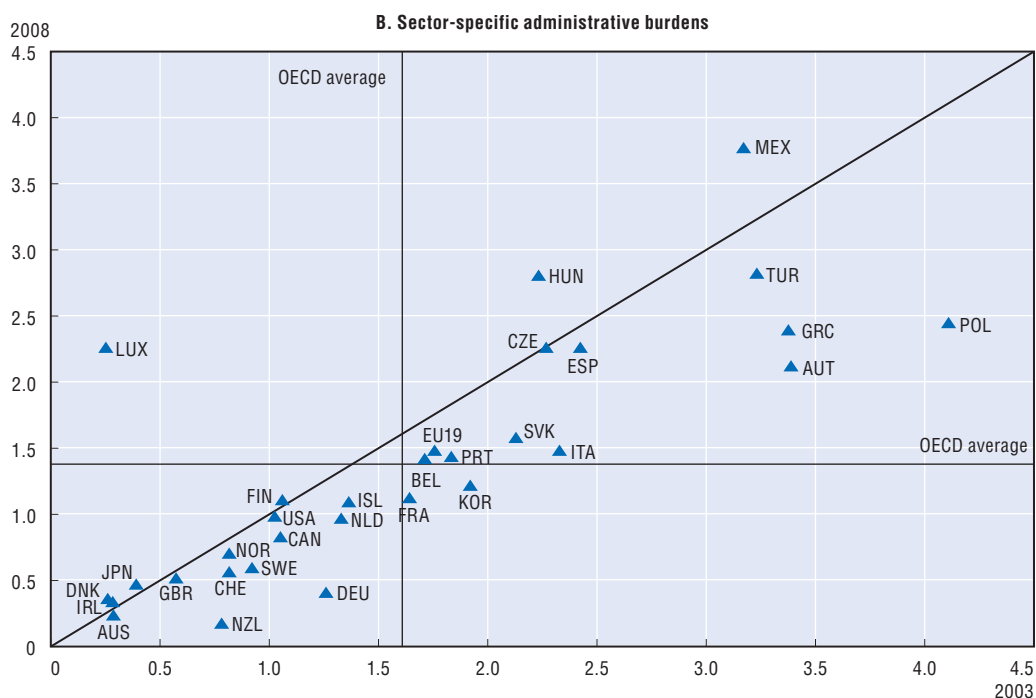
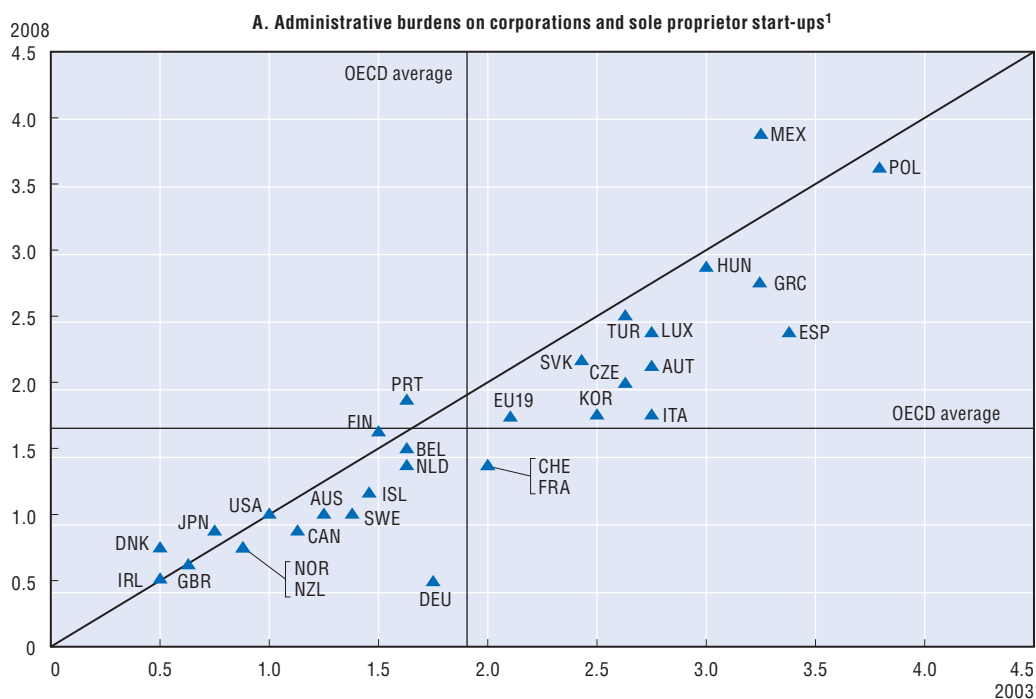


Figure 4.12. **Administrative burdens on entrepreneurship**

Index scale of 0-6 from least to most restrictive

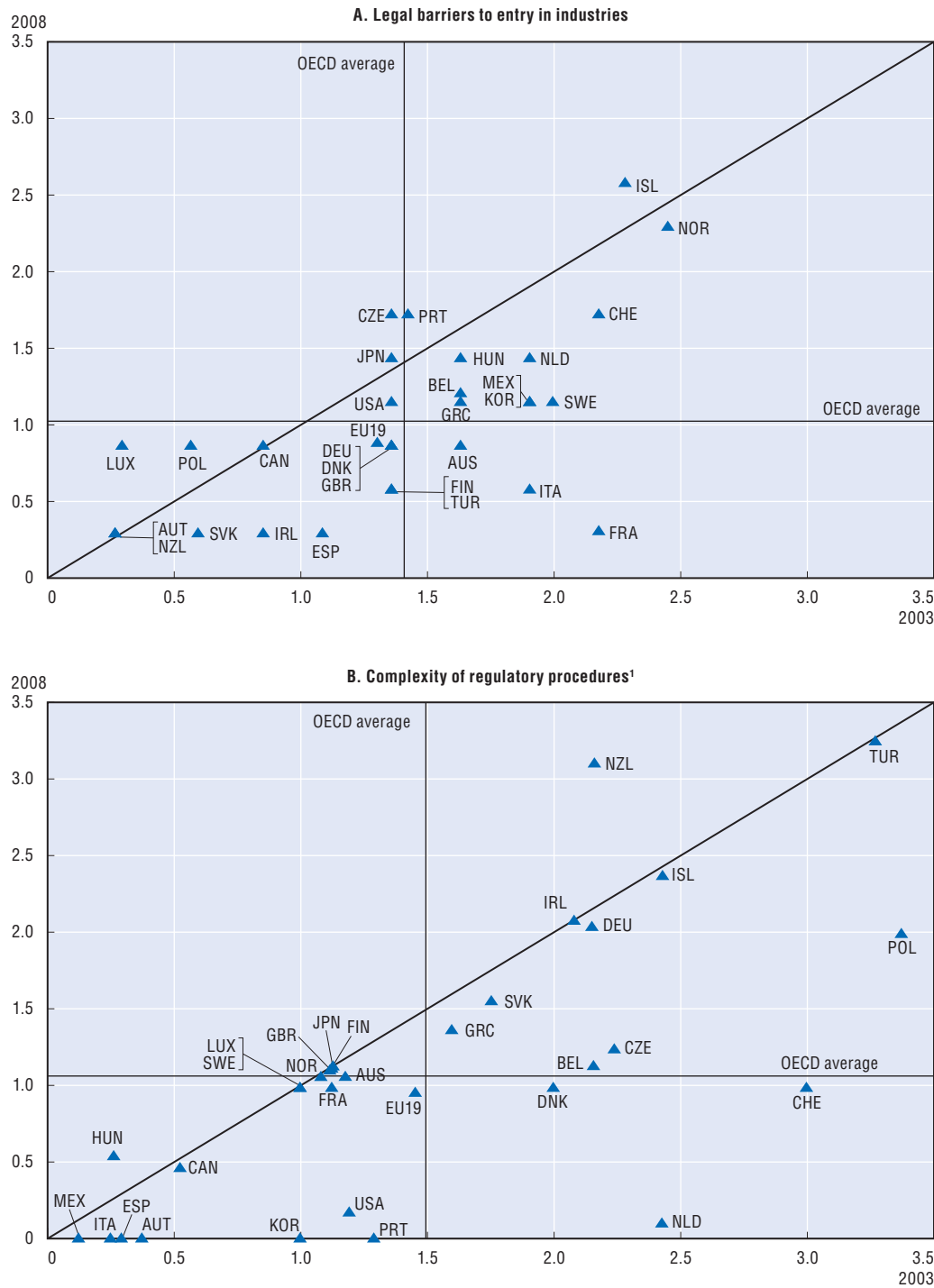


1. This is a simple average of the two indicators for administrative burdens on corporations and sole proprietor start-ups.

Source: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.13. **Barriers to entry**
Index scale of 0-6 from least to most restrictive



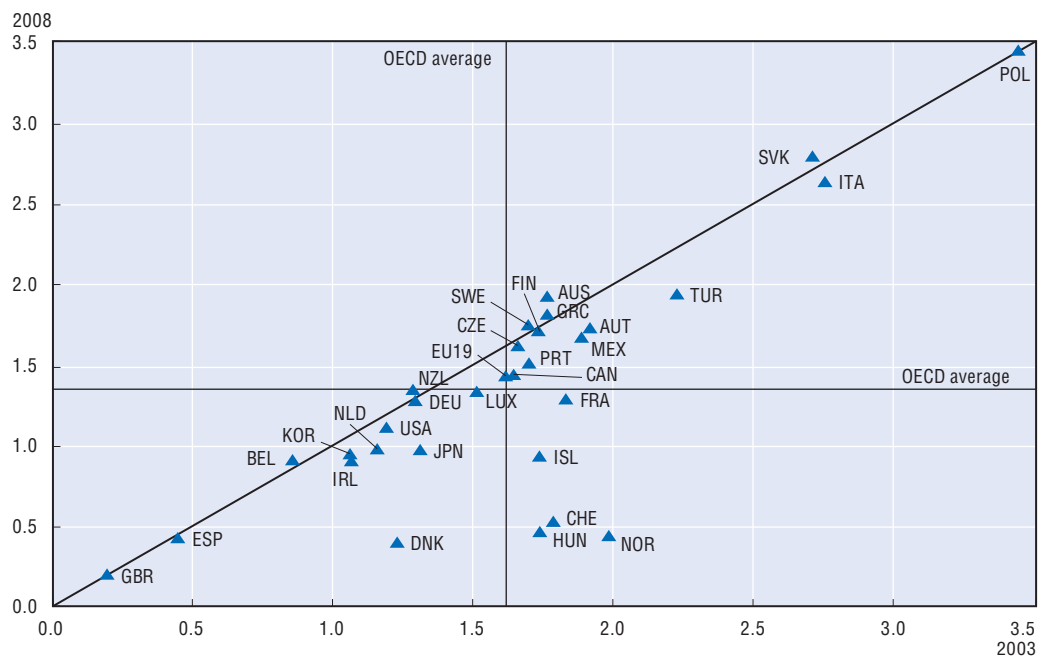
1. Concerns complexity of government communication of rules and procedures as well as of licences and permit systems.

Source: OECD, Product Market Regulation Database.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.14. **Barriers to foreign direct investment¹**

Index scale of 0-6 from least to most restrictive



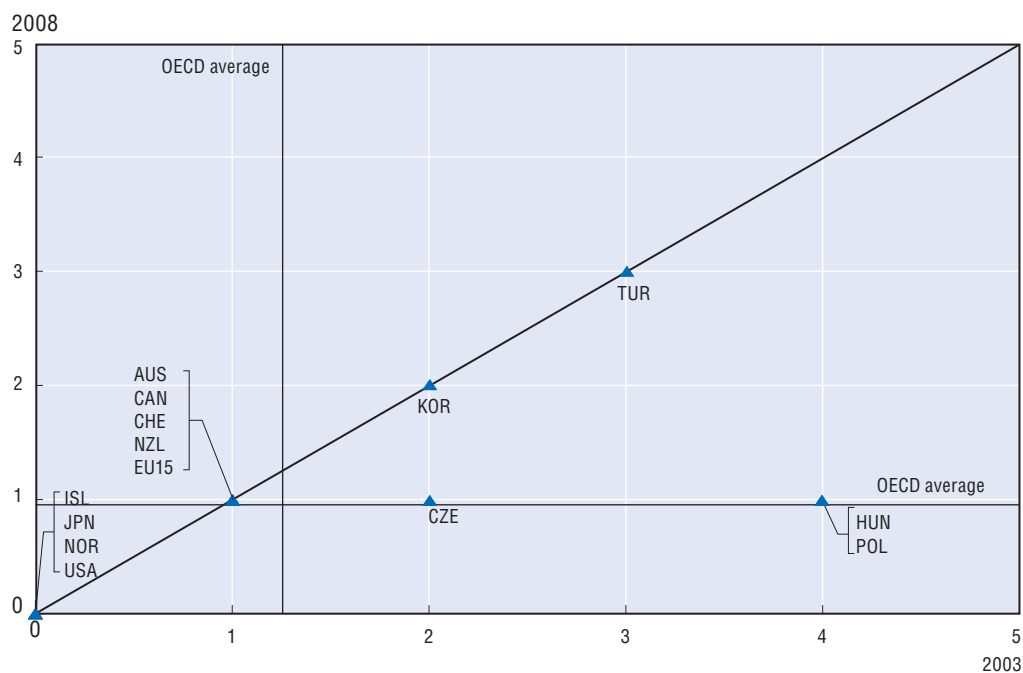
1. This combines restrictions on acquisition of equity by foreign investors in publicly-controlled firms with the general FDI restrictiveness index by Koyama and Golub (2006), "OECD's FDI regulatory restrictiveness index: revision and extension to more economies", OECD Economics Department Working Papers, No. 525.

Source: OECD, Product Market Regulation Database.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.15. **Restrictiveness of external trade tariffs**

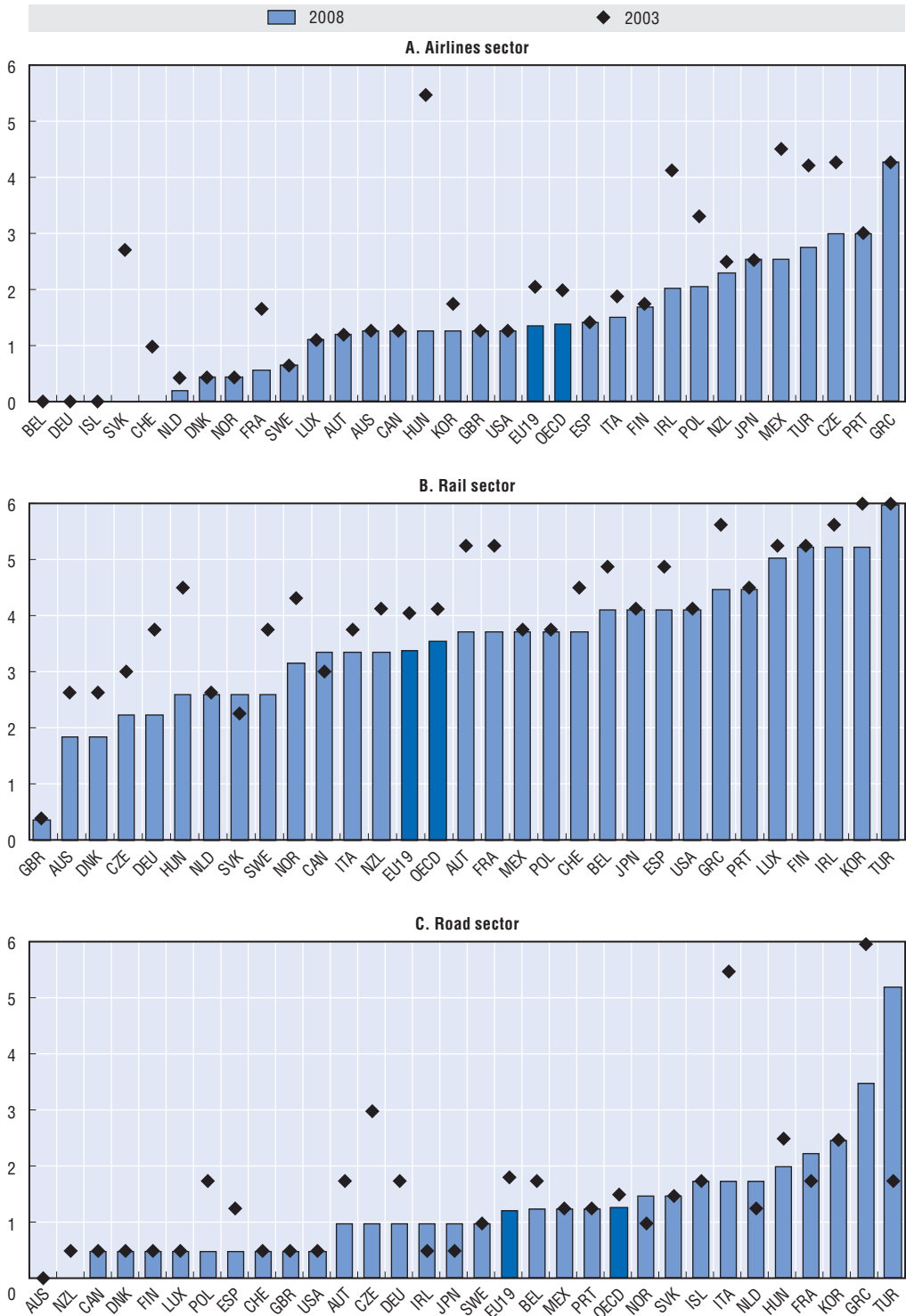
Index scale of 0-6 from least to most restrictive



Source: OECD, Product Market Regulation Database.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.16. **Sectoral regulation in the transport sector**
Index scale of 0-6 from least to most restrictive

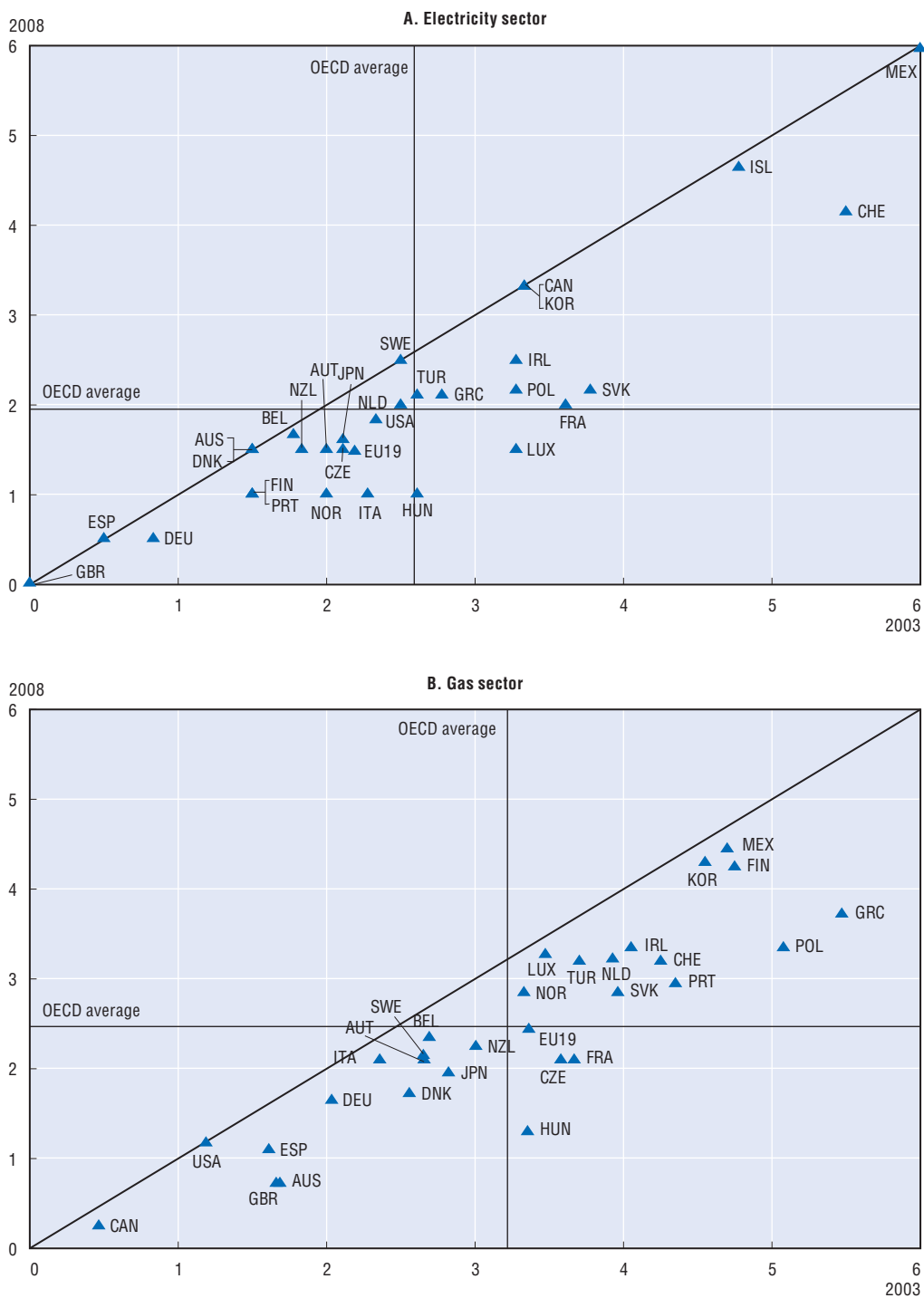


Source: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.17. Sectoral regulation in the energy sector

Index scale of 0-6 from least to most restrictive



Source: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.18. **Sectorial regulation in the post and telecommunications sector**
Index scale of 0-6 from least to most restrictive

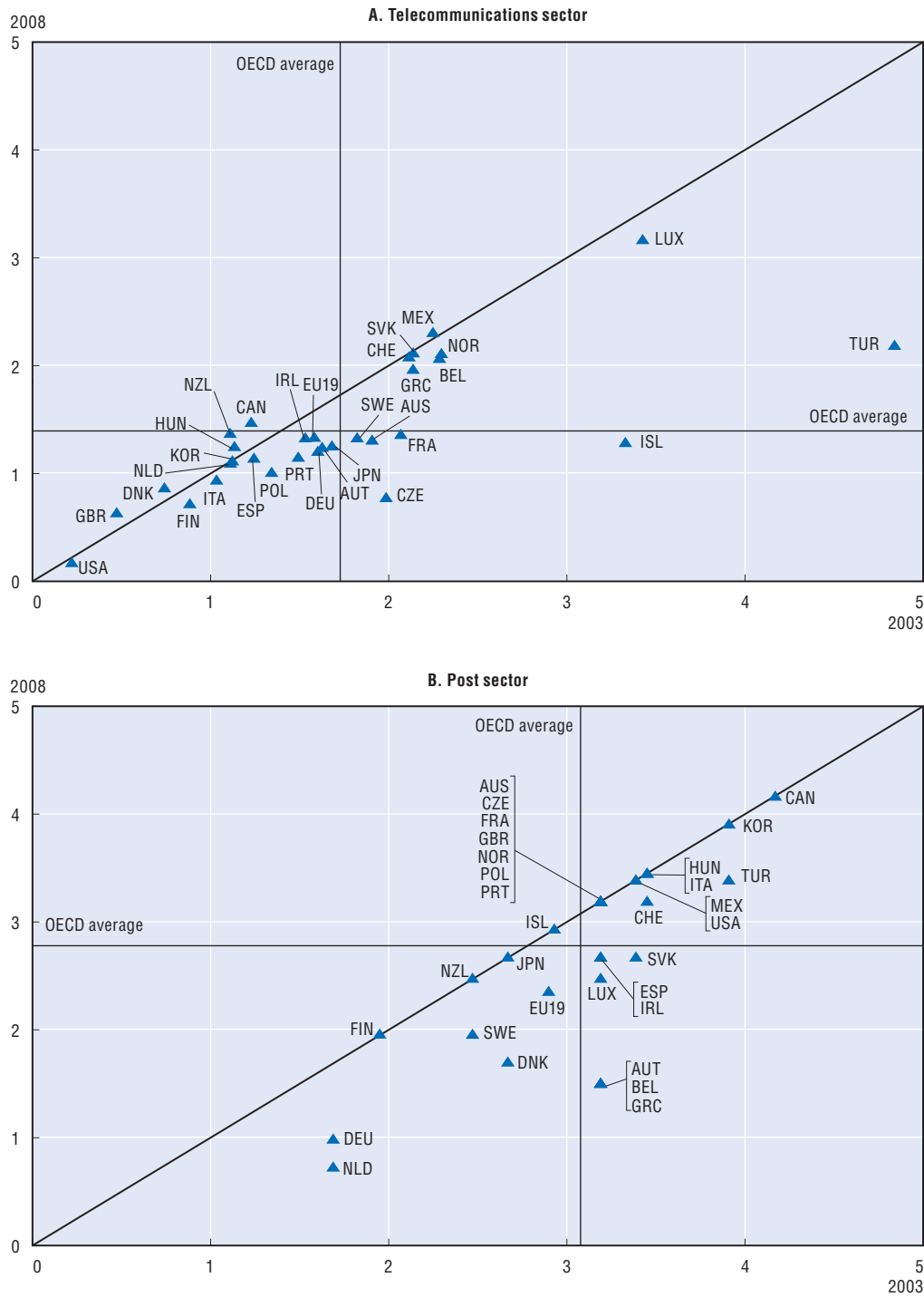
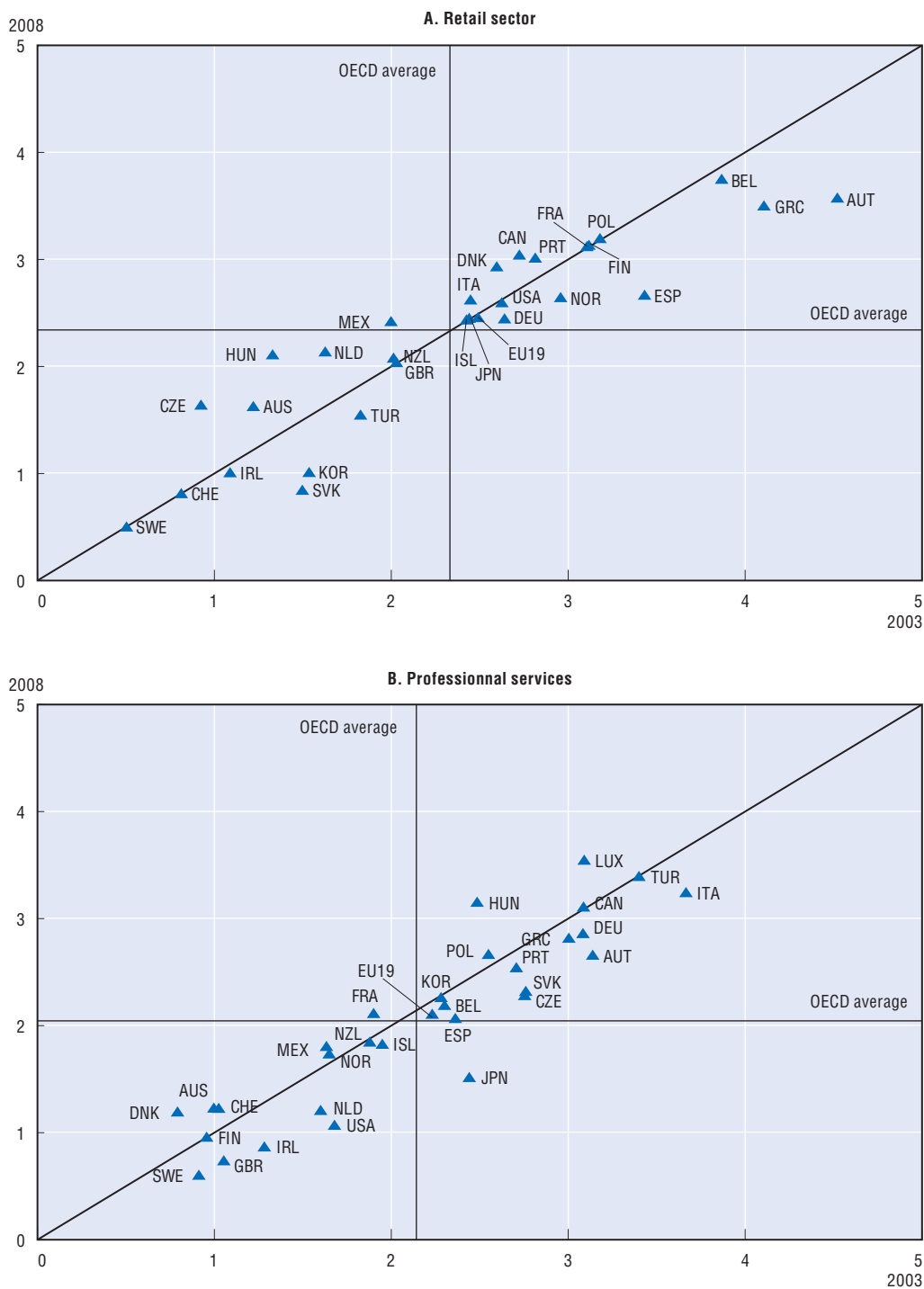


Figure 4.19. **Sectoral regulation in retail and professional services**

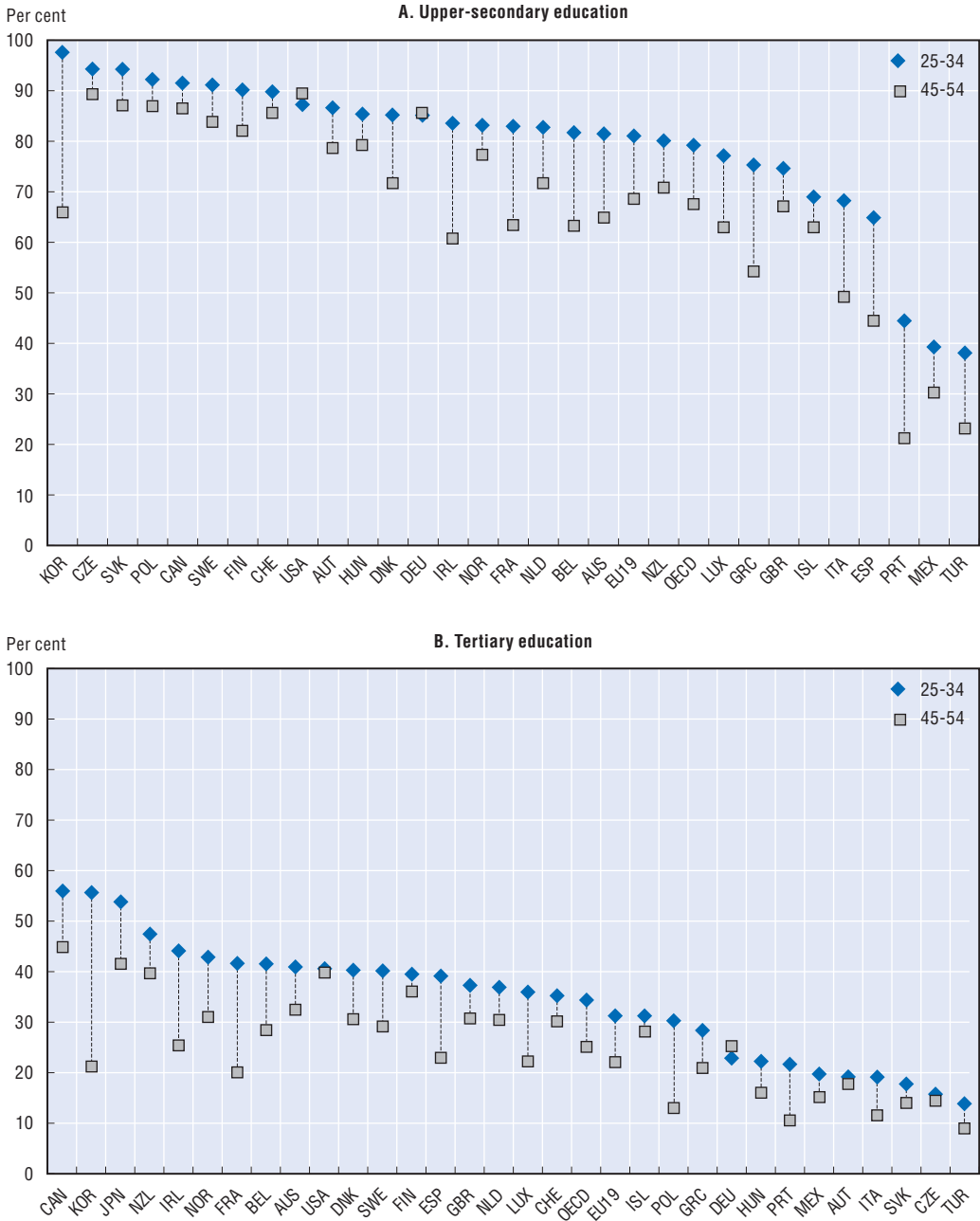
Index scale of 0-6 from least to most restrictive



Source: OECD, Product Market Regulation Database.

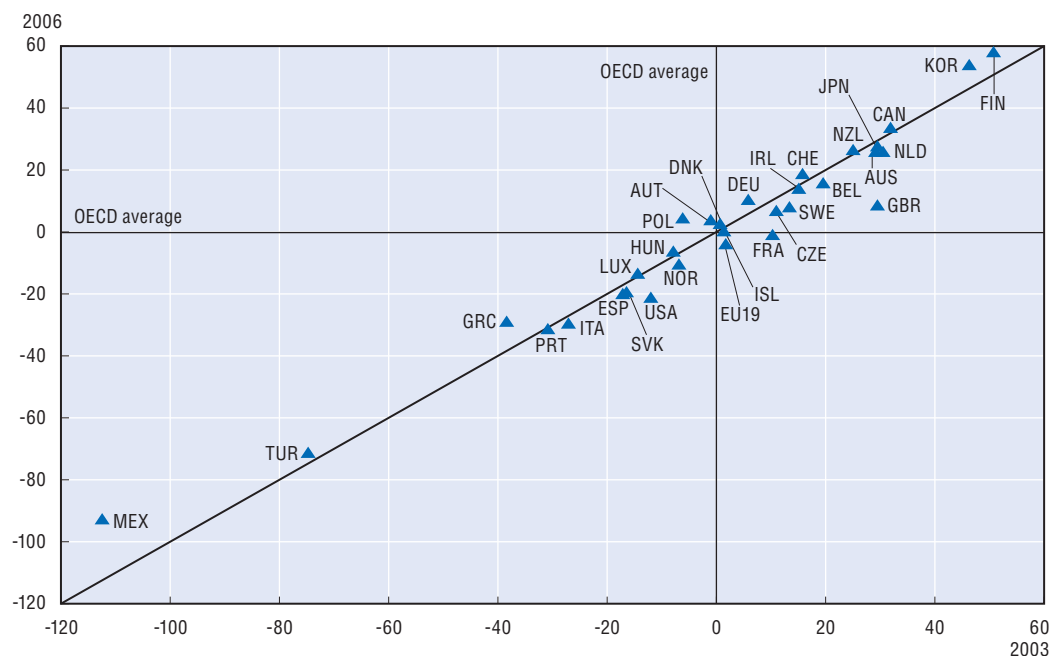
StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.20. **Educational attainment, 2007**
Percentage of population aged 25-34 and 45-54



Source: OECD (2009), *Education at a Glance*.

StatLink  <http://dx.doi.org/10.1787/786626575743>

Figure 4.21. Educational achievementAverage of PISA scores in reading, mathematics and science^{1, 2}

1. Deviation from OECD average PISA scores. PISA is the Programme for International Student Assessment.

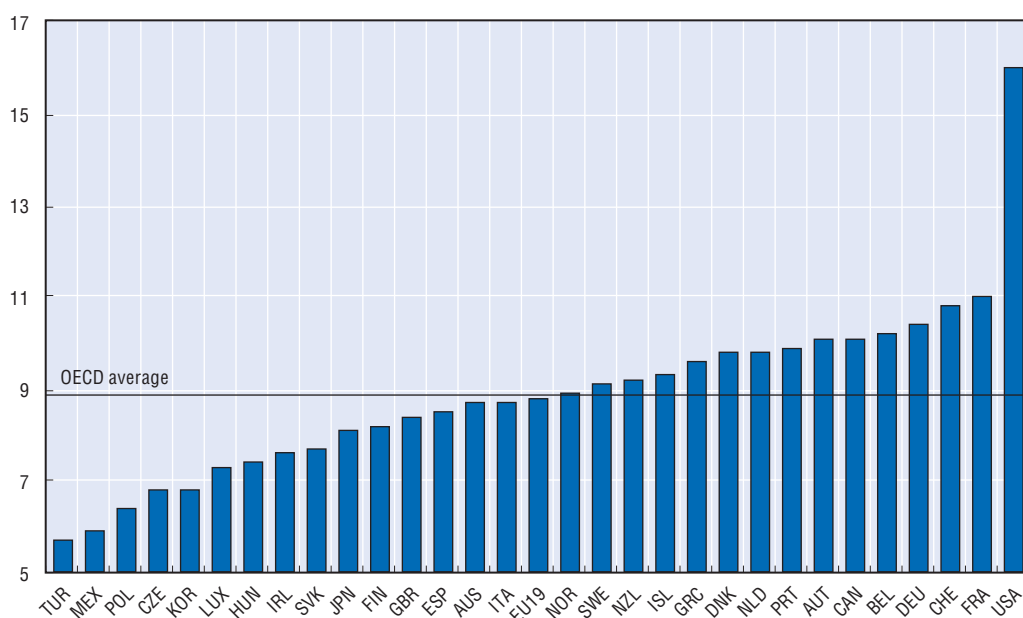
2. For the United Kingdom, science only in 2003 and for the United States, average of PISA scores in mathematics and science in 2003 and 2006.

Source: OECD, PISA, 2003 and 2006 Databases.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.22. Health expenditure, 2007¹

Percentage of GDP

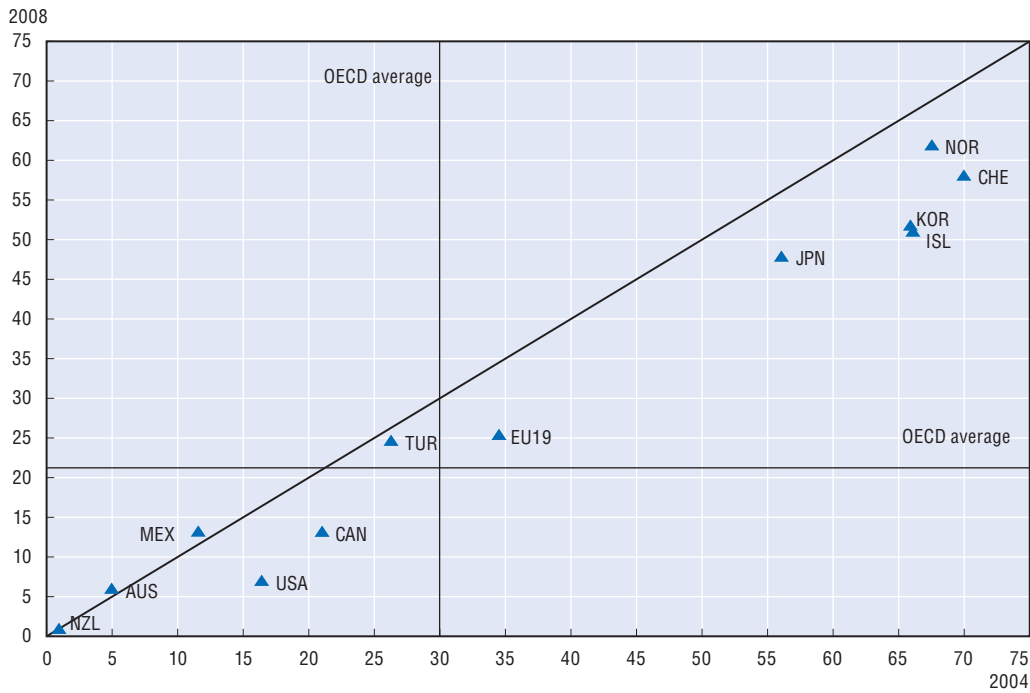


1. 2006 for Australia, Japan, Luxembourg and Portugal; 2005 for Turkey.

Source: OECD, Health Database.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.23. **Producer support estimate to agriculture**¹
Percentage of farm receipts

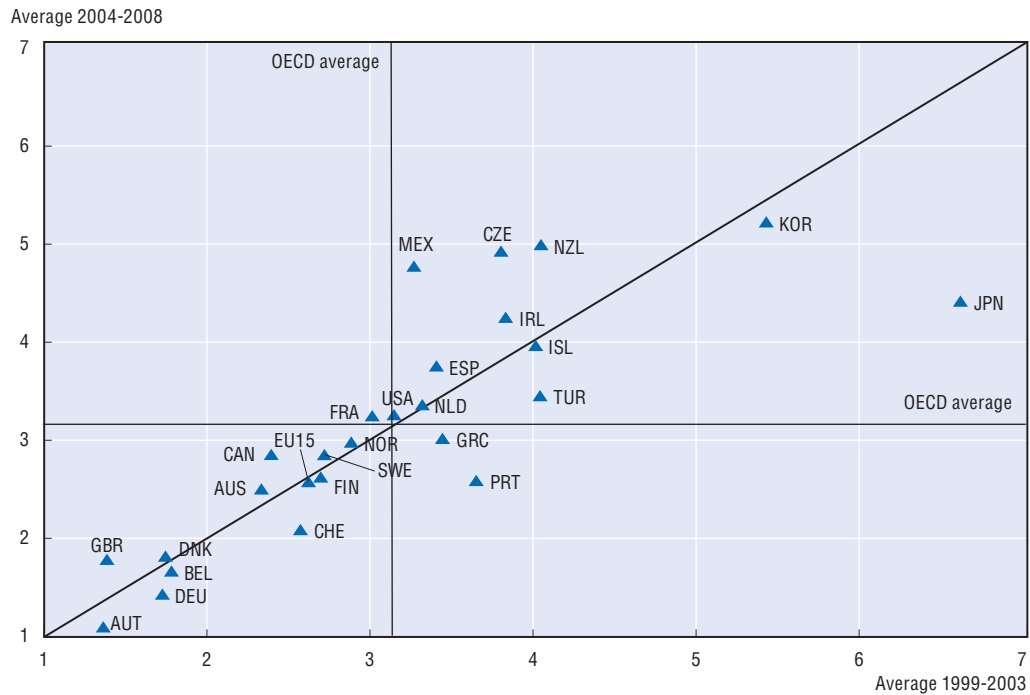


1. A single producer support estimate is calculated for EU countries.

Source: OECD, Producer and Consumer Support Estimates Database.

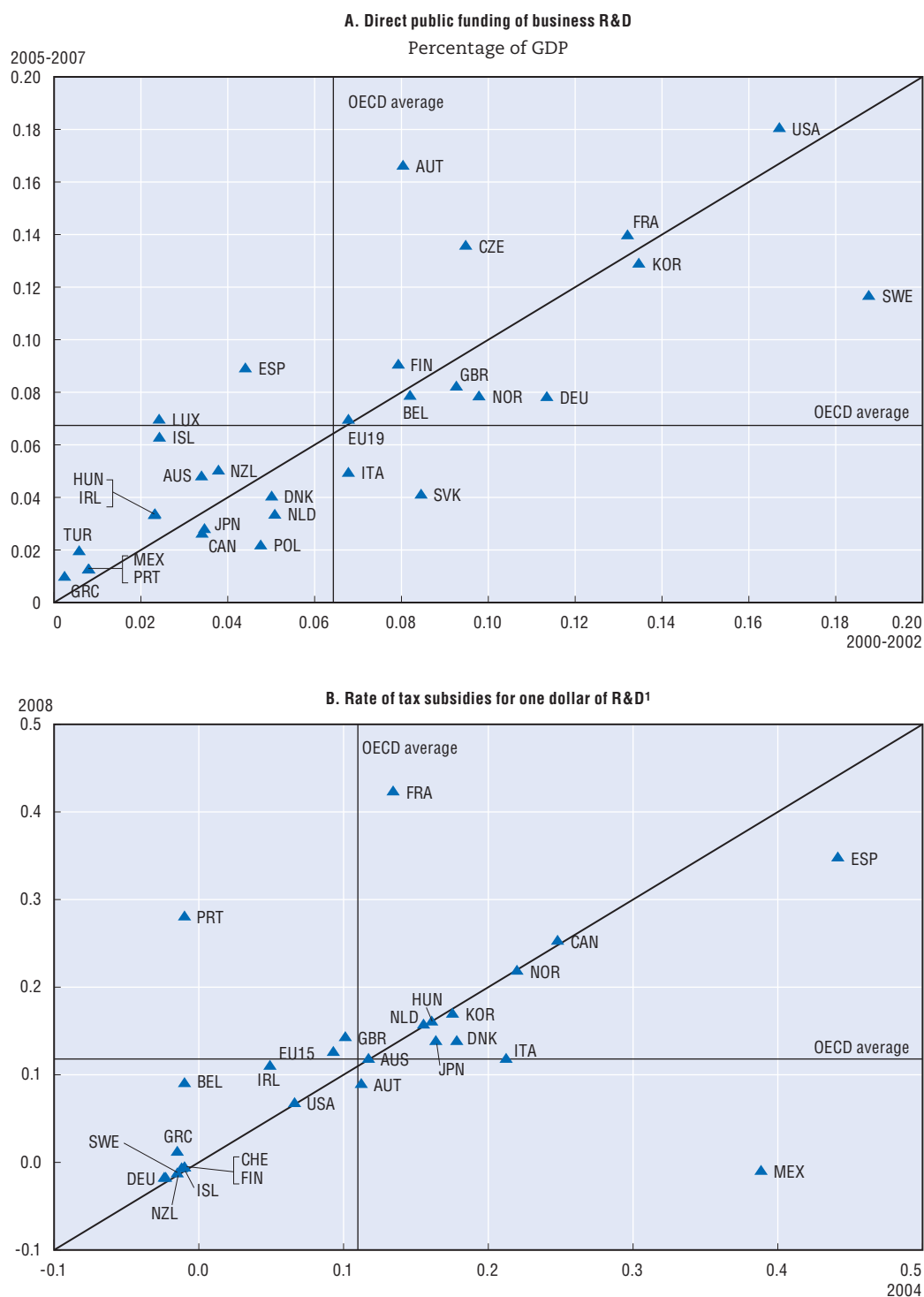
StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.24. **Public investment**
Percentage of GDP



Source: OECD Economic Outlook, No. 86, Vol. 2009/2.

StatLink <http://dx.doi.org/10.1787/786626575743>

Figure 4.25. **Financial support for private R&D investment**

1. Measures the generosity of tax incentives to invest in R&D, on the basis of the pre-tax income necessary to cover the initial cost of one dollar R&D spending and pay corporate taxes on one dollar of profit (B-index). A value of zero on the chart would mean that the tax concession for R&D spending is just sufficient to offset the impact of the corporate tax rate.

Source: OECD (2009), OECD Science, Technology and Industry Scoreboard.

StatLink  <http://dx.doi.org/10.1787/786626575743>

PART II

Thematic Studies

PART II

Chapter 5

A Family Affair: Intergenerational Social Mobility across OECD Countries

Policy reform can remove obstacles to intergenerational social mobility and thereby promote equality of opportunities across individuals. Such reform will also enhance economic growth by allocating human resources to their best use. This chapter assesses cross-country patterns in intergenerational social mobility and examines the role that public policies play in affecting mobility. Intergenerational earning, wage and educational mobility vary widely across OECD countries. Mobility in earnings, wages and education across generations is relatively low in France, southern European countries, the United Kingdom and the United States. By contrast, such mobility tends to be higher in Australia, Canada and the Nordic countries.

Intergenerational social mobility reflects equality of opportunities

Intergenerational social mobility refers to the relationship between the socio-economic status of parents and the status their children will attain as adults. Put differently, mobility reflects the extent to which individuals move up (or down) the social ladder compared with their parents. A society can be deemed more or less mobile depending on whether the link between parents' and childrens' social status as adults is looser or tighter. In a relatively immobile society an individual's wage, education or occupation tends to be strongly related to those of his/her parents. Intergenerational mobility depends on a host of factors that determine individual economic success, some related to the inheritability of traits (such as innate abilities), others related to the family and social environment in which individuals develop. Among environmental factors, some are only loosely related to public policy (such as social norms, work ethics, attitude towards risk and social networks), while others can be heavily affected by policies. Typical examples are policies that shape access to human capital formation, such as public support for early childhood, primary, secondary and tertiary education, as well as redistributive policies (e.g. tax and transfer schemes) that may reduce or raise financial and other barriers to accessing higher education. Indeed, in an economic sense, intergenerational social mobility is generally defined in terms of the possibility to move up (or down) the income or wage scale relative to one's parents. Such mobility is closely related to educational achievement, given the direct link between human capital and labour productivity.

Against this background, this chapter assesses patterns of intergenerational social mobility across the OECD countries for which sufficient data are available, focusing on educational and wage mobility. It then identifies policy areas in which reform can help removing obstacles to mobility. Removing policy-related obstacles to social mobility can be advocated on equity grounds as it should improve equality of economic opportunities, but also on efficiency grounds. The economic rationale for removing such obstacles is two-fold. First, less mobile societies are more likely to waste or misallocate human skills and talents. Second, lack of equal opportunity may affect the motivation, effort and, ultimately, the productivity of citizens, with adverse effects on the overall efficiency and the growth potential of the economy.¹ It may also create greater pressure for policy settings that are detrimental to growth but may help specific groups increase their share in overall income.

These mobility-motivated rationales for reform have to be weighed against the possibility that some measures in favour of social mobility also entail potential output losses by affecting other drivers of growth (for example, certain redistributive policies such as progressive labour taxation can adversely affect labour utilisation or productivity). This suggests that a careful balance must be struck between growth-oriented policies and those that enhance mobility across generations. Also, because many of the factors potentially affecting intergenerational social mobility are family or country-specific, they are not readily amenable to public policies. Overall, there is neither a "desirable" level nor an international benchmark for mobility. This is so much more the case as several different

indicators (e.g. wage and earnings persistence, secondary and post-secondary education persistence) can be used to measure intergenerational social mobility, and given the complex nature of mobility, these indicators do not necessarily depict the same cross-country patterns. Nonetheless, the different measures of mobility levels can be compared across countries, and understanding the role potentially played by policies in driving cross-country differences can help in designing policy mixes that remove unintended obstacles to intergenerational social mobility, while at the same time encouraging growth.

The following main conclusions emerge from the analysis:

- Parental or socio-economic background influences descendants' educational, earnings and wage outcomes in practically all countries for which evidence is available.
- Mobility in earnings across pairs of fathers and sons is particularly low in France, Italy, the United Kingdom and the United States, while mobility is higher in the Nordic countries, Australia and Canada.
- Across European OECD countries, there is a substantial wage premium associated with growing up in a better-educated family, and a corresponding penalty with growing up in a less-educated family. The premium and penalty are particularly large in southern European countries, as well as in the United Kingdom. The penalty is also high in Luxembourg and Ireland. In these countries the wage premium is more than 20%, while the penalty is some 16% or more (relative to wages earned by individuals raised in a family with average education).
- The influence of parental socio-economic status on students' achievement in secondary education is particularly strong in Belgium, France and the United States, while it is weaker in some Nordic countries, as well as in Canada and Korea. Moreover, in many OECD countries, including all the large continental European ones, students' achievement is strongly influenced by their school environment.
- Inequalities in secondary education are likely to translate into inequalities in tertiary education and subsequent wage inequality. For example, in Denmark, Finland, Italy and Luxembourg the probability of achieving tertiary education is more than 30 percentage points higher for a son whose father had also achieved tertiary education compared to a son whose father only had upper secondary education. Educational inequalities are compounded by wage inequalities in the sense that generationally transmitted inequalities in higher education are positively associated across countries with inequalities in wages.
- At the other end of the spectrum, there is also generational persistence for below upper secondary education in OECD countries. Persistence is relatively strong in certain southern European countries, Ireland and Luxembourg, while it is lower in France, some Nordic countries and the United Kingdom.
- Education policies play a key role in explaining observed differences in intergenerational social mobility across countries. For example, higher enrolment in early childhood education is associated with a lower influence of parental background on students' achievement in secondary education. By contrast, school practices that group students into different curricula at early ages come with less social mobility in educational achievement. Moreover, increasing the social mix within schools appears to boost performance of disadvantaged students without any apparent negative effects on overall performance.

- Redistributive and income support policies seem to be associated with greater intergenerational social mobility.

Assessing intergenerational social mobility and its channels

Parental background can affect individuals' wages via their productivity and labour market success

It is a challenge to measure intergenerational wage or educational mobility and to identify the main ways in which the socio-economic status of parents can influence that of their children as adults. A key issue is that it is difficult to disentangle the effect of parents' socio-economic status from that of inherited abilities or disposition of individuals that influence their wages and educational achievement.² In general, as in this study, estimates of the impact of parents' socio-economic status on individuals' wages and educational achievement do not distinguish these two effects. However, to the extent that heritability of ability does not vary systematically across countries, it should not influence cross-country variation in wage or educational mobility.

Parents can affect their descendants' labour market outcomes in different ways. One runs through labour productivity, which is often affected by schooling choices, parents' private investment in education outside the educational system and individuals' own investment in higher education. The extent to which productivity is then reflected in wages is influenced by labour market institutions, which vary across countries. Parents can also affect the success and integration in the labour market in more indirect ways, such as through the transmission of social norms, work ethics or social networks (Bourguignon *et al.*, 2003). In practice, it has often been difficult to separate all these channels.

Recent OECD analysis assesses and explores the drivers of intergenerational mobility in three steps (Causa and Johansson, 2009).³ A first step investigates how individuals' wages are associated with parents' socio-economic status, as measured by fathers' educational attainment. This can be seen as capturing all direct and indirect effects of family background on wages. A second step assesses how fathers' educational attainment influences individuals' wages *over and above* its effect on their educational attainment, which is thought to capture the influence of family and/or social environment factors such as social networks, social norms and work ethics. Given the importance of education in explaining wages, in a third step the study measures the access to education of descendants from different family backgrounds by assessing the extent to which students' and adults' educational achievement relates to their parental background.

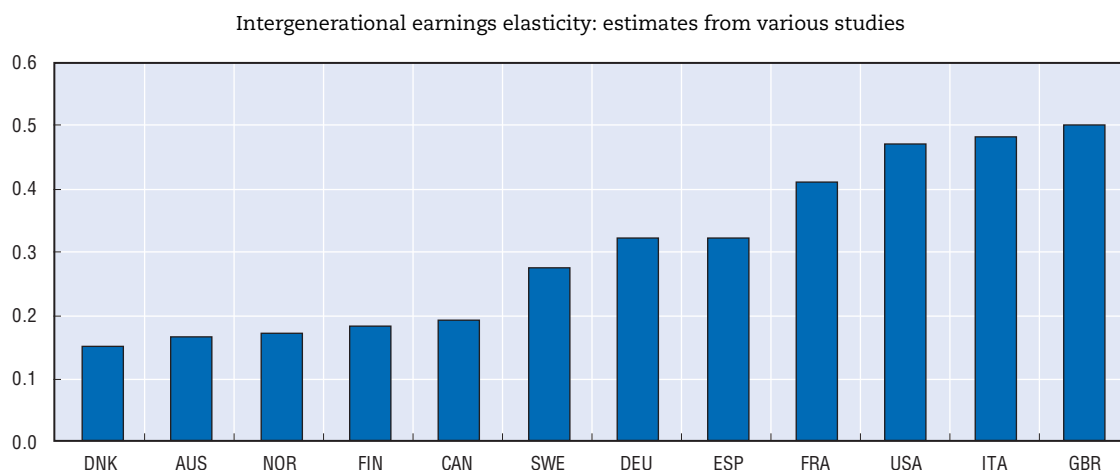
Cross-country patterns in intergenerational social mobility

Wages tend to persist across generations in all OECD countries but cross-country differences are wide

Relative positions in the labour income hierarchy persist over generations in all OECD countries, although to varying degrees (e.g. Solon, 2002; Corak, 2004, 2006; D'Addio, 2007). Existing estimates of the extent to which sons' earnings levels correlate with those of their fathers (i.e. the "intergenerational earnings elasticity") find persistence to be particularly pronounced in the United Kingdom, Italy, the United States and France. In these countries, at least 40% of the economic advantage that high-earnings fathers have over low-earnings fathers is transmitted to their sons (Figure 5.1). By contrast, persistence is comparatively

low in the Nordic countries, Australia and Canada, with less than 20% of the wage advantage being passed on from fathers to their sons.

Figure 5.1. **The strength of the link between individual and parental earnings varies across OECD countries¹**



1. The height of each bar measures the extent to which sons' earnings levels reflect those of their fathers. The estimates are the best point estimate of the intergenerational earnings elasticity resulting from an extensive meta-analysis carried out by Corak (2006) and supplemented with additional countries from d'Addio (2007). The choice of empirical estimates in this meta-analysis is motivated by the fact that they are based on studies that are similar in their estimation technique, sample and variable definitions. The higher the value, the greater is the persistence of earnings across generations, thus the lower is the intergenerational earnings mobility.

Source: D'Addio (2007).

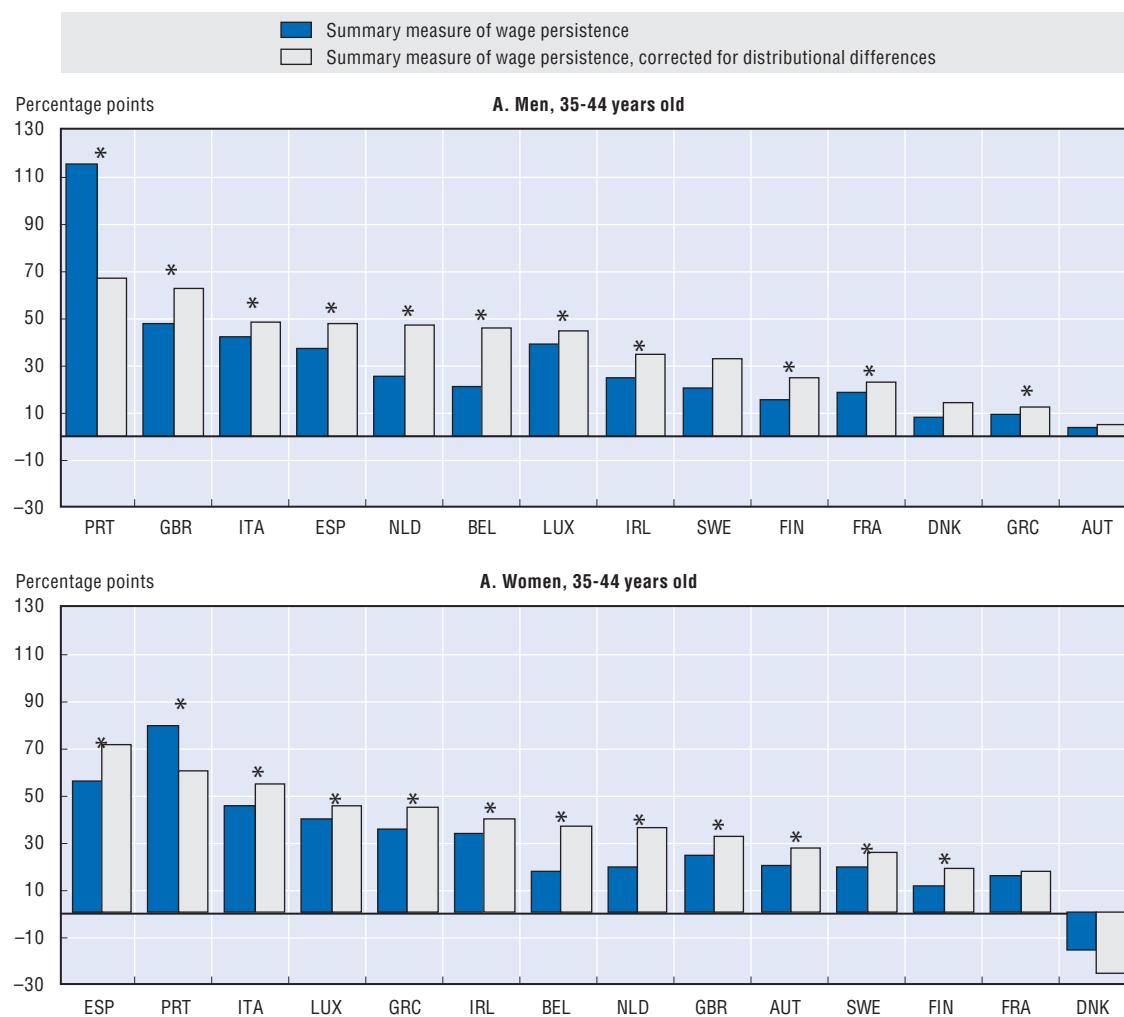
StatLink  <http://dx.doi.org/10.1787/784787325068>

New OECD evidence on intergenerational persistence in wages is obtained by estimating the percentage increase or decrease in individuals' gross hourly wages for different levels of their fathers' educational attainment in selected European countries.⁴ Across these countries, individuals whose fathers had achieved tertiary education are found to earn substantially more than those whose fathers had achieved upper secondary education, after taking into account the impact of a number of individual characteristics (e.g. migrant and marital status and urbanisation of the area of residence).⁵ For instance, in southern European countries, the United Kingdom and Finland, having a father with tertiary education raises a son's wages by at least 20% or more, compared with a son whose father had upper secondary education. At the same time, individuals whose fathers had achieved below upper secondary education tend to earn considerably less than those whose fathers had achieved upper secondary education.⁶

One way to summarise intergenerational wage persistence is through the overall estimated gap between the wage for individuals whose fathers had achieved tertiary education and the wage of individuals whose father had achieved below upper secondary education. According to this measure, intergenerational persistence is particularly strong in some southern European countries and in the United Kingdom, while it is lower in some Nordic countries, Austria, France and Greece (Figure 5.2).⁷ In general, according to this metric, wage persistence across generations is also slightly stronger for sons than for daughters. The magnitude of wage persistence changes moderately, but country rankings are barely affected – although the cross-country spread is flatter – when adjustments are made for cross-country differences in inequalities today and in past generations. Such

adjustments aim to take account of the fact that the wage premium from having a higher-educated father is likely to be higher in countries where there is greater wage inequality, which does not necessarily signal lower intergenerational wage mobility.

Figure 5.2. **Summary measure of wage persistence across generations for some OECD countries¹**



Note: An asterisk denotes statistical significance at least at the 10% confidence level. For example, the negative persistence in Denmark for daughters is not statistically significant, i.e. not statistically different from zero.

1. Wage persistence is measured as the distance or gap between the estimated wage of an individual whose father had achieved tertiary education and the wage of an individual whose father had achieved below upper secondary education. A larger number implies a larger gap, thus stronger persistence in wages or a higher degree of immobility over generations. Father's educational achievement is a proxy for parental background or wage. The summary measure corrected for distributional differences, corresponds to the summary measure of wage persistence, multiplied by the ratio of the standard deviation of fathers' education to the standard deviation of sons' or daughters' gross hourly wage. For details see Causa et al. (2009).

Source: OECD calculations based on the 2005 EU-SILC Database.

StatLink <http://dx.doi.org/10.1787/784787325068>

Education is a key driver of intergenerational persistence in wages

Human capital is a key determinant of individual wages and productivity, and education is a key determinant of human capital. Therefore, as a further step in the analysis of intergenerational wage persistence, the OECD analysis attempts to separate any direct influence of fathers' educational attainment on their descendants' wages from the indirect effect going through their descendant's educational attainment (see Bourguignon *et al.*, 2003). Such direct effects could reflect social norms or work ethics transmitted to children but also the role of social networks. After taking into account the influence of individuals' education, the father's level of education appears to have only a limited influence on individuals' wage, except in some European countries (Ireland, Italy, Luxembourg the Netherlands, Spain and the United Kingdom), where direct linkages appear to be comparatively more important.⁸ Overall, given that wages are largely driven by individual educational achievement, intergenerational educational persistence appears to be a key determinant of wage persistence.⁹

Socio-economic background has a considerable influence on students' secondary education achievement

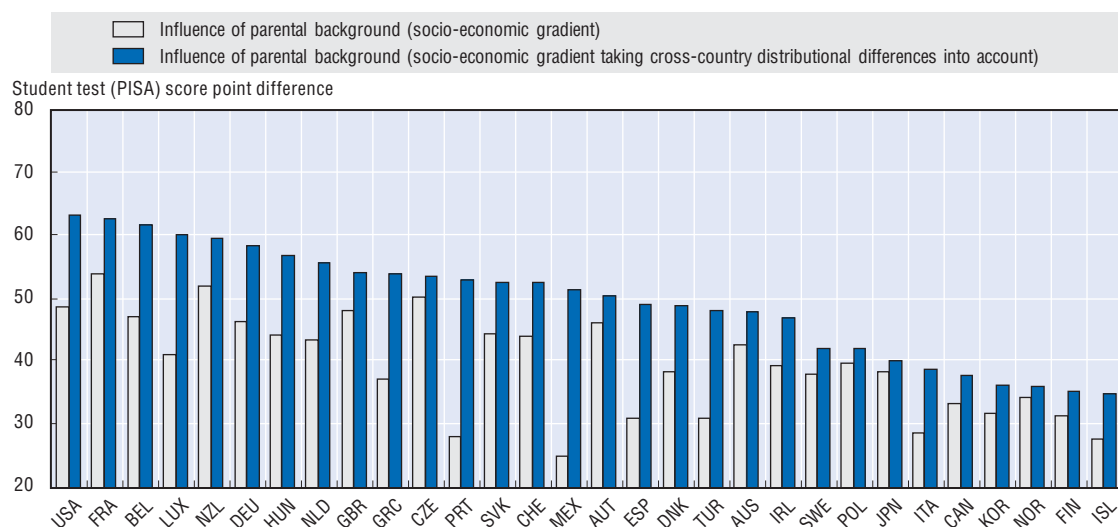
Intergenerational educational persistence partly reflects the influence of family background on cognitive skills acquired during secondary education. Persistence in secondary education, as measured by the influence of students' socio-economic background on student test score (PISA) achievements, is considerable in many OECD countries.¹⁰ Austria, the Czech Republic, France, New Zealand, the United Kingdom and the United States are among the countries where socio-economic background appears to have the largest influence on students' performance (Figure 5.3). The countries in which persistence is relatively low include Iceland, Finland, Korea, Norway, Denmark, Canada and southern European countries, as well as Mexico and Turkey.

The extent of inequality in students' socio-economic background differs significantly across OECD countries, with possible consequences for the overall influence of socio-economic background on student achievement. Concretely, the effect of a comparable change in socio-economic background has a different meaning in countries in which inequalities in family backgrounds are small, as in Finland, or large, as in Mexico. Adjusting educational persistence measures by cross-country differences in background inequality significantly changes some country rankings along the persistence scale. In countries with large inequalities in students' socio-economic background, including Mexico, Portugal, Luxembourg, Spain, and Turkey, even a relatively mild influence of background on students' achievement leads to large overall educational persistence across generations (Figure 5.3). In these countries, inequality tends to exacerbate the influence of background on achievement. According to this adjusted metric, persistence in secondary education is among the highest in the United States, France and Belgium, while it remains low in most Nordic countries, Korea and Canada.

The school environment plays an important role

The overall influence of socio-economic background on students' achievement in secondary education reflects both an effect at the individual level and an effect operating through school choice. In most countries, the overall effect is to a large extent explained by students with different backgrounds attending different schools, and thereby benefiting from diverse school environments (Figure 5.4). This school effect reflects partly the extent

Figure 5.3. **The influence of parental background on student achievement in secondary education varies widely across OECD countries¹**



1. *Socio-economic gradient*: change in PISA science score due to an improvement of one international standard deviation in the PISA index of student socio-economic background. *Socio-economic gradient taking cross-country distributional differences into account*: change in PISA science score due to an improvement of one country-specific, inter-quartile change in the PISA index of student socio-economic background. In countries where the difference in socio-economic background across students is particularly large (e.g. Italy, Portugal and Mexico) the gap between the socio-economic gradients with and without account for cross-country distributional differences is comparatively wide. The PISA test score scale has a mean of 500 and a standard deviation of 100 test-score points. For details, see Causa and Chapuis (2009).

Source: OECD calculations based on the 2006 OECD PISA Database.

StatLink  <http://dx.doi.org/10.1787/784787325068>

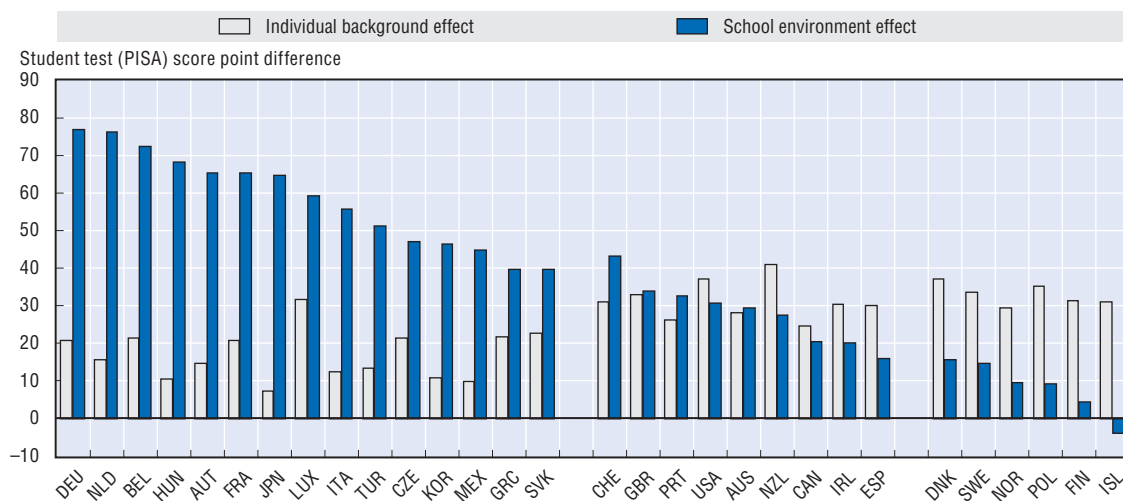
to which students' achievement depends on their peer group, educational resources available to the school, the quality of the teachers, and the way in which students are allocated across schools or to classes within them. In all OECD countries there is a clear advantage in attending a school whose students are, on average, from higher socio-economic backgrounds. However, the strength of this school environment effect varies widely across countries. It is particularly sizeable in some continental European Union countries, notably in Germany and the Netherlands, which have several distinct schooling programmes within secondary education. The effect is much lower in the Nordic countries that essentially have a unified secondary education system.

In all European OECD countries there is persistence in tertiary education across generations

Intergenerational persistence in secondary educational achievement also translates into persistence in post-secondary educational attainment. The latter can be assessed by estimating the percentage increase or decrease in individuals' probability of achieving tertiary education for different levels of their fathers' educational attainment. This measures the extent to which individuals' educational levels reflect those of their fathers. Across all European OECD countries covered by the analysis, coming from a higher-educated family (i.e. a father with a tertiary degree) increases the probability of achieving tertiary education relative to having a medium parental educational background (i.e. a father with an upper secondary degree). Likewise, there is a sizeable drop in the probability of achieving tertiary education associated with growing up in a lower-educated family vis-à-vis a medium-educated one. For pairs of fathers and sons the increase in probability is at

Figure 5.4. **The school socio-economic environment is a major channel of transmission of parental background¹**

Effects of individual background and school socio-economic environment on students' secondary achievement
(Socio-economic gradient taking cross-country distributional differences into account)



1. The individual background effect is defined as the difference in performance on the PISA science scale associated with the difference between the highest and the lowest quartiles of the average distribution of the PISA index of economic, social and cultural status, calculated at the student level. The school environment effect is defined as the difference in a given student's performance on the PISA science scale associated with the difference between the highest and the lowest quartiles of the country-specific school-level average distribution of the PISA index of economic, social and cultural status. In the group of countries to the left in the figure the school environment effect mainly explains the influence of socio-economic background on student's achievement, while in the group of countries to the right in the figure the individual background effect largely explains the influence of socio-economic background on student's achievement. In the group of countries in the middle of the figure the two effects are fairly balanced. For details, see Causa and Chapuis (2009).

Source: OECD calculations based on the 2006 OECD PISA Database.

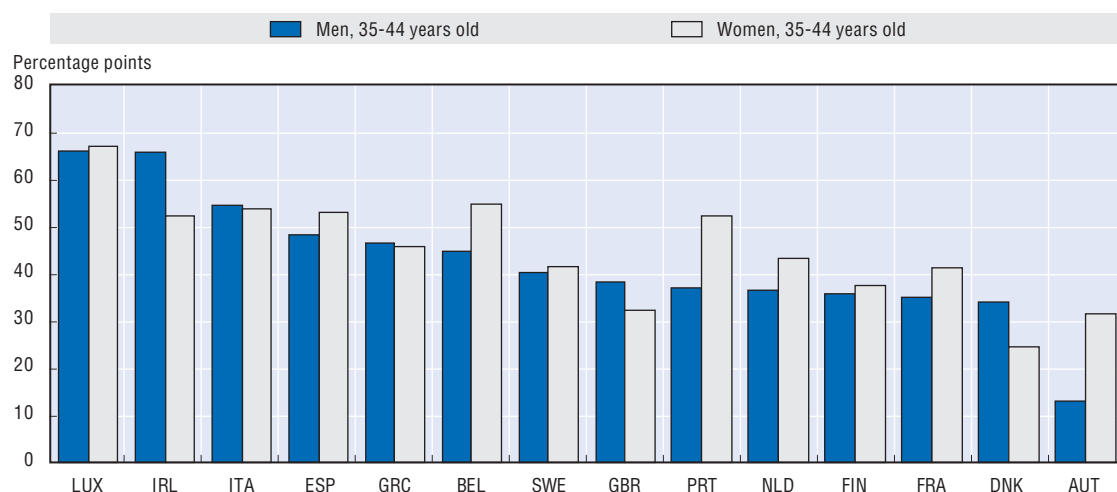
StatLink <http://dx.doi.org/10.1787/784787325068>

least 30 percentage points in Luxembourg, Italy, Finland and Denmark, while the decrease in probability is more than 30 percentage points in Ireland and Greece.

A summary indicator of persistence in tertiary education is the overall gap between the increase and decrease in the probability of achieving tertiary education when coming from a higher-educated and lower-educated family, respectively. A larger gap implies stronger intergenerational persistence in tertiary education (Figure 5.5). According to this metric, persistence in sons' education is relatively high in Luxembourg, Ireland and in most southern European countries, possibly reflecting financial and other constraints in access to post-secondary education, but also that inequalities in secondary education give rise to learning deficits that hinder students in qualifying for higher education. Persistence in tertiary education across generations for daughters follows a pattern similar to that of sons.

There is also persistence in below upper secondary education across generations

There is also persistence in below upper secondary education across European OECD countries. The probability of achieving below upper secondary education is, on average across countries, 18 percentage points higher for a son or daughter whose father had below upper secondary education compared to a descendant whose father had upper secondary education. Conversely, the probability of achieving below upper secondary education decreases, on average, by 10 percentage points for the descendant of tertiary-educated

Figure 5.5. **Summary measure of persistence in tertiary education for some OECD countries¹**

1. Persistence in tertiary education is measured as the distance between the estimated probability to achieve tertiary education of an individual whose father had also achieved tertiary education and the probability to achieve tertiary education of an individual whose father had below upper secondary education. A larger number implies a larger gap, thus stronger persistence in tertiary education or a lower degree of educational mobility across generations. For details see Causa et al. (2009).

Source: OECD calculations based on the 2005 EU-SILC Database.

StatLink  <http://dx.doi.org/10.1787/784787325068>

fathers compared with children whose fathers had upper secondary education. Persistence can be summarised by the difference in these probabilities, which is 28 percentage points on average, but varies widely across countries (Figure 5.6). Persistence in below upper secondary education is relatively high in certain southern European countries, Ireland and Luxembourg, while it is lower in Austria, some Nordic countries, France and the United Kingdom.

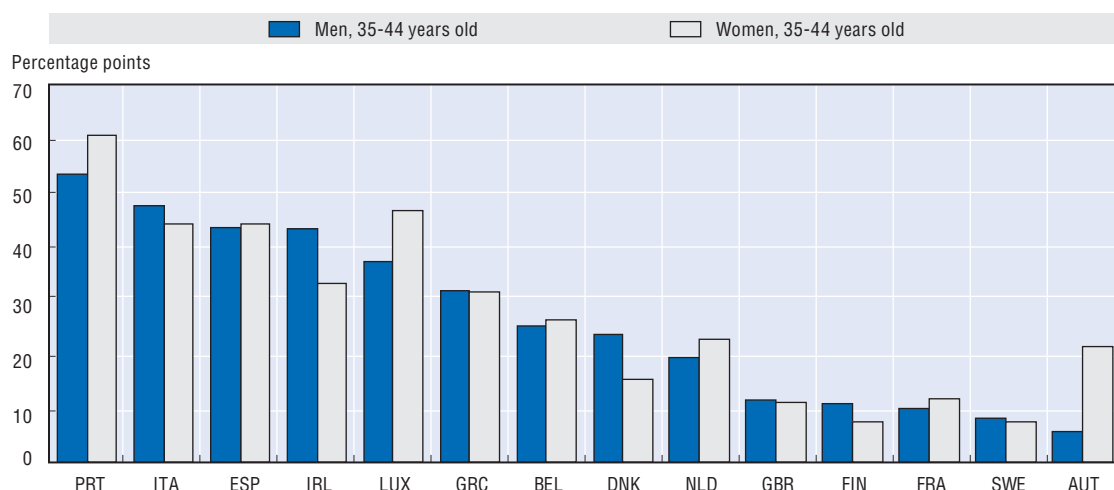
How do policies and institutions affect intergenerational social mobility?

Policies and institutions are only a few among many factors affecting intergenerational social mobility, but OECD analysis suggests they explain some of the differences in mobility observed across countries. They include policies that affect access to education and those that influence (intra-generational) wage and income inequality.¹¹

Mobility depends more on how resources are spent for schooling rather than how much

The sheer amount of schooling resources and inputs is found to be only weakly associated with student performance. For instance, cross-country evidence suggests that increases in spending on secondary education or in other measureable school inputs (e.g. reductions in class size) do not yield large benefits in terms of reducing the influence of socio-economic background on students' performance in secondary education. By contrast, the ability to prioritise and allocate resources efficiently, as measured for instance by new OECD indicators (Sutherland and Price, 2007) capturing the degree of decentralisation and the existence of mechanisms matching resources to specific needs, are associated with a lower influence of parents' socio-economic background on

Figure 5.6. **Summary measure of persistence in below upper secondary education for some OECD countries¹**



1. Persistence in below upper secondary education is measured as the distance between the estimated probability to achieve below upper secondary education of an individual whose father also had below upper secondary education and the probability to achieve below upper secondary education of an individual whose father had achieved tertiary education. A larger number implies a larger gap, thus stronger persistence in below upper secondary education or a lower degree of mobility across generations. For details see Causa et al. (2009).

Source: OECD calculations based on the 2005 EU-SILC Database.

StatLink  <http://dx.doi.org/10.1787/784787325068>

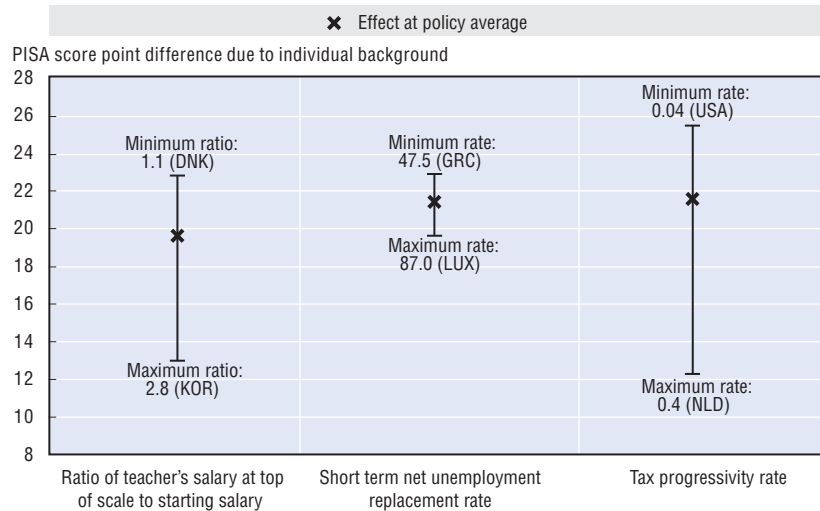
student achievement in secondary education. An exception to the limited role for schooling resources is the gain from lengthening of compulsory education at both ends (see below).

Teacher quality matters not only for average student performance but also for equality of opportunities in secondary education. Frequent suggestions for improving teacher quality include raising overall salary levels, increasing salaries in the most disadvantaged schools and areas, or introducing some type of performance-based pay schedule. Suggestive new evidence from cross-country analysis indicates that the influence of socio-economic background on a student's achievement in secondary school is lower in countries where teachers' wage profiles are steeper over their career, possibly because larger expected wage increases incentivise teachers (Figure 5.7, left).¹² At the same time, practical difficulties in designing and implementing cost-effective, incentive-based pay schedules for teachers should not be underestimated.

Early childhood education and care can promote intergenerational social mobility

There is a rising body of economic and educational research pointing to the importance of early childhood care and education for the development of cognitive skills at later stages in life. Hence, compulsory enrolment in quality early childhood education and care could possibly promote intergenerational social mobility. Indeed, new OECD cross-country empirical evidence suggests that greater enrolment in early childcare and education (day-care and pre-school), as well as higher spending on childcare and early education, are correlated with a lower influence of socio-economic background on students' secondary education achievement (Figure 5.8, left).

Figure 5.7. **Teachers’ pay, social and tax policies shape the effect of individual parental background on secondary education achievement**¹

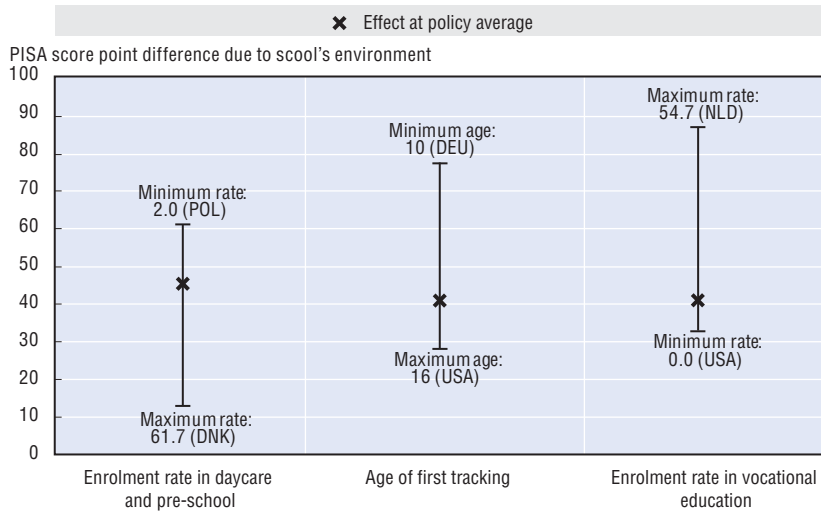


1. Each bar represents the change in the individual background effect associated with a change from the least to the most mobility-friendly level of the policy (based on OECD countries' policies distribution, excluding Mexico and Turkey). The scale of PISA score in this figure differs from that of Figure 5.8. For details see Causa and Chapuis (2009) and Causa and Johansson (2009).

Source: OECD calculations based on PISA 2006 Database.

StatLink <http://dx.doi.org/10.1787/784787325068>

Figure 5.8. **Early childcare and education policies shape the effect of the school socio-economic environment on secondary education achievement**¹



1. Each bar represents the change in the school environment effect associated with a change from the least to the most mobility-friendly level of the policy (based on OECD countries' policies distribution, excluding Mexico and Turkey). The scale of PISA score in this figure differs from that of Figure 5.7. For details see Causa and Chapuis (2009).

Source: OECD calculations based on PISA 2006 Database.

StatLink <http://dx.doi.org/10.1787/784787325068>

School practices that group students at early ages tend to undermine social mobility

School practices or systems that start grouping or “tracking” students early on in their educational curricula are associated with larger socio-economic inequalities in secondary

educational performance, without any gains in average performance. The influence of socio-economic background on students' achievement in secondary education tends to be comparatively higher in countries where tracking and/or ability-grouping within schools occur earlier. OECD evidence suggests that moving from a practice that separates students into different schools at age ten to a practice that separates students at age sixteen would reduce by two-thirds the influence of the school socio-economic environment on students' achievement (Figure 5.8, centre).

Vocational education in secondary education varies across OECD countries in terms of its design and success in equipping individuals with the necessary skills needed on the labour market. This needs to be kept in mind when discussing the concern that vocational education within secondary education could end up grouping “weak/disadvantaged” students into programmes that limit their future learning possibilities in a similar way as tracking. For example, OECD estimates suggest that, on average across countries, higher enrolment in vocational education is associated with a larger influence of socio-economic background on students' performance in secondary education (Figure 5.8, right).

Increasing the social mix of students within schools could enhance mobility

Housing market and urban planning outcomes sometimes lead to the geographical concentration of disadvantaged households in particular housing estates. In turn, such residential socio-economic separation is often matched by schooling separation, primarily because a large proportion of students tend to attend schools in their own neighbourhood. The tendency of housing prices to internalise school quality further exacerbates this phenomenon. According to suggestive new OECD evidence (Causa and Chapuis, 2009), increasing the social mix of students within schools could increase the relative performance of disadvantaged students, without any apparent negative effects on overall performance. Therefore, education, housing and urban planning policies that encourage the social mix within neighbourhoods could play a role in mitigating educational socio-economic inequalities and raise social mobility.

The design of loan and student support systems can ease financial constraints and promote mobility in tertiary education

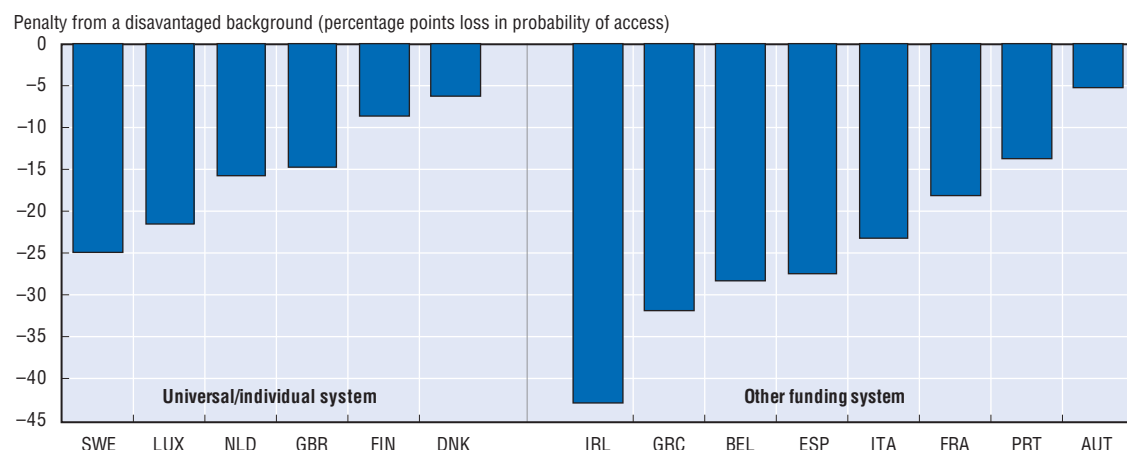
The presence of credit constraints may hold back investment in tertiary education for able individuals from disadvantaged or low-income families and thereby be an obstacle to upward social mobility. The design of student loan and support systems can help mitigate these constraints. In countries where such funding is available to all students (so-called universal/individual systems), the probability for an individual from a lower-educated family to achieve tertiary education is higher compared with the probability observed in countries relying on other types of funding and loan systems (Figure 5.9). This suggests that government-supported loan or grant systems may reduce students' dependence on their families for financing their post-secondary studies and alleviate financial constraints, thus promoting intergenerational social mobility.

Policies and institutions can also influence social mobility by affecting intra-generational income inequality

The link between intra-generational income inequality and intergenerational social mobility is complex because higher inequality can have conflicting effects on mobility. However, recent research tends to show that higher inequality is associated with lower

Figure 5.9. Education funding systems matter for access to tertiary education for individuals from disadvantaged backgrounds¹

Men, 35-44 years old



1. The figure shows the estimated percentage points decrease in the probability of a son achieving tertiary education given that the son's father had achieved below upper secondary education, relative to a son whose father had upper secondary education. For details see Causa et al. (2009) and Causa and Johansson (2009).

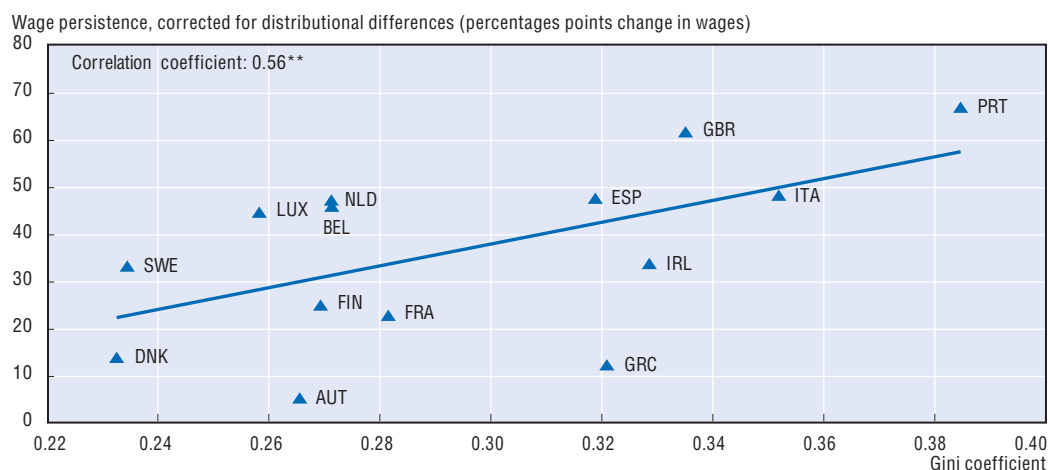
Source: OECD calculations based on the 2005 EU-SILC Database, Oliveira Martins et al. (2007).

StatLink <http://dx.doi.org/10.1787/784787325068>

intergenerational mobility (e.g. Björklund and Jäntti, 1997; Solon, 2004; Corak 2006; d'Addio 2007; Andrews and Leigh 2009). One explanation is that with higher wage or income dispersion, returns to education are also higher and this may especially benefit individuals whose investment in education is not constrained by family background.¹³ One channel through which public policies and institutions could, therefore, influence intergenerational social mobility is by affecting intra-generational income and wage inequality. Indeed, narrower cross-sectional income inequality (at a given point in time) is associated with lower intergenerational persistence in wages across European OECD countries (Figure 5.10). OECD evidence for a larger set of OECD countries also shows that greater income equality is associated with a lower influence of family socio-economic background on students' achievement in secondary education.

Redistributive and income support policies seem to enhance intergenerational social mobility

Progressive tax systems and social transfer programmes help defray the opportunity costs to parents in poor households of investing in the education of their children. In some countries, there exist social transfer programmes that are specifically directed to paying part of such costs. Such redistributive policies could thus reduce current income inequalities across parents so that their descendants' income would converge more quickly. Cross-country evidence suggests that higher progressivity in the personal income tax schedule correlates with a lower influence of socio-economic background on students' achievement in secondary education, as well as with a lesser influence of fathers' educational attainment on individuals' wages (Figures 5.7 and 5.11, right).¹⁴ In a similar way, higher short-term net unemployment benefits are found to be associated with a lesser influence of socio-economic background on students' achievement in secondary education (Figure 5.7, centre). Consistent with this evidence, European OECD countries with relatively

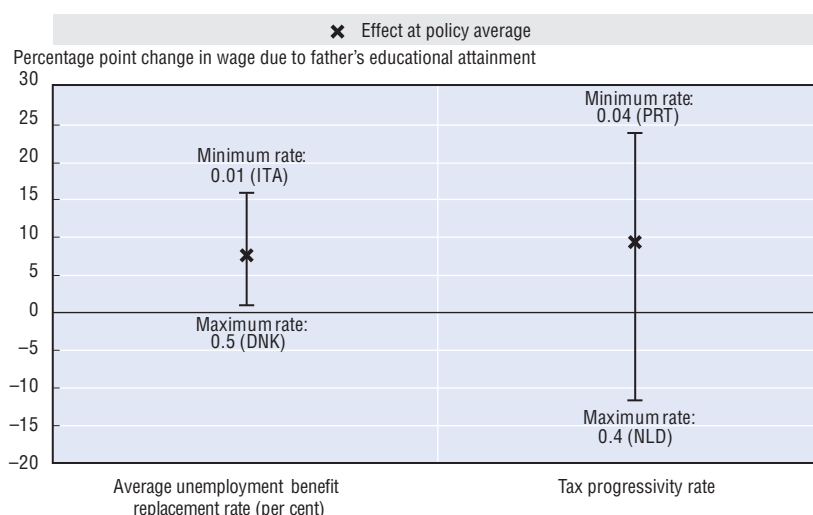
Figure 5.10. **Intergenerational social mobility tends to be lower in more unequal societies¹**Correlation between inequality and intergenerational wage persistence
Men, 35-44 years old

1. Wage persistence is measured as the distance or gap between the estimated wage of an individual whose father had achieved tertiary education and the wage of an individual whose father had achieved below upper secondary education. A larger number implies a larger gap, thus stronger persistence in wages or a lower degree of mobility across generations. The summary measure corrected for distributional differences corresponds to summary measure of wage persistence, multiplied by the ratio of the standard deviation of fathers' education to the standard deviation of sons' or daughters' gross hourly wage. Inequality is measured by the Gini coefficient of disposable household income adjusted for household size.

** denotes significant at 5%. For details see Causa et al. (2009) and Causa and Johansson (2009).

Source: OECD calculations based on the 2005 EU-SILC Database and *Growing Unequal?* (OECD, 2008).

StatLink <http://dx.doi.org/10.1787/784787325068>

Figure 5.11. **Social and tax policies also seem to shape the effect of a father's educational attainment on his son's wage¹**

1. Each bar represents the change in the parental background (father's level of education) effect associated with a change from the least to the most mobility-friendly level of the policy (based on the European OECD countries' policies distribution). For details see Causa et al. (2009) and Causa and Johansson (2009).

Source: OECD calculations based on the 2005 EU-SILC Database.

StatLink <http://dx.doi.org/10.1787/784787325068>

higher levels of average unemployment benefits seem to exhibit higher levels of intergenerational wage mobility (Figure 5.11, left).

Concluding remarks

In this chapter, intergenerational social mobility is measured in alternative ways (e.g. wage mobility, secondary and post-secondary education mobility), given that no single indicator can provide a comprehensive picture. One pattern that emerges is that a group of countries appears to be relatively immobile along most dimensions (e.g. southern European countries and Luxembourg) while another group tends to be relatively mobile (e.g. Nordic countries). In general, however, the extent of mobility in a given country may differ along these various dimensions. In the United Kingdom, for instance, wage and earnings mobility are found to be low in international comparison compared to mobility in tertiary education. Likewise, in France the influence of family background on students' achievement in secondary education appears to be much stronger than that of parental background on individuals' probability to achieve tertiary education.

Policies that facilitate access to education of individuals from disadvantaged family backgrounds promote intergenerational wage mobility, and are also likely to be good for economic growth. Examples include *inter alia* school practices that start grouping or "tracking" students only late in their educational curricula so as to encourage the social mix within schools, or government-supported loan or grant systems that reduce students' dependence on their families for financing their post-secondary studies.

Notes

1. Faster economic growth could also have positive feedback effects on intergenerational mobility insofar as the opportunities it creates benefit disproportionately the disadvantaged.
2. The relative importance of "nature" versus "nurture" in explaining intergenerational social mobility is far from established (e.g. Sacerdote, 2002; Plug and Vijverberg, 2003).
3. This chapter is also based on analyses reported in Causa and Chapuis (2009) and Causa, Dantan and Johansson (2009). These papers provide extensive references to the literature on intergenerational social mobility.
4. The implicit assumption is that such attainment is a good proxy for parents' permanent income, which is reasonable given the close link between education and income. Basing the assessment of wage persistence on gross hourly wages means that labour supply decisions are not taken into account, and the obtained persistence measure can be thought to reflect the impact of parental background on productivity.
5. The empirical regression analysis is performed separately for men and women, by cohort (25-34, 35-44 and 45-54 years old) and country. The results are presented for the 35-44 year old cohort in order to reduce life-cycle measurement error in individuals' economic outcomes (Haider and Solon, 2006). Details on the empirical result for other cohorts are presented in Causa et al. (2009).
6. In the analysis, only wage earners are included. This may potentially exaggerate the degree of intergenerational wage mobility, to the extent that the descendants of higher-educated families are less likely to be inactive than those of lower-educated families.
7. Intergenerational social mobility in France measured by the influence of fathers' educational achievement on individuals' wages is higher than mobility measured by the strength of the link between earnings of pairs of fathers and sons. One possible explanation for this could be that the former measure overstates mobility, because the group of fathers with tertiary education does not distinguish between those with a university degree and those with a degree from a "Grande École". It is possible that the wage gain from having a father with a Grande École degree is larger than that from having a university-educated father.

8. The analysis of wage and adult education persistence is based on the SILC poverty module of Eurostat's survey data, which only covers European OECD countries.
9. See Solon (2004), Blanden et al. (2005, 2006) and d'Addio (2007) for a discussion of the importance of education for intergenerational social mobility.
10. Students' socio-economic background is captured here by an index that includes parents' educational attainment as well as a number of other factors shaping the family's social, economic and cultural status.
11. Other potentially relevant policies such as affirmative action could not be considered in the analysis.
12. It should, however, be recognised that such wage profiles may not capture performance-based pay systems, but rather constitute a proxy for cross-country differences in "seniority wage profiles".
13. This effect would appear to override the opposite effects that inequality may have on mobility, for instance by raising incentives to enhance effort and improve productivity.
14. The measure of tax progressivity is the difference between the marginal and average personal income tax rates, divided by one minus the average personal income tax rate, for an average single worker.

Bibliography

- Andrews, D. and A. Leigh (2009), "More Inequality, Less Social Mobility", *Applied Economics Letters*, Vol. 16.
- Björklund, A. and M. Jäntti (1997), "Intergenerational Income Mobility in Sweden Compared to the United States", *American Economic Review*, Vol. 87, No. 5.
- Blanden, J., P. Gregg, and S. Machin (2005), "Intergenerational Mobility in Europe and North America", Report supported by the Sutton Trust, Centre for Economic Performance, London School of Economics.
- Blanden, J., P. Gregg, and L. Macmillan (2006), "Accounting for Intergenerational Income Persistence: Non-Cognitive Skills, Ability and Education", *CEE Discussion Papers*, No. 73.
- Bourguignon, F., Ferreira, F and M. Menendez (2003), "Inequality of Outcomes and Inequality of Opportunities in Brazil", *DELTA Working Papers*, No. 2003-24.
- Causa, O. and Å. Johansson (2009), "Intergenerational Social Mobility", *OECD Economics Department Working Papers*, No. 707.
- Causa, O. and C. Chapuis (2009), "Equity in Student Achievement across OECD Countries: An Investigation of the Role of Policies", *OECD Economics Department Working Papers*, No. 708.
- Causa, O., S. Dantan, and Å. Johansson (2009), "Intergenerational Social Mobility in European OECD Countries", *OECD Economics Department Working Papers*, No. 709.
- Corak, M. (2004), "Generational Income Mobility in North America and Europe", Cambridge, UK: Cambridge University Press.
- Corak, M. (2006), "Do Poor Children Become Poor Adults? Lessons from a Cross Country Comparison of Generational Earnings Mobility", *IZA Discussion Paper*, No. 1993.
- D'Addio, A. (2007), "Intergenerational Transmission of Disadvantage: Mobility or Immobility Across Generations? A Review of the Evidence for OECD countries", *OECD Social, Employment and Migration Working Papers*, No. 52.
- Haider, S. and G. Solon (2006), "Lifecycle Variation in the Association between Current and Lifetime Earnings", *American Economic Review*, Vol. 96.
- OECD (2008), *Growing Unequal? Income Distribution and Poverty in OECD Countries*, Paris.
- Oliveira Martins, J., R. Boarini, H. Strauss, C. de la Maisonneuve, C. Saadi (2007), "The Policy Determinants of Investment in Tertiary Education", *OECD Economics Department Working Papers*, No. 576.
- Plug, E. and W. Vijverberg (2003), "Schooling, Family Background, and Adoption: Is it Nature or is it Nurture?", *Journal of Political Economy*, Vol. 111.

- Sacerdote, B. (2002), "The Nature and Nurture of Economic Outcomes", *American Economic Review*, American Economic Association, Vol. 92.
- Solon, G. (2002), "Cross-Country Differences in Intergenerational Income Mobility", *Journal of Economic Perspectives*, Vol. 16.
- Solon, G. (2004), "A Model of Intergenerational Mobility Variation over Time and Place", in Miles Corak (ed.), *Generational Income Mobility in North America and Europe*. Cambridge, UK: Cambridge University Press.
- Sutherland, D. and R. Price (2007), "Linkages Between Performance and Institutions in the Primary and Secondary Education Sector, Performance Indicators", *OECD Economics Department Working Papers*, No. 558.

PART II

Chapter 6

Getting it Right: Prudential Regulation and Competition in Banking

Stability and competition are both desirable features of a well-functioning banking sector. The importance of banking sector stability has been highlighted by the recent financial crisis, while gains from competition, in terms of efficient financial intermediation and access of firms and households to finance, are well established. Based on indicators of different aspects of prudential regulation for banking prior to the crisis, this chapter finds little evidence that the two objectives of stability and competition conflict with each other, with one exception being the anti-competitive effect of stringent entry and ownership regulations. A stronger banking supervisor even seems to strengthen competition, as it is found to potentially reduce the cost of credit faced by borrowers.

Introduction and main findings

The recent financial crisis and its subsequent impact on growth and employment have been a forceful reminder of the vital role of prudential regulation in financial markets for overall economic stability. At the same time, when evaluating the current proposals and actions to strengthen prudential regulation frameworks, attention needs to be paid to preserving the well-established benefits from financial market competition.¹ Competition matters for efficient financial intermediation and for the quality of financial products. It can also facilitate access of firms and households to external financing and financial services,² with potentially far-reaching consequences for economic growth and living standards. As a consequence, even if it maximises stability, prudential regulation that excessively harms competition cannot be a desirable strategy. Inasmuch as there may be trade-offs between stability and competition regulatory reform will have to strike the right balance.

Against this background, this chapter explores possible trade-offs between stability and competition objectives.³ The analysis relies on a set of indicators of different aspects of prudential regulation that are constructed from qualitative information on pre-crisis policy stances.⁴ The main findings are as follows:

- Relationships between the indicators of prudential regulation and summary measures of competition in banking do not in general point to prudential regulation as having adverse effects on the strength of competition. There may thus be no general trade-off between financial sector stability and competition objectives.⁵ Some areas of prudential regulation, most notably the strength of the banking supervisor, appear to have even been associated with greater competition in banking, possibly because strong supervision has helped to level the playing field across all competitors. Taken at face value, the empirical analysis suggests that increasing the strength of the supervisor can reduce the average cost of credit faced by borrowers by a few tenths of a percentage point.
- In a few specific areas, however, the findings indicate that a trade-off may be present between the strength of prudential regulation and competition. In particular, stricter provisions on entry and ownership appear to have weakened competition. More stringent rules in this area might add up to several tenths of a percentage point to the average cost of credit.
- How a given aspect of prudential regulation affects competition in banking seems to depend on the strength of supervision. For example, where supervisors are strong, stricter capital requirements or a more credible threat of forced exit are found to go along with more competitive banking systems. The reverse is true when the supervisors are weak. Likewise, strong supervisors seem to mitigate the anti-competitive effects of stringent entry and ownership regulations.

Prudential banking regulation

The regulatory indicators are based on an information set collected by the World Bank covering answers to over 100 individual questions and assessments in different areas of prudential regulation prior to the recent crisis. They have been constructed for the banking sectors of OECD and selected non-OECD countries⁶ and cover the following broad areas of regulation: capital requirements, liquidity and diversification requirements, accounting and provisioning requirements, external auditing and information disclosure requirements, entry rules and ownership structures, exit rules and disciplining devices, depositor protection, and the strength of the supervisory authority (see Box 6.1).⁷ However, there are areas for which insufficient or no comparable cross-country information is available, and which as a result are not covered by the indicators. Some of these areas have featured prominently in recent policy discussions following the crisis, such as off-balance-sheet exposure, possibilities for accounting arbitrage, links between commercial and investment banking activities, incentives built into remuneration systems, or macro-prudential regulations. The quality of the actual regulatory system may also differ from the strength of regulations for a variety of reasons, including influences of particular interests on regulators or insufficient institutional capacity in administration.⁸ For example, the focus on existing regulations and *a priori* measures of supervisory strength can only partly capture the actual strength of on-site and off-site monitoring carried out by prudential authorities, such as for liquidity monitoring. Also, regulatory consistency may be important, implying the need to see each component of regulation as an element of a country's whole regulatory system. The individual area indicators of prudential banking regulation are, however, relatively well correlated with measures of financial soundness and stability,⁹ suggesting that they indeed capture some of the cross-country differences in the stance of prudential regulation.

In the areas of regulation covered by the indicators, prudential regulation appears to have been strengthened on average across the OECD over the 1998-2002 period and weakened thereafter, the main exception being an increase in the strength of the supervisor in both periods. Overall, the post-2002 weakening seems to have been less marked than the pre-2002 strengthening (Figure 6.1).

Prudential regulation and competition in banking

The primary objective of prudential banking regulation is to ensure financial stability. However, in the ongoing revamping of financial frameworks, attention should be focused not only on reacting to the significant shortcomings that contributed to the crisis, but also on ensuring that the new system will be efficient. This could in theory be difficult to the extent that too-strict regulations have efficiency costs because of their negative impact on the strength of competition. This would compound the challenges to competition posed by amplified concentration, as well as the increased public ownership and intervention in the financial industry that have occurred in the wake of the crisis.

OECD empirical evidence based on pre-crisis regulation is not, however, suggestive of any generalised trade-off between the financial stability and competition objectives for the banking sector – with corresponding evidence for the insurance sector leading to broadly similar conclusions (see Box 6.2). OECD analysis based on net interest margins – one of several possible indicators of competition outcomes¹⁰ – could not, for most areas of prudential regulation, identify prejudice to competition outcomes. More stringent exit and disciplining

Box 6.1. Underlying indicators and empirical analysis

Prudential regulation indicators have been constructed for eight thematic areas based on survey information collected by the World Bank. These areas cover the following issues, *inter alia*:

Capital requirements include minimum capital to asset ratios, variations of capital to asset ratios according to individual banks' credit, market or operational risks, the application of simple leverage ratios, the acceptability of subordinated debt and the use of revaluation gains as capital.

Liquidity and diversification requirements include limits on exposures to single or related borrowers, limits on sectoral concentration of lending and liquidity reserves.

Accounting and provisioning requirements include information on accounting standards, definitions of nonperforming loans, and disclosure of off-balance sheet items.

External auditing and information disclosure requirements include details on external auditing requirements and their disclosure to supervisors, as well as the scope of legal action against auditors in the case of negligence and against directors in the case of erroneous or misleading information.

Entry rules and ownership structures includes information on the granting procedure and requirements for entry licenses, disclosure of and limitations on the source of funds, ownership restrictions for related parties, limits to engagement in securities, insurance and real estate activities, and limits to foreign lending and ownership of nonfinancial voting shares by banks.

Exit rules and disciplining devices include measures relating to the forced exit of banks, bankruptcy procedures for banks, and the powers of supervisors to override management decisions if the solvency of a bank is under threat.

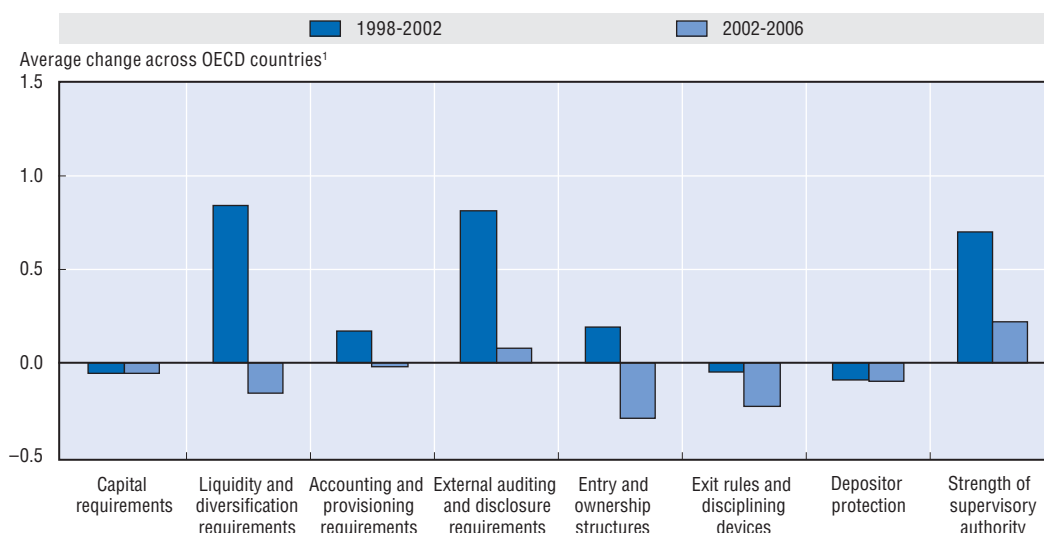
Depositor protection includes facts on the existence and limits of explicit deposit insurance protection systems, the collection of premia to such schemes, and whether fees depend on banks' risk profiles and co-insurance provisions.

Strength of the supervisory authority includes the budget and number of professional supervisors of the authority relative to the size of the sector, the number and frequency of onsite inspections, the ability of supervisors to change banks' internal organisation structures, the protection of the supervisory agency from political interference and the protection of individual agency staff from law suits by banks.

The indicators form the basis for two sets of OECD empirical analyses presented in Ahrend *et al.* (2009). The first part of the analysis, which is the focus of this chapter, explores the link between indicators of prudential regulation and competition measures in the banking and insurance industries. This focus on the link from stability-oriented regulation to competition is novel although it relates to existing literature that has tried to evaluate the link from competition to stability in banking.* The second part of the study relates bank share price developments before and after the recent financial crisis, as well as estimates of the potential net fiscal costs of bank rescue packages, to prudential regulation indicators and finds that banks in countries with stricter prudential regulation seemed to experience less of a run-up in share prices before the financial crisis but also less of a collapse afterwards with the net effect being positive overall.

* Surveying the evidence, Beck (2008) argues that, even though the issue is theoretically ambiguous, and in spite of some conflicting empirical evidence, the literature mostly points to a positive relationship between competition and stability in banking. Schaek *et al.* (2009) find a positive relationship between bank competition and banking system stability, while Schaek and Cihak (2007) find bank capitalisation of European banks to be higher in more competitive environments. Beck *et al.* (2006a, b) find that banking systems with more restrictions on entry and conduct are more vulnerable to systemic banking distress. In contrast, Jimenez *et al.* (2007) find that lower loan market power is associated with more risk taking.

Figure 6.1. **Past increases in prudential banking regulation were partly reversed in the first half of the 2000s**



1. Changes are measured in units of one standard deviation.

Source: Calculations based on Ahrend et al. (2009).

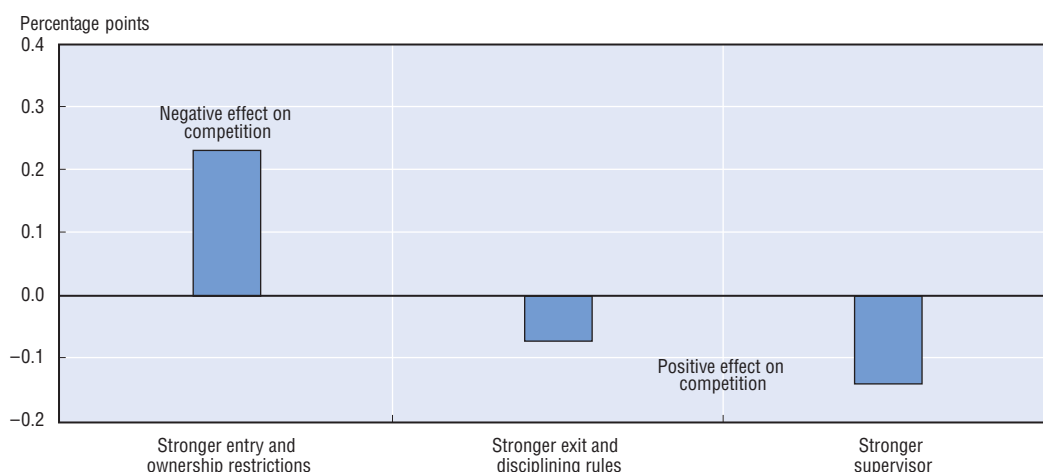
StatLink  <http://dx.doi.org/10.1787/786661265275>

rules, as well as stronger and more independent supervisory bodies, are even found to be associated with greater banking competition. For example, taken at face value, the results imply that increasing the strength of the supervisory agency from a moderately low (in a cross-country setting) to a moderately high level may reduce interest margins, and with them the average cost of credit faced by borrowers, by around 0.15 percentage points (Figure 6.2). In addition, a similar increase in the strength of exit and disciplining rules would reduce margins by close to 0.1 percentage points. The analysis also suggests that heterogeneous levels of stringency across different areas of prudential regulation could hamper competition.

There may be trade-offs in some policy areas, however. In particular, more stringent entry and ownership restrictions across countries are associated with higher net interest margins in the banking sector, consistent with the view that such regulations hamper competition.¹¹ The size of this effect may be close to a quarter of a percentage point in the case of a change from a moderately low to a moderately high level of restrictions.

Splitting – on a judgemental basis – individual regulations at a detailed level into potentially competition-adverse and remaining (competition-neutral or competition-friendly) categories also does not produce evidence for a general trade-off between the strength of regulation and competition. An indicator aggregating all potentially competition-adverse regulations is associated with less competition, and an indicator aggregating the remaining regulations is actually positively related to competition outcomes (see Ahrend et al., 2009, for details). One interpretation for the latter result may be that many prudential regulations contribute to leveling the playing field for all banks. The overwhelming share of prudential regulations are *a priori* not potentially competition adverse, although the incidence of potentially competition-adverse measures across different areas of prudential regulation is highly uneven (Figure 6.3). Whereas for half of the regulatory areas all individual regulations can be classified as competition-neutral or competition-friendly, competition-adverse prudential regulations are especially common

Figure 6.2. **Different prudential rules have different effects on competition as measured by low net interest margins¹**



1. Bars represent the effect on net interest margins of increasing the strength of prudential regulation in the respective area from the level of a country with moderately low regulation to the level of a country with moderately high regulation. Moderately high regulation is defined as the level of a country with stricter rules than three quarters of the 40 countries covered, while moderately low regulation is the level of a country with less stringent rules than three quarters of the countries.

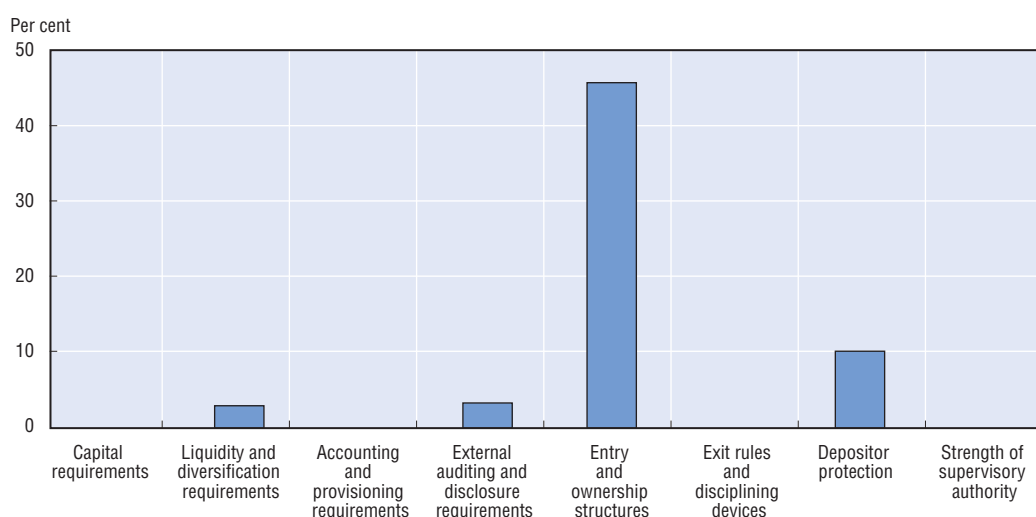
Source: Calculations based on Ahrend et al. (2009).

StatLink <http://dx.doi.org/10.1787/786661265275>

in the area of “Entry Rules and Ownership Structures”, i.e. in the form of barriers to entry and ownership.

The strength of the supervisor matters for the competition effects of other prudential rules. More broadly, different areas of prudential regulation seem to interact in how they affect banking competition, i.e. the effect of one regulatory policy on competition could

Figure 6.3. **Few prudential rules are competition adverse a priori**
Share of individual regulations that are potentially competition-adverse by regulatory area



Source: Calculations based on Ahrend et al. (2009).

StatLink <http://dx.doi.org/10.1787/786661265275>

Box 6.2. Insurance sector

For the insurance sector there is no dataset on prudential regulation comparable to that for the banking sector. Even so, it is possible to use available information to explore possible links between regulation and competition. More specifically, indicators of prudential regulation in the insurance sector have been constructed for OECD countries based on the degree of compliance with the Insurance Core Principles issued by the International Association of Insurance Supervisors, as assessed by the International Monetary Fund in the context of the Financial Sector Assessment Program (FSAP).¹

Insurance core principles deal with the quality of insurance sector regulation and supervision in five main areas for which indicators can be constructed: resources and powers of the supervisor; licensing and corporate governance requirements; the extent of actual ongoing supervision; prudential capital requirements; and market practices surveillance. An overall index, summing up regulations in these five areas is also constructed, as are separate indices for life and non-life insurance. Life and non-life insurance are very different in nature, with life insurance often fulfilling investment rather than proper insurance functions. Net underwriting margins are used as the preferred measure of competition for the overall insurance sector, as well as for life and non-life insurance separately.²

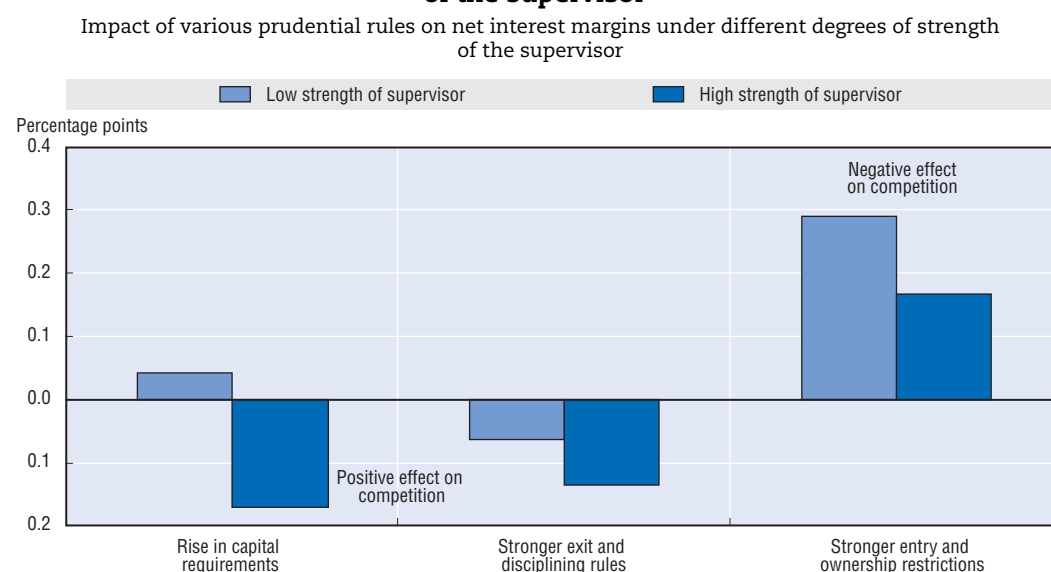
As for the banking sector, empirical analysis for most elements of stability-oriented insurance regulation found either no link with competition, or even signs that stricter regulation might strengthen competition. The empirical evidence points, however, to a stronger regulatory stance on ongoing supervision being associated with higher net margins in life insurance, which could be seen as a sign of weaker competition. This finding is not straightforward to interpret but may be connected to possible incentive problems in the life insurance sector that suggest the trade-off may be more apparent than real.³

1. The information based on FSAP reports is qualitatively different from the survey-based information for the banking sector which refers to details on specific regulations. Each compliance assessment aggregates a fairly large amount of information on the regulatory situation in a given field, while also incorporating a certain amount of judgment by the assessors. In contrast to the comprehensive country coverage of the World Bank survey data, complete FSAP information is not available for all OECD countries. The fact that FSAP reports reflect regulatory stances in different base years and have been compiled by different teams is likely to have some implications for comparability across countries.
2. The net underwriting margin, which is compiled from the OECD Insurance Statistics, is calculated as gross premiums earned by insurers minus gross claims paid to policyholders, divided by gross premiums.
3. With large numbers of life insurance plans being *de facto* savings or pension plans, promising overly optimistic payouts may increase the market share of a company. The resulting collection of insufficient premia may be reflected in (overly) low underwriting margins. Even though the pursuit of such a strategy would not be in the long-term interest of shareholders, it may well be in the (short-term) interest of a company's management. Successful regulation would prevent such practices, and this could result in countries with stronger ongoing supervision having higher underwriting margins and a lower measured degree of competition in the life-insurance sector.

depend on regulatory stances in other areas. For instance, the empirical analysis suggests that stronger capital requirements could hamper competition where supervisors are weak, possibly because they can be abused to create an uneven playing field and distort competition when not enforced properly. For example banks with stronger lobbying power might in the absence of proper enforcement gain a competitive advantage by not holding the required amount of capital. More stringent capital requirements, however, would seem to support competition where supervisors are sufficiently strong. The strength of the supervisor is also found to dampen the competition-adverse effect of entry and ownership

regulations, almost fully offsetting it where the supervisory authority is very strong. This could indicate that a competition-adverse effect of entry and ownership rules can be mitigated if those rules are administered properly, but that such rules can be exploited to distort competition in weaker institutional environments. Along the same lines, exit and disciplining rules appear to be more beneficial for competition the stronger the supervisory institution, suggesting that the potential benefit from such rules – from a competition perspective – may depend on proper enforcement (Figure 6.4). Finally, strict accounting and provisioning rules seem more competition-friendly the more banks are required to disclose information, and the stronger the requirements for subjecting their accounts to external audits.

Figure 6.4. **The effects of prudential rules on competition depend on the strength of the supervisor¹**



1. Bars represent, for two possible levels of strength of the supervisor, the effect on net interest margins of increases in prudential regulation in various areas (capital requirements, exit and disciplining rules, and entry and ownership restrictions) from moderately low to moderately high regulation, defined as a move from the first to the third quartile of the relevant regulatory stance across countries. Light bars represent this effect when the strength of supervisors is moderately low, while dark bars show the same effect when the strength of supervisors is moderately high. Moderately high regulation corresponds to the level of a country with stricter rules than three quarters of the 40 countries covered, while moderately low regulation is the level of a country with less stringent rules than three quarters of countries.

StatLink  <http://dx.doi.org/10.1787/786661265275>

Notes

1. These are suggested by both economic theory and empirical evidence. For evidence see *e.g.* *Going for Growth* 2006, de Serres *et al.* (2006), Stiroh and Strahan (2003) or Jayaratne and Strahan (1996).
2. See *e.g.* Beck *et al.* (2008), Cetorelli and Strahan (2006), or Black and Strahan (2002).
3. This chapter is based on Ahrend, Arnold and Murin (2009).
4. Constructing indicators of prudential regulation faces the challenges inherent in any indicator building exercise, namely the intrinsic difficulty of transforming qualitative into quantitative data. These issues have been extensively discussed in the past for other areas of regulation, as for example in the construction of the OECD Product Market Regulation (PMR) indicators or the OECD FDI restrictiveness index.

5. OECD (2009) even argues that competition itself is good for financial stability because it limits the number of firms that are “too big to fail”.
6. The non-OECD countries covered in the analysis are: Brazil, Chile, China, Estonia, India, Indonesia, Israel, Russia, Slovenia, and South Africa. World Bank surveys on banking regulation were released in 2007, 2003 and 2001, and cover the periods 2005/2006, 2001/2002 and 1998/2000, respectively. OECD member and candidate countries for accession (Chile, Estonia, Israel, Russia, and Slovenia) were given the opportunity to verify and correct the data used in the construction of the indicators. For a number of countries revisions turned out to be substantial.
7. For information about the methodology and detailed results see Ahrend et al. (2009).
8. See e.g. Black and Jacobzone (2009).
9. See Ahrend et al. (2009) for details.
10. See Ahrend et al. (2009) for a detailed discussion. The net interest margin is defined as the margin between the interest rates banks pay for their funding and the interest rates at which they lend. While net interest margins may be influenced by the amount of risk taken by banks, as by well as country-specific features, they are found to be the preferred measure for competition analysis for traditional banking activities within countries (Carbo et al., 2009). As the analysis presented here controls for country fixed effects as well as time fixed effects, it would be robust to permanent cross-country differences in risk-taking as well as common trends in risk-taking behaviour over time. However, for completeness, the paper also considers other possible competition measures in the econometric analysis. The analytical framework employed is similar to Demirgüç-Kunt and Huizinga (1999).
11. Obviously, these findings do not exclude the possibility of trade-offs in areas of prudential regulation not covered in the data-set underlying the analysis. For example, the rise in securitisation in pre-crisis years could conceivably have increased competition at the expense of financial stability.

Bibliography

- Ahrend, R., J. Arnold and F. Murtin (2009), “Prudential Regulation and Competition in Financial Markets”, *OECD Economics Department Working Papers*, No. 735.
- Ahrend, R., B. Courneade and R. Price (2008), “Monetary Policy, Market Excesses and Financial Turmoil”, *OECD Economics Department Working Papers* No. 597.
- Beck, T., A. Demirgüç-Kunt and R. Levine (2006a), “Bank Concentration, Competition, and Crises: First Results”, *Journal of Banking and Finance*, Vol. 30.
- Beck, T., A. Demirgüç-Kunt and R. Levine (2006b), “Bank Concentration and Fragility: Impact and mechanics” in R. Stulz and M. Carey (eds.), *The Risks of Financial Institutions*, National Bureau of Economic Research, Cambridge, MA.
- Beck, T. (2008), “Bank Competition and Financial Stability: Friends or Foes?”, *World Bank Policy Research Working Paper* No. 4656.
- Beck, T., A. Demirgüç-Kunt and M.S. Martinez Peria (2008), “Banking Services for Everyone? Barriers to Bank Access and Use around the World”, *World Bank Economic Review*, Vol. 22.
- Black J., and S. Jacobzone (2009), “Tools for Regulatory Quality and Financial Sector Regulation, a Cross-country Perspective”, *OECD Working Papers on Public Governance*, No. 16.
- Black, S. E. and P.E. Strahan (2002), “Entrepreneurship and Bank Credit Availability”, *Journal of Finance*, Vol. 57.
- Carbo, S., Humphrey, D., Maudos, J. and P. Molyneux (2009), “Cross-country comparisons of competition and pricing power in European banking”, *Journal of International Money and Finance*, Vol. 28.
- Cetorelli, N. and P.E. Strahan (2006), “Finance as a Barrier to Entry: Bank Competition and Industry Structure in Local US Markets”, *Journal of Finance*, Vol. 61.
- Demirgüç-Kunt, A., and H. Huizinga (1999), “Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence”, *World Bank Economic Review*, Vol. 13.
- Jimenez, G., J.A. Lopez, and J. Saurina (2007), “How Does Competition Impact Bank Risk-Taking?”, *Federal Reserve Bank of San Francisco Working Paper* No. 2007-23.

- Jayaratne, J. and P.E. Strahan (1996), "The Finance-Growth Nexus: Evidence from Bank Branch Deregulation", *Quarterly Journal of Economics*, Vol. 111.
- OECD (2009), *Competition and Financial Markets – Key Findings*, Paris.
- Schaeck, K., M. Čihák and S. Wolfe (2009), "Are More Competitive Banking Systems More Stable?", *Journal of Money, Credit and Banking*, Vol. 41.
- Schaeck, K. and M. Čihák (2007), "Banking Competition and Capital Ratios", *IMF Working Paper* No. 07/216.
- de Serres, A., S. Kobayakawa, T. Sløk and L. Vartia (2006), "Regulation of Financial Systems and Economic Growth", *OECD Economics Department Working Papers* No. 506.
- Stiroh, K. and P.E. Strahan (2003), "Competitive Dynamics of Deregulation: Evidence from US Banking", *Journal of Money, Credit and Banking*, Vol. 35.

PART II

Chapter 7

Going For Growth in Brazil, China, India, Indonesia and South Africa

Taken together, the “BIICS” (Brazil, China, India, Indonesia and South Africa) have been an important engine for world growth through this crisis, and they account for a growing share of global output. However, further reforms will be needed to ensure catch-up to OECD GDP per capita levels over the long term. This Chapter uses the OECD’s Going for Growth framework, as well as other available evidence linking policies to economic performance, to identify key structural policy challenges in the BIICS for the years ahead. While such challenges vary from country to country, common areas for reform include strengthening policies in the areas of education, product market regulation and labour markets, as well as improving more basic market institutions.

Introduction

Brazil, China, India, Indonesia, and South Africa – collectively referred to as the “BIICS” in this Chapter – are the largest developing countries in their respective regions. As evidenced by the increasing role of the G20, these countries are also becoming increasingly important in the global economy.¹ The BIICS are a highly heterogeneous group of countries.² In terms of size, the group ranges from China, which is the world’s second largest economy and most populous country, to South Africa, whose economy is currently 6% the size of China’s (or 4% in terms of population) and the 24th largest in the world. As well as being very different in size, the BIICS are also at different stages of development, with the variation among their incomes being similar to that among the 30 OECD countries. They also differ in terms of their long-term growth performance. While all the BIICS were enjoying periods of improved economic growth prior to the onset of the recent financial and economic crisis, only China and to a lesser extent India sustained a continuous and significant narrowing of the gap with high-income OECD countries in terms of GDP per capita levels. Relative growth performance has not fundamentally changed with the crisis, with all of the BIICS showing greater resilience than most OECD member countries.

While diverse, the BIICS also have a number of economic features in common. Analysis of shortfalls in GDP per capita reveal that, with the exception of South Africa and India, labour utilisation is broadly comparable to that in the upper half of OECD countries. Instead, relatively low GDP per capita in the BIICS can be primarily traced to shortfalls in labour productivity, which, in turn, reflect primarily technology but also human and physical capital gaps. Large income gaps, predominantly driven by productivity deficiencies, along with rapid convergence in China and India, point to the scope for catch-up as a driver of growth going forward. However, achieving and/or sustaining high economic growth rates will require the implementation of a broad range of growth-enhancing structural policy reforms.

This chapter uses the OECD’s *Going for Growth* framework, as well as other available evidence linking policies to economic performance, to identify key structural policy challenges in the BIICS for the years ahead. The focus is on how to ensure catch-up to OECD GDP per capita levels over the long term. As a result, more immediate macroeconomic policy challenges – that at least in part have arisen in the context of the recent financial and economic crisis – are not addressed here. The analysis in this chapter suggests a number of common areas for ongoing reform across the BIICS:

- Rapid improvements in access to education have resulted in secondary school attainment rates that are similar to OECD countries for younger cohorts. Although it will still take some time for the stock of human capital in the BIICS to catch up with OECD levels, this positive development bodes well for sustained productivity growth over the coming decades. However, R&D spending in the BIICS is low relative to OECD countries, reinforcing the impact of still relatively low human capital (especially as regards tertiary education attainment) and barriers to trade and foreign investment that limit the international diffusion of new technologies.

- Virtually all aspects of product market regulation are less conducive to competition in the BIICS compared with OECD countries. In particular, government intervention in markets that are inherently competitive is more pervasive, with state-owned enterprises (SOEs) often operating in sectors that are protected by implicit or explicit barriers to entry, especially in network sectors. Among the BIICS, government involvement in competitive markets is particularly pronounced in China and Indonesia. Barriers to entrepreneurship are also high and act as an obstacle to firm entry, while substantial barriers to international trade and investment impede capital accumulation and technological absorption.
- The persistence of large informal sectors in most of the BIICS and extremely low labour utilisation in South Africa justifies a multifaceted strategy with emphasis on facilitating formal sector employment. Key elements of such a strategy include giving informal workers the necessary means (legal, financial, educational) to shift to formal employment as well as to provide incentives for firms to become formal. The most important policies include enhancing human capital and labour market flexibility, simplifying the tax system, and reducing burdensome product market regulation.
- Property rights and legal institutions could be strengthened in the BIICS, especially in China and Indonesia. In particular, rural land use rights in these two countries need to be strengthened to a standard similar to that in urban areas to improve the ability of small borrowers to use their property as collateral. In addition, proxy indicators of policy enforcement suggest considerable room for strengthening enforcement agencies and making them more efficient, in Indonesia, India, China and Brazil.
- Financial markets are typically much shallower in the BIICS than in OECD countries, implying low levels of financial inclusion and a more limited role for financial intermediation in capital allocation. Restricted access to financial services, particularly in the informal sector, increases financing costs, resulting in low capital accumulation and small scale, which contribute to low productivity. Hence, policies directed at financial deepening, including improved regulation, would have important effects on economic growth.
- While GDP per capita is the focus of this chapter, other dimensions of well-being, such as the distribution of income, the quality of health and the environment also matter for all countries including the BIICS.³ Brazil and China have made dramatic gains in poverty reduction over the past decade, halving the share of their population living at less than USD 2 dollars a day (at PPP). In contrast, India and Indonesia have made smaller gains, while the share of the poor population in South Africa has slightly increased. Though there has been a sharp fall in life expectancy and increase in child mortality in South Africa due to the AIDS epidemic, health indicators have improved in the other BIICS. However, significant gaps between the BIICS and the OECD persist, partly because access to healthcare in the BIICS remains a challenge.

Applying the *Going for Growth* framework to the BIICS is necessarily more difficult than for OECD countries since the full suite of policy and performance indicators are currently not available across all of these countries. In addition, with the extensive differences between some of them and most of the OECD economies, the BIICS's incorporation into *Going for Growth* vastly increases the heterogeneity of country coverage. Although the OECD countries are also unique in important ways and *Going for Growth* has been specifically designed to avoid a "one-size-fits-all" approach, the framework will still need to be made

more flexible over time to successfully accommodate the BIICS (Box 7.1). Therefore, the policy priorities identified in this chapter should be seen as preliminary, and will be refined as part of the full integration of the BIICS into *Going for Growth* in future years.

The Chapter is structured as follows. Section 2 gives a brief overview of economic performance among the BIICS and *vis-à-vis* OECD countries, including a discussion of recent convergence dynamics and a decomposition of current gaps in GDP per capita. Section 3 then uses a range of policy indicators that are routinely included in *Going for Growth* to assess broad regulatory settings in the BIICS. Section 4 goes on to evaluate policy areas not typically included in *Going for Growth* though known to influence productivity convergence in emerging markets, such as property rights, policy enforcement and financial sector development. This section also includes a discussion of the causes and consequences of informality.

Box 7.1. Adapting the *Going for Growth* framework for inclusion of the BIICS

In order to fully incorporate the BIICS into *Going for Growth*, a number of caveats apply that call for further analysis. In particular, empirical work on the impact of policies on performance that underlies *Going for Growth* will need to be broadened to include the BIICS. Beyond assessing whether existing OECD-based evidence on the links between policies and economic performance extends to the BIICS, this will also involve addressing policy issues more specific to these countries. Empirical evidence will be needed to see if the policy-performance relationships vary across widely heterogeneous groups of countries, for example reflecting the influence of policies whose effects vary in relation to a country's distance to the efficiency frontier. Empirical work on the BIICS will also need to consider the implications of large informal sectors that typically operate outside the scope of many aspects of the regulatory framework. This can have a major impact on optimal policy design, as the effect of policies on the size of the informal sector can be of first-order importance. In addition, policy implementation and enforcement often faces relatively more difficulty in the BIICS, which may also have important implications for optimal policy design.

Recent literature, as summarised in *The Growth Report* of the Commission on Growth and Development (2008), suggests that the sequencing and idiosyncrasies of policy reforms may be important to understand the effects of successful growth episodes in countries such as the BIICS. At times, unorthodox or so-called "second-best" reforms can be appropriate, all the more so given political economy constraints and the difficulty of building new institutions in economies undergoing large-scale transitions. Such reforms can be useful to overcome the most binding constraints to growth and pave the way for subsequent first-best reforms.

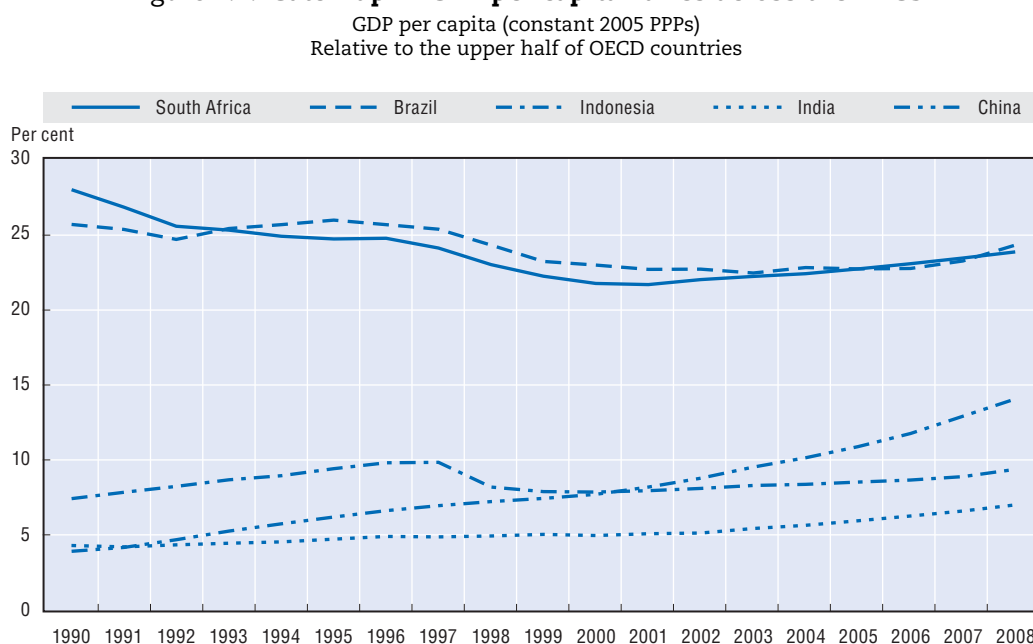
As well as developing a better understanding of the impact of policy on performance in the BIICS, the range of indicators used in *Going for Growth* will need to be tailored to suit these countries. One initial challenge for extending the exercise to the BIICS is that some of the indicators used for OECD countries are currently not available for the BIICS and it will take time to construct a comprehensive set of policy indicators. In addition, some of the key policy issues for OECD countries – such as the work incentives embedded in social transfer programs – are currently less relevant in the BIICS where social insurance systems are just being implemented or considered, though Brazil has more experience. On the other hand, the set of policy and performance indicators used in *Going for Growth* may also need to be expanded to incorporate issues specific to the BIICS such as the quality of governance and the size of the informal sector.

Overview of performance differences among the BIICS and vis-à-vis OECD countries

Trend growth and convergence performance

Average GDP growth rates have varied considerably across the BIICS in recent decades, leading to very different convergence dynamics vis-à-vis countries in the upper half of the OECD income distribution.⁴ Most impressively, since the onset of economic reform around thirty years ago, the Chinese economy has enjoyed a sustained and rapid economic transformation, with swift catch-up in average incomes (Figure 7.1). India has also enjoyed a period of solid economic growth since liberalising extremely interventionist economic policies starting from the mid-1980s and has made good progress in reducing its large income gap with the countries in the upper half of the OECD. Rapid convergence in Indonesia during the early 1990s was interrupted by the Asian financial crisis and average income has yet to recoup its pre-crisis level relative to the upper half of the OECD, despite some recent progress. In the non-Asian BIICS, both South Africa and particularly Brazil had, until the early 2000s, suffered deteriorating per capita income levels vis-à-vis the countries in the upper half of the OECD.

Figure 7.1. **Catch-up in GDP per capita varies across the BIICS**



Source: World Bank (WDI).

StatLink  <http://dx.doi.org/10.1787/786673262253>

GDP per capita gaps

Despite differences in convergence dynamics and high growth rates in some cases, gaps in GDP per capita vis-à-vis countries in the upper half of the OECD income distribution remain large, ranging from 75% in Brazil and South Africa to almost 95% in India. These gaps can be broken down into contributions from labour productivity and labour utilisation (Figure 7.2). With the exception of South Africa and, to a lesser extent, India, labour utilisation in the BIICS is not that dissimilar with the upper half of OECD countries (when

Box 7.2. Measures of well-being in the BIICS

While GDP per capita is the focus of the *Going for Growth* exercise – and this chapter – other dimensions of well-being are also important to assess the qualitative nature of income gains (see Box 2.1). These include particularly the distribution of income, as well as broader well-being concepts such as health and environmental outcomes. The extent of inequality varies widely across the BIICS – with Brazil and South Africa's inequality (based on Gini indices) the highest, and India's the lowest (table below, first column). These measures are higher than in most OECD countries, reflecting in part the lack of income transfer programmes that are prevalent throughout the OECD (Förster and Mira d'Ercole, 2005). While rapid economic growth is generally associated with declining poverty (Kraay, 2006), for some countries poverty rates have fallen much more rapidly than for others (table below). In particular, assessed at the \$2-a-day threshold, Brazil and China have made dramatic gains in poverty reduction over the past decade, halving the share of their population living at this level. In contrast, India and Indonesia have made smaller gains, while the share of the poor population in South Africa has actually increased.

Poverty reduction gains are rapid despite high income inequality

	Gini index	Poverty headcount ratio ¹	
	Mid-2000s	Mid-1990s	Mid-2000s
Brazil	55.0	27.8	12.7
China	41.5	84.6	36.3
India	36.8	81.7	75.6
Indonesia	39.4	55.0	50.0
South Africa	57.8	41.1	42.9
Chile	52.0	13.6	2.4
Estonia	36.0	2.8	2.0
Israel	39.2	..	..
Russian Federation	37.5	7.6	2.0
Slovenia	31.2	2.0	2.0
Upper half of OECD countries	27.0		
Lower half of OECD countries	35.6		

1. Poverty headcount ratio at \$2 a day (PPP) (per cent of population)

Source: OECD income distribution questionnaire and World Bank (WDI).

Health outcomes are another important measure of well-being that generally improves with income, and is also a driver of it. However, their rate of improvement can depart from income growth for long periods. In particular, the sharp fall in life expectancy and the increase in child mortality in South Africa are due to the AIDS epidemic. In other countries, life expectancy has been converging, but remains significantly lower than in the OECD. Infant mortality rates have similarly fallen rapidly, but gaps remain large: mortality in India is three times higher when compared to Brazil and China, and ten times higher than the OECD average. Despite some important progress, access to healthcare in the BIICS remains a challenge as evidenced by relatively low numbers of doctors and hospital beds and the limited overall size of health care spending. Spending on health care is close to that in OECD countries (as a per cent of GDP) for Brazil and South Africa, though India and Indonesia spend much less.

Box 7.2. Measures of well-being in the BIICS (cont.)

Despite strong progress, the gap in health indicators remains substantial

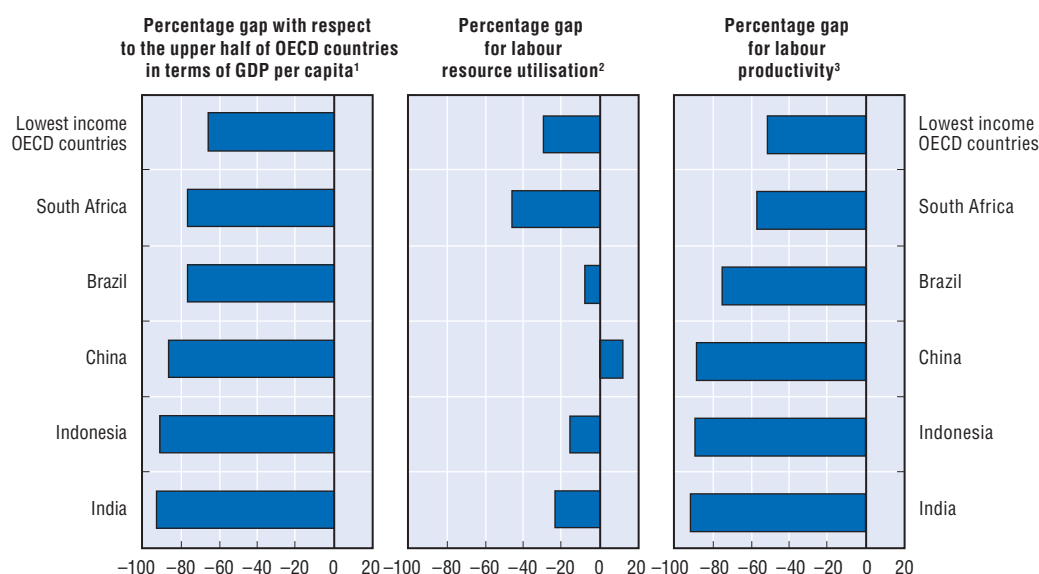
	Health expenditure (% of GDP)	Life expectancy at birth, total (years)		Infant mortality rate ¹ (per 1 000)		Hospital beds (per 1 000 people)		Physicians (per 1 000 people)	
	2006	1990	2007	1990	2007	Mid-90's	Latest year	Mid-90's	Latest year
Brazil	7.5	66.5	72.3	57.9	21.7	3.3	2.4	1.4	1.2
China	4.6	68.3	73.0	45.4	21.9	2.6	2.2	1.5	1.5
India	3.6	59.7	64.7	116.6	71.8	0.8	0.9	0.5	0.6
Indonesia	2.5	61.7	70.6	91.0	31.2	0.7	0.6	0.1	0.1
South Africa	8.0	61.6	50.5	63.6	59.0	..	2.8	0.6	0.8
Chile	5.3	73.7	78.4	21.0	9.0	3.2	2.3	1.1	1.1
Estonia	5.2	69.5	72.9	17.5	5.6	11.6	5.7	3.5	3.3
Israel	8.0	76.6	80.6	11.5	5.0	6.2	6.0	3.2	3.7
Russian Federation	5.3	68.9	67.6	27.0	14.5	13.1	9.7	4.1	4.3
Slovenia	8.4	73.3	77.7	10.5	3.9	6.0	4.8	2.0	2.4
Upper half of OECD countries	9.5	76.8	80.8	9.2	3.7	10.4	7.3	2.8	3.7
Lower half of OECD countries	8.2	72.6	77.1	18.6	8.9	5.6	3.7	1.9	2.3

1. Mortality rate under the age of 5.

Source: World Health Report (2004) and World Bank (WDI).

Environmental outcomes are also important determinants of health status and well-being more generally. Unfortunately, economic growth can result not only in rising incomes but also in increased energy consumption and pollution. While per capita greenhouse gas emissions are still low in the BIICS, their carbon intensity (per unit of GDP) is usually higher than for most OECD countries. Air pollution, in particular exposure to particulate matter, are also much higher in the BIICS than across the OECD countries (OECD, 2008f). In addition, a larger share of the population lives under medium to severe water stress, while low levels of wastewater treatment and pollution contribute to the incidence of waterborne and preventable diseases. In addition, particular economic and health challenges are expected in the BIICS if global warming continues, including the fall of agriculture yields, increased water stress, and loss of biodiversity. As the greenhouse gas emission trends in these countries as a whole will have a considerable impact on global climate, these challenges make “green growth” a high priority in the BIICS.

the informal sector is included in total employment). In contrast, across all of the BIICS, labour productivity is estimated to be substantially below levels prevailing in the upper half of OECD countries and is the predominant source of shortfalls in GDP per capita.⁵ At the same time, the distribution of income in the BIICS is more unequal and poverty is higher than in most OECD countries, while health and environmental outcomes are weaker. This makes it even more important to consider broader measures of well-being (see Box 7.2).

Figure 7.2. **The largest part of real income differences comes from labour productivity gaps**

1. For 2007, relative to the simple average of the highest 15 OECD countries in terms of GDP per capita, based on revised 2007 purchasing power parities (PPPs) from the World Bank. The sum of the percentage gap in labour resource utilisation and labour productivity do not add up exactly to the GDP per capita gap since the decomposition is multiplicative. The lowest income OECD countries are Hungary, Mexico, Poland, the Slovak Republic and Turkey. See Blöndal and Dougherty (2009) for details.

2. Labour resource utilisation is measured as total employment as a share of total population, based on national labour force and household surveys.

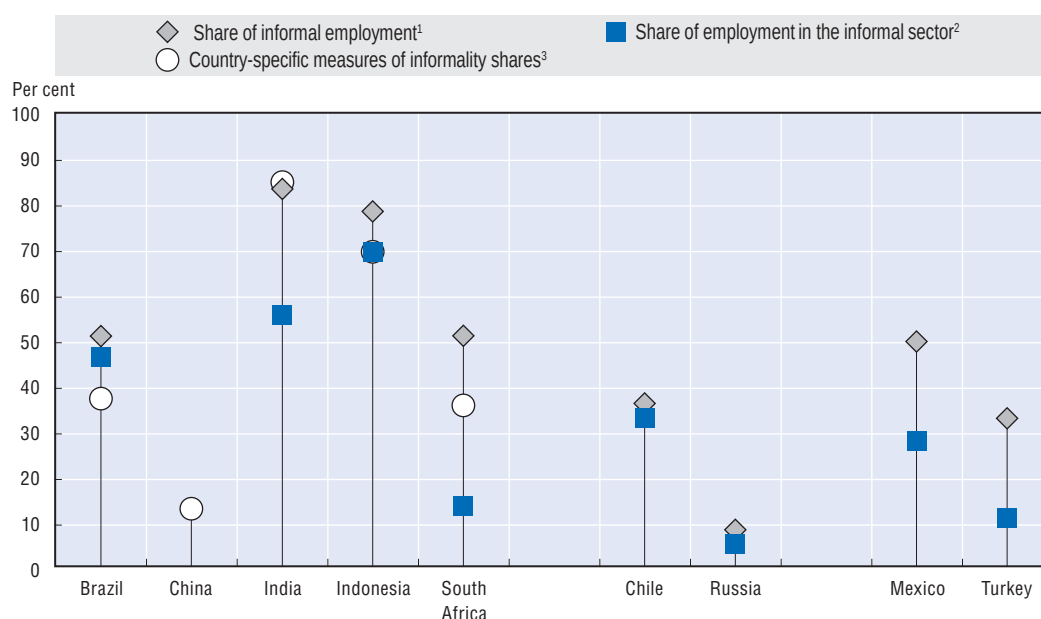
3. Labour productivity is measured as GDP per person employed, including estimated informal employment.

Source: OECD estimates.

StatLink  <http://dx.doi.org/10.1787/786673262253>

Labour utilisation

Generally good levels of labour utilisation do not imply that labour markets in the BIICS are without major challenges. In addition to strong gender differences in labour market access in several countries, a distinguishing feature of BIICS labour markets is the high degree of informality, which means that many workers remain outside the scope of labour market and social protection regulations.⁶ Although the extent of informality is difficult to measure and is thus highly uncertain (see Box 7.3), various measures suggest that informality is particularly high in India and Indonesia, and more moderate in Brazil, China and South Africa (Figure 7.3). Informality generally affects the less privileged, such as youth and the low-skilled, which constitute a relatively large share of labour supply in the BIICS given their demographics and levels of educational attainment (as discussed below). In Brazil, informal jobs are mainly concentrated in low-skill intensive sectors such as agriculture, construction, hotels and restaurants, domestic services, wholesale and retail trade. In China, undeclared rural migrants and workers laid off from urban state and collective enterprises constitute the largest part of informal employment. In India and Indonesia, informal employment includes a disproportionate number of women, home-based workers, street sellers and workers sub-contracted by firms in the formal sector. In South Africa, the relatively small informal sector is partly a result of legacy restrictions and municipal rules, while its growth has been associated with the emerging entrepreneurialism among the majority black population.

Figure 7.3. **Informality is substantial in some of the BIICS**

1. The share of informal employment is based on a standardized definition, and excludes agriculture. Latest available estimate shown: 2000-2007 (Brazil and South Africa); 1995-1999 (India and Indonesia); unavailable for China. See *Is Informal Normal?* (OECD, 2009b) for more details and Box 7.3 for a further discussion.
2. The share of employment in the informal sector is based on the ILO KLIM database. Definition for Brazil: unincorporated urban enterprises employing five or less employees and producing for sale, excluding agriculture. India (2000): all unincorporated proprietary and partnership enterprises producing all or some of their goods or services for sale, excluding agriculture and utilities. Indonesia (2004): all own-account and unpaid family workers and employees in agriculture, and own-account workers (unless professional, administrative or clerical workers) not assisted by other persons. South Africa (2004): business activities which are not registered for taxation, for professional groups' regulatory requirements or similar acts.
3. Country-specific measures of informality shares based on OECD Economic Surveys (OECD, 2007a, 2008a, 2008b, 2009c) and the OECD Employment Outlook (2007b). Definition for Brazil (2009): own-account workers and employees without social contributions. China (2008): self-employed. India (2004): workers not covered by the employee's provident fund. Indonesia (2004): own account workers and unpaid workers. South Africa (2008): workers without pension and medical plans.

Source: OECD analysis.

StatLink  <http://dx.doi.org/10.1787/786673262253>

While there might be a voluntary upper tier of informal employment, the large majority of employment in the informal sector is involuntary. Systems of unemployment insurance are generally much less developed in the BIICS, such that informal sector employment provides an alternative to overt unemployment. However, informal sector workers are generally self-employed with low levels of physical capital per worker, which is reflected in low productivity and subsistence wages; this highlights the strong interaction between employment structure and productivity performance in less developed countries (OECD, 2009b). Informal jobs tend to be more unstable than formal jobs with limited opportunities for human capital accumulation. Employment in the informal sector can also be detrimental to a worker's subsequent prospects for formal employment and thereby may act as a trap for the low-skilled, contributing to the persistence of income inequality.

Box 7.3. Informality and employment measures in the BIICS

The concept of informal employment has become widely accepted in the analysis of labour markets in developing countries, yet there are large differences in definitions and measurement, making cross-country analysis difficult. *Employment in the informal sector* and *informal employment* are two distinct measures related to different aspects of informality recommended by the International Conference of Labour Statisticians. *Employment in the informal sector* refers to the legal registration status of the enterprise unit and covers employment in unregistered enterprises which are private unincorporated (or household) units that produce and sell legal goods and services, with paid employment up to a certain threshold (usually five employees). *Informal “unprotected” employment* refers to jobs that do not comply with national labour legislation, income taxation, social protection or entitlement to certain employment benefits like advance notice, severance pay, paid annual or sick leave. Informal jobs can thus be performed in units of any status, including both formal and informal-sector enterprises as well as in households producing exclusively for own use.

While the two concepts of informality are complementary, the *informal employment* definition tends to be broader. Compared to informal-sector employment, informal employment adds two important groups, namely informal employees in the formal sector and paid employees in households producing exclusively for their own use, while it subtracts a group that tends to be small in most developing countries, namely formal employees in informal enterprises.

According to the ILO conventions (from the 17th ICLS), the exact criteria for measurement are to be determined “in accordance with national circumstances and data availability”. In practice, OECD *Economic Surveys* apply the most commonly used definition for a given country, which approximates the informal employment concept. Difficulties in measuring employment in the informal sector and informal employment add to broader challenges in measuring labour market outcomes in the BIICS, and complicate assessments of the size of the total labour force, employment and unemployment. However, as most activities related to labour market informality are neither illegal nor underground, they are – in principle – included in regularly published employment figures derived from household surveys, such as those used in this chapter.

Source: OECD *Employment Outlook* (OECD, 2008e) and *Is Informal Normal?* (OECD, 2009b).

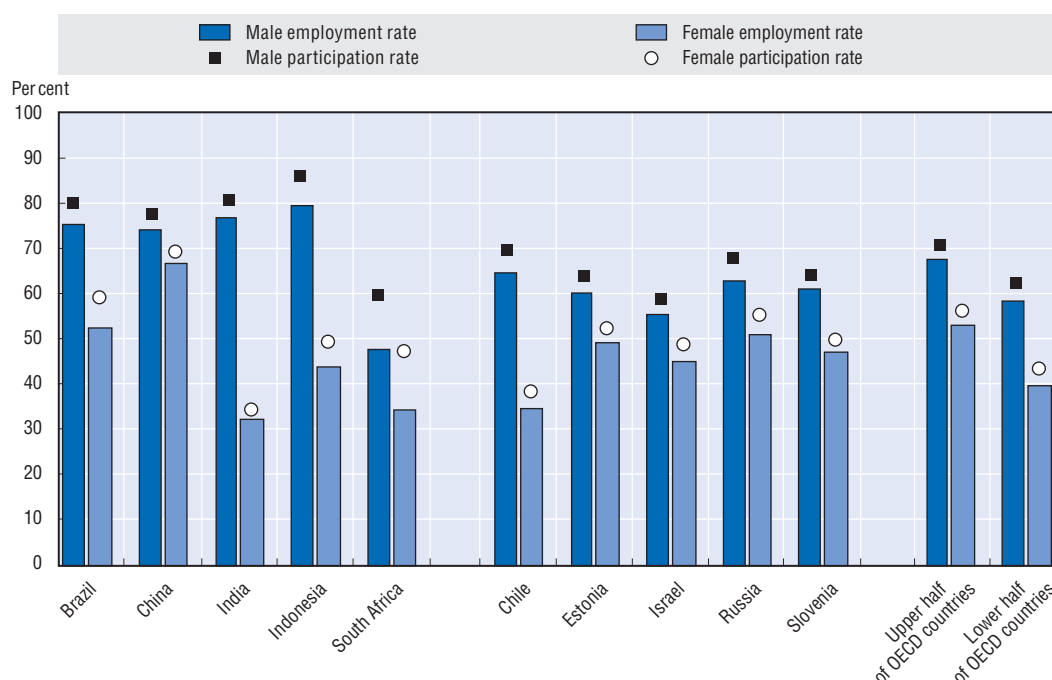
Aside from the issue of informality, some key country-specific characteristics of BIICS labour markets are as follows:

- Labour utilisation in South Africa is the lowest among the BIICS and, being almost half that of the upper half of OECD countries, it explains a large part of the gap in GDP per capita. This severe underperformance reflects both low labour force participation and high unemployment, which currently stands at around 25% (Figure 7.4).⁷ Unemployment is not only high on average but also very unevenly distributed among age groups, gender, skill categories and ethnic groups (OECD, 2008a). This partly reflects the legacy of apartheid, but is also a function of the inability of labour demand to keep pace with a rapidly growing labour force owing to shortcomings in product market competition, labour market institutions and some aspects of macroeconomic policy.
- India’s labour utilisation gap vis-à-vis the upper half of OECD countries is also comparatively large at just under 25%. Although employment growth has picked up since the beginning of economic reforms, the labour utilisation gap has remained

broadly constant with participation rates for women still (very) low in international comparison.

- In Indonesia, the labour utilisation gap is around 15%. Despite an abundance of low-cost labour, the growth of labour-intensive sectors has been relatively sluggish since the Asian financial crisis in 1997-98, contributing to low job creation and high unemployment, particularly among young adults. This has resulted in the labour utilisation gap widening since the crisis.
- Labour utilisation in Brazil is now close to levels in the upper half of OECD countries, reflecting in part the positive impact of solid economic growth on job creation during 2003-08. Labour force participation has risen, while unemployment and the share of employment in the informal sector have both been trending downwards, notwithstanding the recent recession (OECD, 2009c).
- Labour utilisation in China compares very favourably with countries in the upper half of the OECD income distribution. Increasing employment in small and medium-sized private companies has mostly offset large declines in employment in state-owned enterprises (OECD, 2010). Against this trend, the participation rate for young people has been falling recently, though mainly as a result of increasing enrolments in tertiary education (discussed below).

Figure 7.4. **Employment rates are relatively high in the BIICS¹**



1. Employment and participation rates as a share of the total population aged 15 and above, for 2008.

Source: ILO KILM Database.

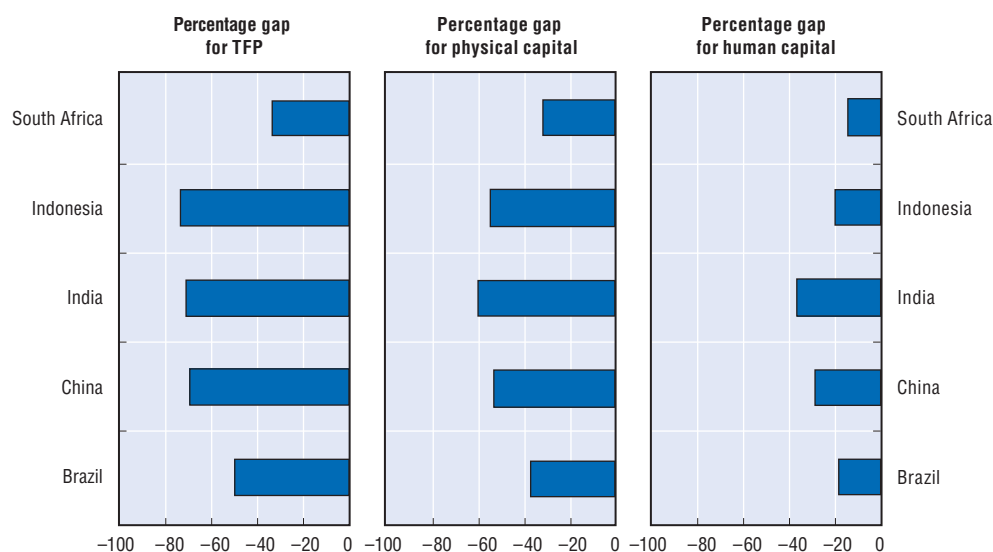
StatLink  <http://dx.doi.org/10.1787/786673262253>

Labour productivity

The breakdown of GDP per capita above (Figure 7.2) indicates that labour productivity in the BIICS is between 55% (South Africa) and 90% (India) lower than that of countries in

the upper half of the OECD income distribution, and it is the predominant source large income gaps. To better identify the driving factors behind these differences in output per worker, labour productivity gaps in the BIICS are decomposed into the contributions from total factor productivity (TFP) and physical and human capital per worker, based on strong but reasonable assumptions regarding the production process and returns from education at the country level (Figure 7.5).⁸ This illustrative decomposition suggests that differences in physical and human capital accumulation are a significant source of labour productivity shortfalls. Nonetheless, TFP gaps between the BIICS and countries in the upper half of the OECD income distribution are extremely large and represent the major source of labour productivity gaps.⁹

Figure 7.5. **Gaps in total factor productivity, physical capital and human capital are wide in the BIICS¹**

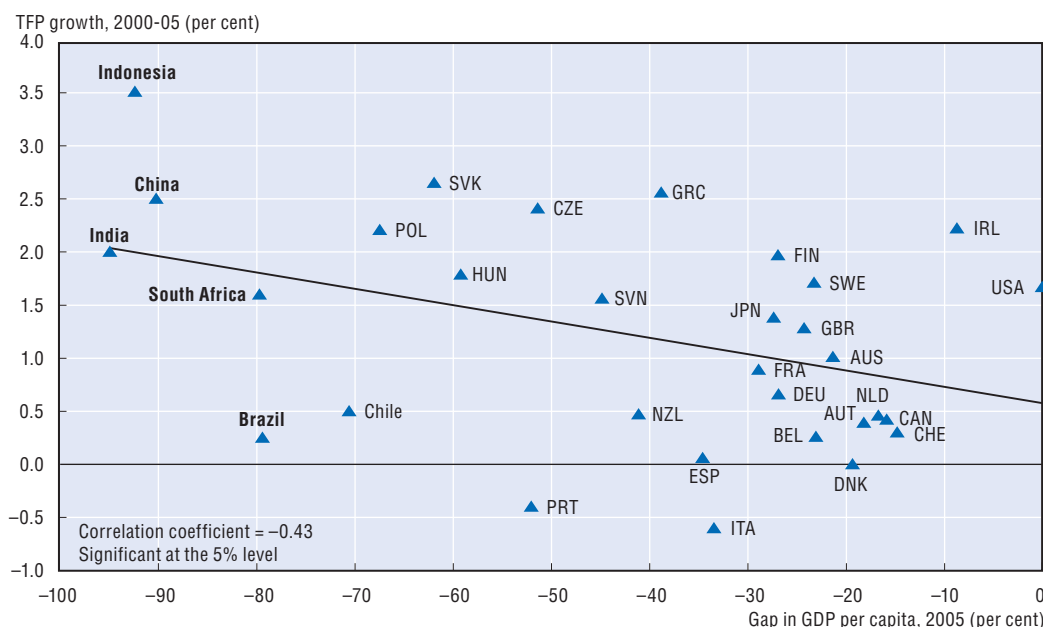


1. Decomposition of labour productivity gaps for 2005, as a per cent of the upper half of the OECD countries, based on a Cobb-Douglas production function that is assumed to be invariant across countries and time. Data on physical capital stocks across countries are derived from investment series using the perpetual inventory method. The physical capital stock is expressed relative to employment. Human capital stocks are constructed based on average years of schooling in the population and assumptions regarding the returns to education. TFP is measured as a residual and acts as a proxy for the level of technology. Due to data limitations and assumptions underlying the decomposition, the results reported in this figure should be viewed as indicative. See Duval and de la Maisonneuve (2010) for details.

Source: OECD analysis.

StatLink  <http://dx.doi.org/10.1787/786673262253>

TFP gaps. A large theoretical and empirical literature has found that TFP growth in industries and countries that lag behind the world technological frontier depend importantly on the ability to adopt leading technologies and production techniques developed in more productive economies (Aghion and Howitt, 2006). With indicative TFP gaps ranging from around 40% in South Africa up to 75% in India and Indonesia, technological diffusion is potentially a key source of productivity growth in the BIICS going forward. The evidence suggests that, with the possible exception of Brazil, TFP growth in the other BIICS has been reasonably good since 2000 and it has been broadly consistent with their stage of economic development (Figure 7.6).

Figure 7.6. **TFP growth slows with higher levels of GDP per capita**¹

1. Note that the measure of TFP growth in this figure is not fully consistent with the TFP levels in Figure 7.5 since the former also implicitly includes the growth of human capital in TFP growth. Data for OECD countries come from the OECD Productivity Database, while for the BIICS it comes from OECD Economic Surveys.

Source: OECD analysis.

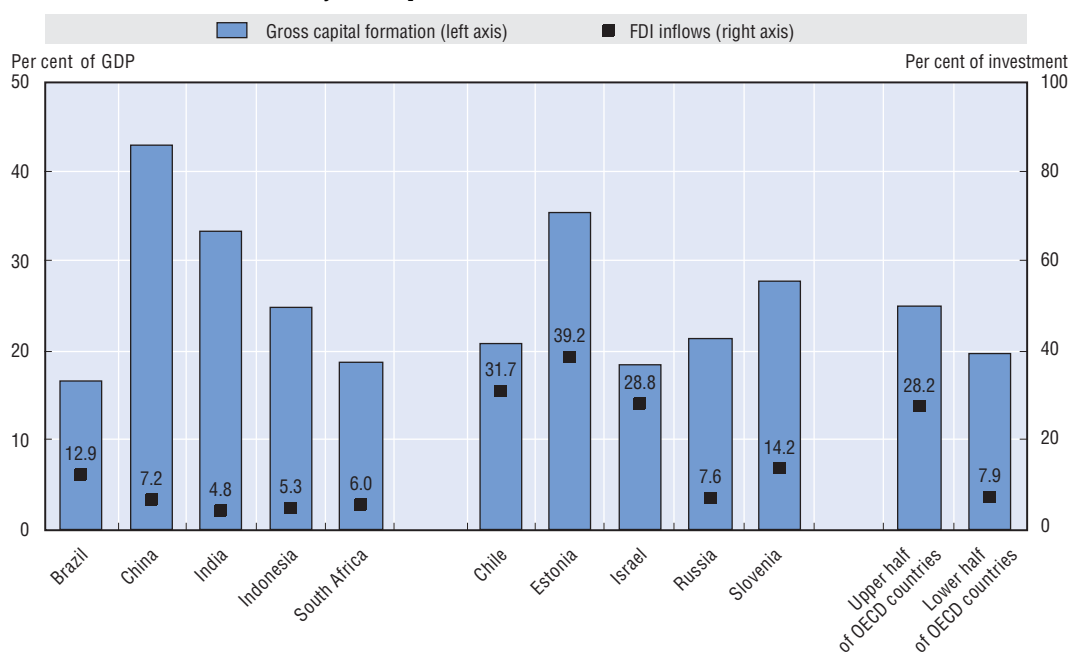
StatLink <http://dx.doi.org/10.1787/786673262253>

Physical capital intensity. The decomposition in Figure 7.5 indicates that shortfalls in physical capital per worker are also an important driver of labour productivity gaps in the BIICS. In China, capital intensity is still about half the level of the upper half of the OECD but increasing rapidly, with investment accounting for almost 45% of GDP (Figure 7.7). In India and Indonesia, capital intensity remains relatively low, although the investment share of GDP has picked up markedly over recent years, particularly in India where it has been helped by increased domestic savings. In South Africa, the relatively small gap in capital intensity largely reflects high rates of capital accumulation during the Apartheid era whereas the investment share of GDP has been lower more recently, before picking up somewhat since 2003. Brazil also has a relatively small gap in capital intensity compared with the other BIICS, although the investment share of GDP has been relatively low, increasing only in the past few years.

As outlined in more detail below, foreign direct investment (FDI) can be particularly effective in promoting productivity catch-up. In general across the BIICS, the FDI share of investment is low compared with most current OECD member countries and accession candidate countries (Figure 7.7). Although China has been the world's largest recipient of FDI in absolute terms, the share of investment funded by foreign capital has been steadily declining since the mid-1990s. Moreover, FDI into China's service sectors has been largely concentrated in the real estate and financial sectors, while inflows into other service sectors have remained relatively modest, constraining technological diffusion (OECD, 2010). In India, FDI inflows have been steadily increasing since the 1990s but still remain comparatively low, as are inflows into Indonesia and South Africa. In Brazil, FDI inflows as a share of investment have been robust over recent years compared to the other BIICS and some of the OECD countries.¹⁰

Figure 7.7. **Physical capital investment rates vary widely across the BIICS**

Physical capital investment indicators, 2003-2008



Source: World Bank (WDI), UNCTAD.

StatLink <http://dx.doi.org/10.1787/786673262253>

Investment in network infrastructure sectors can have a positive impact on long-term income levels that goes beyond the effect of increases in the capital stock. This can arise for a number of reasons including economies of scale, the existence of network externalities and competition-enhancing mechanisms (Égert et al., 2009). Furthermore, there is fairly general agreement that the link between infrastructure and growth tends to be stronger in lower-income countries, where infrastructure deficiencies are most pressing and the (marginal) return to investment highest (Estache and Fay, 2007). Indeed, although it is notoriously difficult to measure the stock of infrastructure, some standard indicators of provision suggest that there are large infrastructure gaps in the BIICS (Table 7.1).

Human capital. The stock of human capital, as measured by the average years of education across the population, is considerably lower in the BIICS than in OECD countries (Figure 7.8a). However, a large part of this gap is a result of the age-education structure of the population, and it will be substantially closed provided that educational attainment is sustained at current rates. To a large extent, attainment rates for secondary school education have increased over time, with the share of graduates among younger individuals being much higher than among their older counterparts (Figure 7.8b). This increase in human capital has been particularly pronounced in China, where secondary-school attainment in younger cohorts is now close to some of the best-performing OECD countries. Indonesia, Brazil and South Africa have also made good progress in this area. In India, secondary school completion rates have also risen but remain low compared to the other BIICS. With the exception of Brazil, tertiary education attainment rates have also increased in the BIICS, but not to the same extent as secondary school attainment, and still generally remain significantly lower than in OECD countries (Figure 7.8c).

Table 7.1. **Infrastructure in network sectors**¹

	Rail density (per 100 km)	Road density (per km)	Telephone lines (per 100 people)
Brazil	0.3	0.2	21.4
China	0.7	0.4	27.7
India	2.1	1.1	3.3
Indonesia	0.3	0.2	13.3
South Africa	2.0	0.3	9.5
Chile	0.8	0.1	21.0
Estonia	2.3	1.3	37.2
Israel	4.4	0.8	39.7
Russian Federation	0.5	0.1	31.1
Slovenia	6.1	1.9	49.5
Upper half of OECD countries	8.3	2.2	53.2
Lower half of OECD countries	2.3	0.6	33.0

1. Rail density is route length in km per 100 km² of land area; road density is total network length in km per km² of land area; telephone lines are total mobile and land lines per 100 people.

Source: World Bank (WDI).

Applying the Going for Growth framework to the BIICS

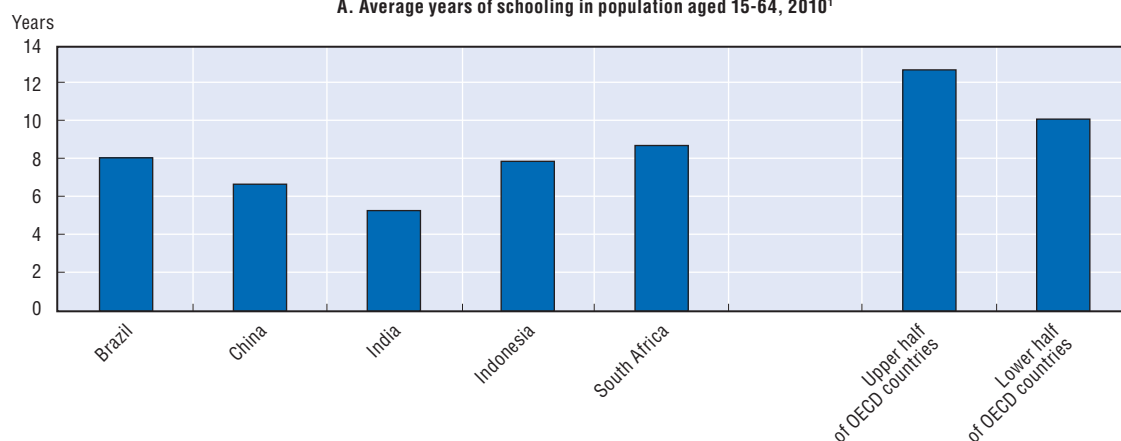
The cross-country differences in various aspects of economic performance outlined in the previous section partly reflect differences in policies and institutions in the BIICS, which is the focus of the remainder of this chapter. Notwithstanding challenges in assessing the impact of policies on performance,¹¹ there is growing evidence – some of which underpins *Going for Growth* – that improvements in institutional quality lead to lasting improvements in resource allocation, productive capacity and economic development. This section applies the *Going for Growth* framework to the BIICS to identify some of the potential policy weaknesses that could be remedied to deliver strong and sustained growth. This application is necessarily more limited than in OECD countries given that the full suite of policy and performance indicators used in *Going for Growth* is not yet available across all of the BIICS.

Education

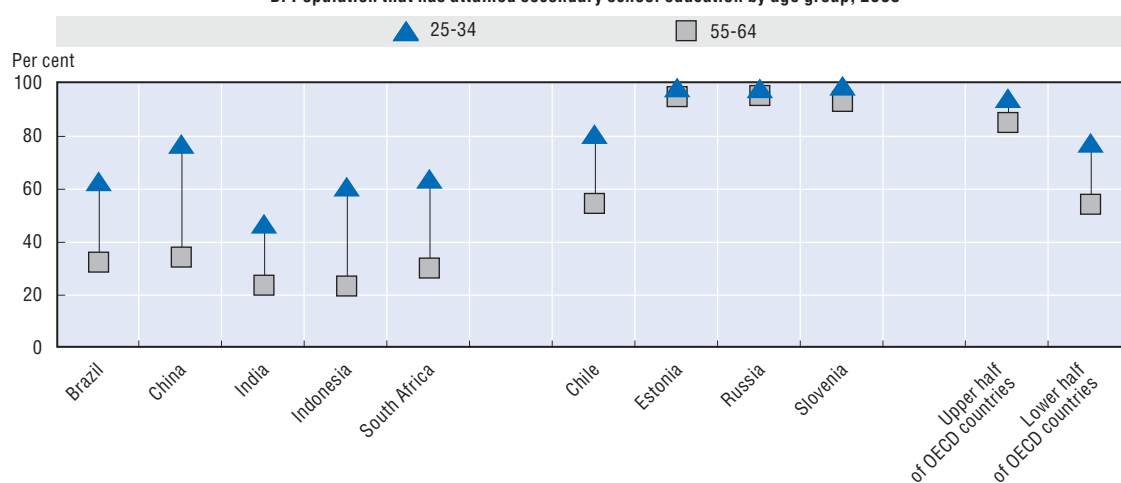
Human capital is a fundamental determinant of economic growth and long-run living standards. Improved educational attainment means more skilled and productive workers that increase an economy's productive capacity (OECD, 2003). Recent evidence suggests that schooling quality and the development of cognitive skills is of particular importance for enhancing human capital and economic growth (Hanushek and Woessmann, 2008). As well as aiding in the development of skills-intensive industries and new technologies, human capital also influences a country's productivity performance by facilitating technological diffusion between firms. In the context of the BIICS, this may speed the adoption of advanced technologies from multinationals operating at the productivity frontier. This suggests a distinction between different types of education spending, with investment in higher education improving a country's ability to make cutting-edge innovations whereas investment in primary and secondary education is more likely to improve a country's ability to implement existing frontier technology (Aghion and Howitt, 2006). Human capital also has an important bearing on labour market outcomes, since better-educated workers are more employable and easier to train/re-train. Such flexibility is particularly important in the increasingly globalised BIICS economies.

Figure 7.8. **Most of the BIICS are catching up in educational attainment**

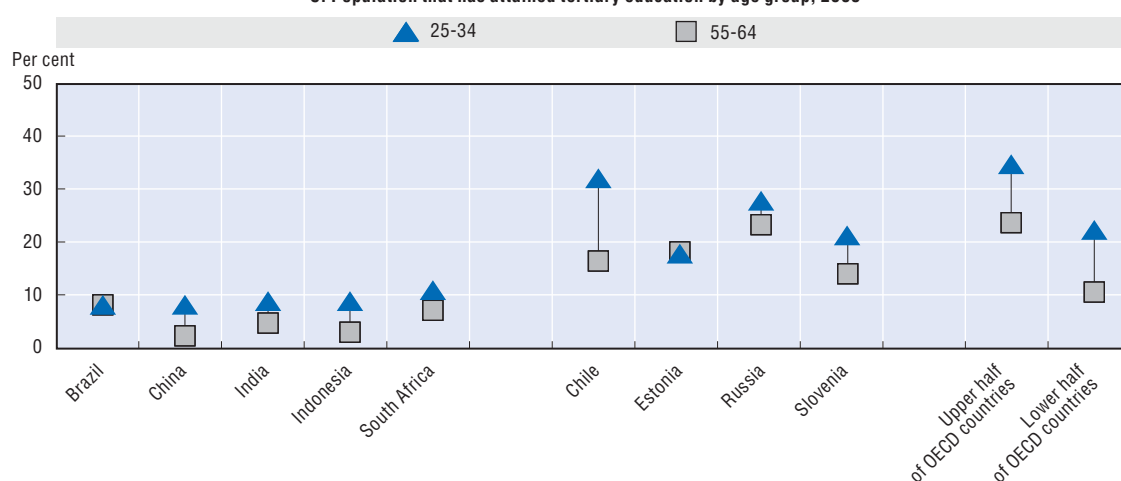
Human capital indicators

A. Average years of schooling in population aged 15-64, 2010¹

B. Population that has attained secondary school education by age group, 2005



C. Population that has attained tertiary education by age group, 2005



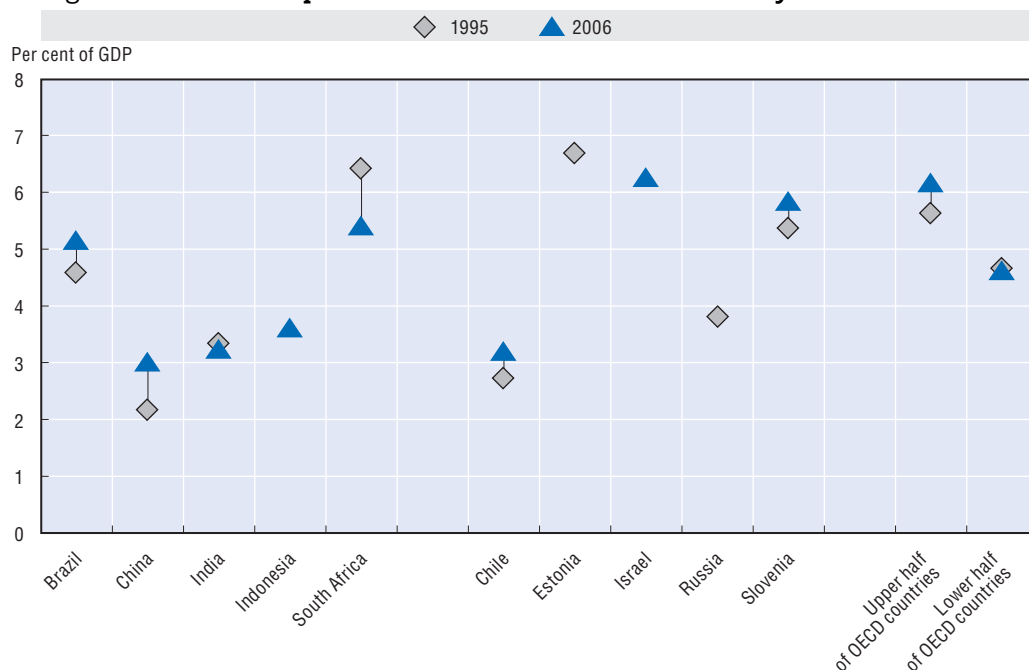
1. Estimate based on a forward-looking demographic projection.

Source: Cohen and Soto (2007); Samir et al. (2008).

StatLink  <http://dx.doi.org/10.1787/786673262253>

As described in the previous section, secondary school attainment rates have increased markedly in the BIICS and, with the exception of India, are similar to average attainment rates in the OECD for younger cohorts, although tertiary enrolment has increased less. In no small part, this reflects the impact of policy initiatives to increase access to education. Notwithstanding these laudable improvements, however, indicators such as PISA scores suggest that student performance and education quality in the BIICS lags that in OECD countries. In India and Indonesia, weak outcomes may partly be associated with insufficient investment given that total public spending on education is low relative to GDP¹² (Figure 7.9). Brazil and South Africa, however, devote a similar share of GDP to education as a number of OECD countries (though less in terms of real expenditure at PPP per student), raising some questions about the administrative cost efficiency and quality of publicly-provided education. In particular, high unemployment in South Africa partly reflects an excess supply of low-skilled labour, though there is also a shortage of highly-skilled workers (OECD, 2008a). The substantial heterogeneity in the quality of education at each level of attainment also plays a role in exacerbating skill mismatches across the BIICS.

Figure 7.9. **Public expenditure on education varies widely across the BIICS**

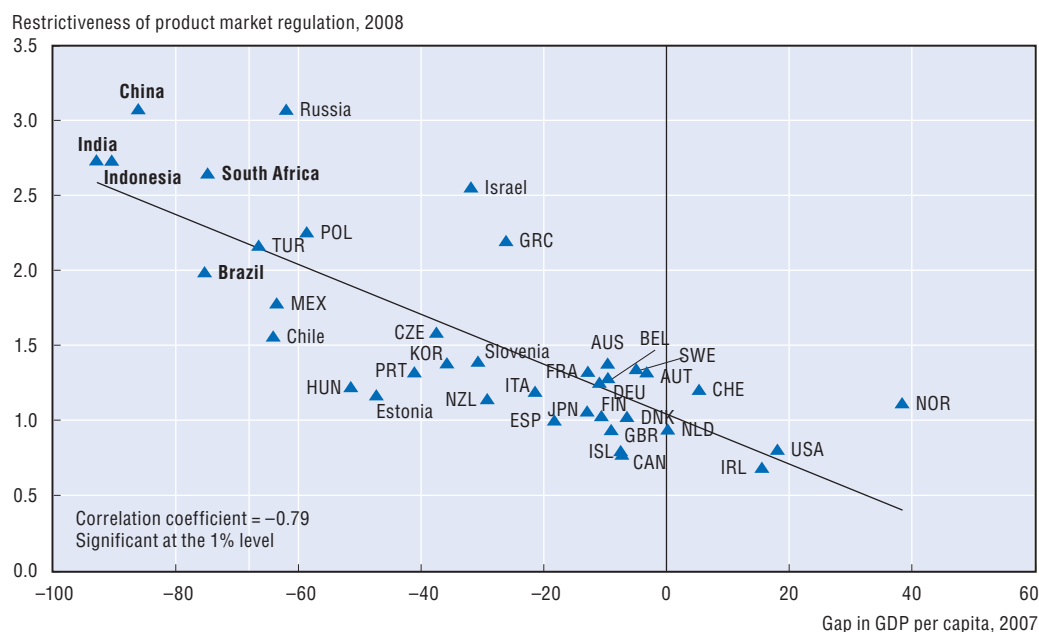


Source: World Bank (WDI).

StatLink  <http://dx.doi.org/10.1787/786673262253>

Product market regulation

The OECD's indicators of product market regulation (PMR) measure the extent to which the regulatory framework is supportive of competition in markets for goods and services where technology and market conditions make competition viable. *Prima facie* evidence suggests that these indicators are highly correlated with gaps in average income across a range of developed and developing countries, including the BIICS (Figure 7.10). Evidence for OECD countries suggests that restrictive PMR can impair productivity growth

Figure 7.10. **Regulation and gaps in GDP per capita are correlated**¹

1. Gaps in GDP per capita are measured vis-à-vis countries in the upper half of the OECD income distribution. Data are for the “simplified” PMR indicator, which has been consistently estimated across the largest number of countries, including all BIICS. See Wölfl et al. (2010) for details.

Source: OECD, Product Market Regulation Database, World Bank (WDI).

StatLink  <http://dx.doi.org/10.1787/786673262253>

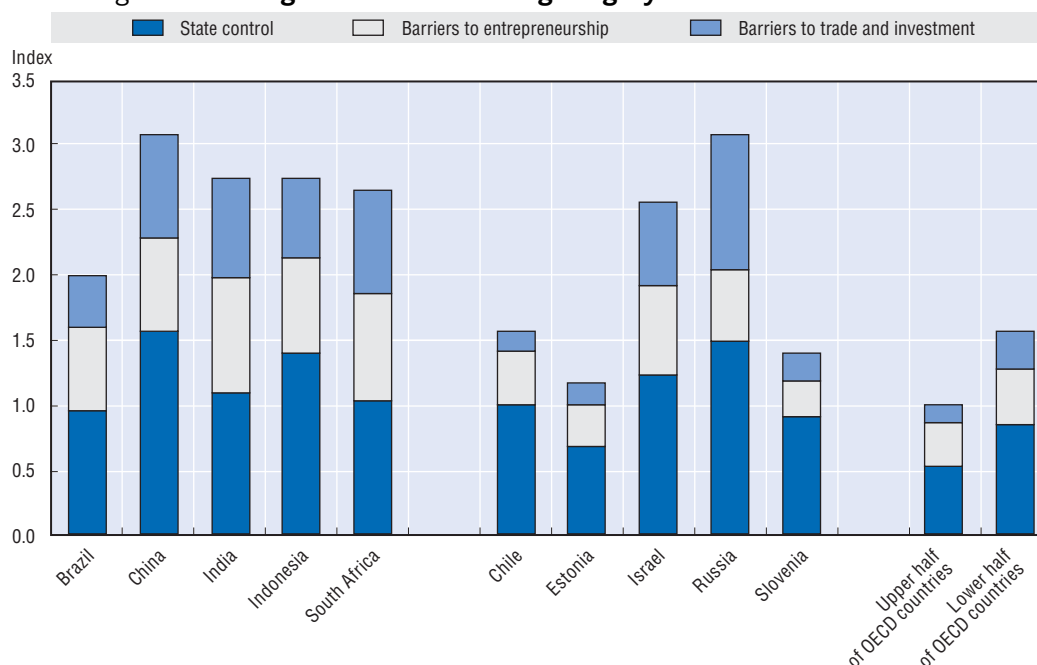
as well as inhibit new firm creation and business investment (Conway et al., 2006; OECD *Going for Growth* 2007). Empirical analysis finds that the link between PMR and GDP per capita may be less robust in lower-income countries, given that the potential growth benefits of enhancing product market competition may be impaired by other structural weaknesses (Wölfl et al., 2010).

Although the effects of PMR reforms may depend on a country’s distance to the efficiency frontier (Aghion and Howitt, 2006), recent theoretical and empirical work generally supports a number of potential mechanisms that may explain this significant link between PMR and economic performance. Broadly speaking, promoting competition by lowering (domestic and border) barriers to entry and leveling the playing field for different firm types can encourage the movement of capital from low to high-productivity firms and sectors, thereby improving resource allocation.¹³ Of particular relevance to the BIICS, there is also evidence that lower PMR speeds the international diffusion of new technologies and production techniques (Arnold et al., 2008; Conway et al., 2006; Aghion and Griffith, 2005). As well as stimulating catch-up, product market liberalisation can also facilitate firm monitoring and encourage managers of state-owned or newly privatised firms to improve efficiency (Aghion et al., 2002). This impact may be potentially large in the BIICS, given their large state-owned sectors that are often less efficient than private-sector firms.¹⁴ Greater competition can also stimulate job creation and raise employment levels in the long run (Blanchard and Giavazzi, 2003; Nicoletti and Scarpetta, 2005; Bassanini and Duval, 2009). There is even some evidence that stronger competition may have particularly beneficial effects for the purchasing power of lower-income deciles (Urzúa, 2008).

On average across the BIICS, PMR is more restrictive of competition than in OECD countries and in most of the countries in accession to the OECD (Nicoletti and Wölfl, 2010) (Figure 7.11). Regulatory regimes in the BIICS are estimated to be relatively restrictive of competition across all three of the broad regulatory areas assessed in the PMR framework: *state control*, *barriers to entrepreneurship* and *barriers to trade and investment*. High state control in the BIICS reflects activist industrial policies that entail widespread government control of business enterprises and a prevalence of coercive instead of incentive-based regulations. In China and Indonesia, where *state control* is particularly high, state-owned enterprises (SOEs) still operate across most sectors of the economy despite extensive privatisation. Although public ownership does not need to be at the expense of competition, SOEs are, in practice, often granted “national champion” status and enjoy some degree of monopoly power and excessive mark-ups.¹⁵ In some of the BIICS, SOEs also still benefit from soft budget constraints and exemptions from competition law, which further tilt the playing field in their favour. Although all of the BIICS have taken important steps to lessen government involvement in product markets, the PMR indicators suggest that the line between the public and private sectors remains blurred to some extent. More complete implementation of the OECD Principles of Corporate Governance would be helpful in this regard.

Administrative reforms have generally made governments in the BIICS less reliant on microeconomic interventions and more focused on framework conditions with improved capacity to oversee market-based economies. However, in international comparison,

Figure 7.11. **Regulation is on average highly restrictive in the BIICS¹**



1. Data are for 2008 using the “simplified” PMR indicator, which has been consistently estimated across the largest number of countries. The indicator ranges from 0 to 6 from least to most restrictive of competition. See Wölfl et al. (2010) for details.

Source: OECD, Product Market Regulation Database.

StatLink  <http://dx.doi.org/10.1787/786673262253>

barriers to entrepreneurship still discourage private sector firms and competitive markets. The main reasons for these barriers differ across countries. In China and India, recent initiatives to improve government bureaucracy and cut red tape have made less headway in practice than expected, such that administrative burdens on entrepreneurs are still very high and act as an obstacle to entry. In South Africa, administrative burdens are comparable to those in some of the OECD countries but the licensing and permits systems are cumbersome and legal barriers to entry persist in a number of sectors generally considered to be competitive. Legal barriers to entry are also high in Indonesia, particularly in sectors where the government has majority (or full) ownership of the dominant firm – for example, in financial services, public utilities and transport sectors. Excessive government bureaucracy is also an ongoing problem in Indonesia. In Brazil, *barriers to entrepreneurship* are estimated to be the least restrictive among BIICS even though legal barriers to entry remain in place in some sectors.

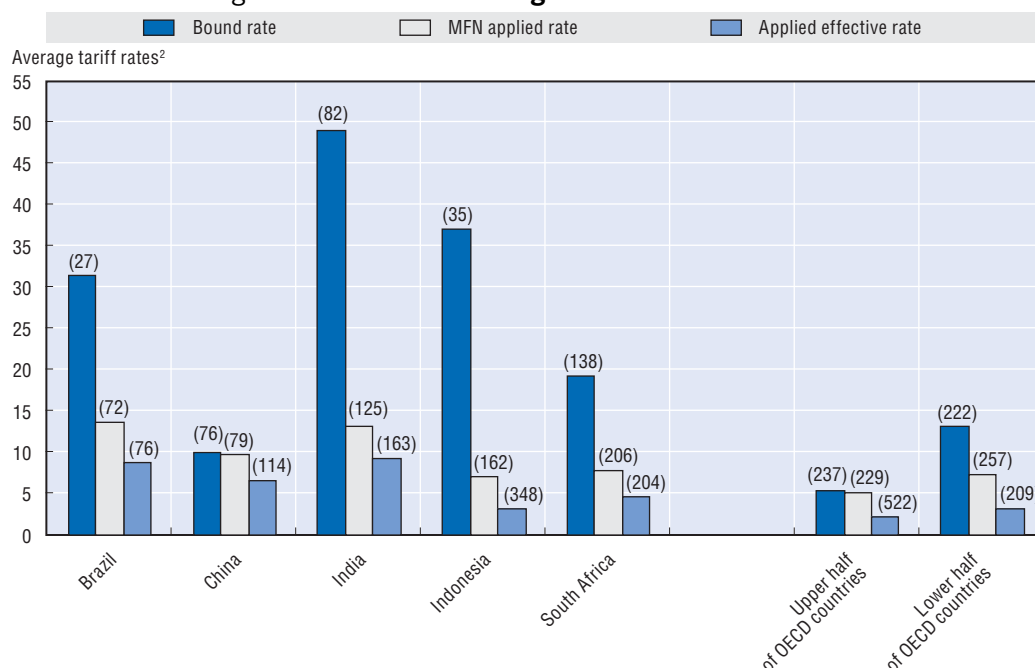
Barriers to trade and investment

Barriers to international trade and foreign direct investment can be particularly detrimental to productivity growth, with an extensive literature finding that countries that grow relatively quickly as a result of higher physical and human capital investment and sustained improvements in productivity tend to be more open economies (e.g. Wacziarg, 2001). Multi-national enterprises tend to be more efficient than their local counterparts and can act as conduits for knowledge transfer by opening sectors up to frontier technologies, including those embedded in more modern intermediate inputs and capital goods. This growth-enhancing effect of FDI is potentially greater in emerging economies, though domestic barriers to competition can also impede the process (Savvides and Zachariadis, 2005; OECD, 2009e).

Notwithstanding the benefits of openness, the BIICS remain relatively restrictive in all forms of *barriers to trade and investment*, as measured by the PMR indicators (Figure 7.11). Tariffs are high and leave considerable scope for selective policies interaction in India (Figure 7.12). In Brazil, tariffs are also high, but overall restrictions on foreign ownership are the least restrictive among the BIICS (except in the banking sector, where it is strongly limited) and comparable to barriers in some of the more restrictive OECD countries. South Africa also has a comparatively open FDI regime in the context of the BIICS while Indonesia has relatively restrictive rules regarding foreign ownership. As outlined in Section 2, barriers to foreign ownership across the BIICS are reflected in moderate rates of FDI inflows as a share of investment, consistent with empirical evidence across a range of countries (Golub, 2009).

Regulation in infrastructure sectors

The respective roles of public and private firms in infrastructure sectors are partly determined by the regulatory regime. Reforms to support free entry into potentially competitive market segments, and to establish independent regulators immune to capture by market participants or political interests, need to reflect the particular circumstances of the industry and be carefully coordinated along the supply chain. Notwithstanding the complexities of infrastructure regulation, the experience of a number of countries in the OECD area and beyond suggests that with appropriately designed regulatory frameworks, a competitive environment in market segments where competition is viable can help ensure more efficient investment, leading to an expansion of supply and lower prices

Figure 7.12. **Tariffs are high in some of the BIICS¹**

1. Data are for 2008, or latest year available for applied effective rates.

2. Bound and most favoured nation (MFN) applied rates are simple averages. Applied effective rates are import-weighted. In parentheses, the coefficients of variation are shown, based on 100 times the standard deviation divided by the average. OECD aggregates are simple averages across countries.

Source: TRAINS and WTO Tariff Databases.

StatLink <http://dx.doi.org/10.1787/786673262253>

(Sutherland et al., 2009). As well as benefiting end-users, this can also flow through to downstream sectors by lowering the price and improving the quality of their intermediate inputs, spreading the benefits of reform throughout the economy. In market segments characterised by natural monopoly, arm's length regulation can, in principle, limit the exercise of market power by aligning private and social costs and benefits. In practice, this has proven difficult in some market segments, although technological progress and regulatory innovations have at the same time gradually reduced the natural monopoly element. Given that governments will continue to play key roles as providers and financiers of infrastructure, mechanisms to ensure investment efficiency also need to be put in place.

On average, entry barriers in infrastructure sectors tend to be higher and regulators less well established in the BIICS compared with OECD countries. In Brazil, regulatory reform and a privatisation programme in the 1990s have lowered entry barriers in some infrastructure sectors, particularly electricity and telecommunications, though regulation still limits competition in some areas. In South Africa, the regulatory environment is still highly restrictive in the telecoms, rail freight and electricity sectors. In China, network regulation is, overall, estimated to be more restrictive than in any of the OECD countries. In India and Indonesia, although OECD indicators of regulation in network sectors are yet to be constructed, network sectors tend to be vertically integrated and dominated by state monopolies, leading to poor outcomes with infrastructure deficiencies often cited as major constraints on business.¹⁶

Subsidies

Subsidies are commonplace in the BIICS, though they are often concentrated in different sectors than in OECD countries. While agricultural support tends to be lower than in OECD countries, other government subsidies to producers and consumers in the BIICS, including trade measures, have the potential to distort production and investment decisions by biasing rates of return. Direct subsidies also risk lowering the quality of government expenditure by reducing the funds available for infrastructure investment and human capital development. Despite these negative effects, India and Indonesia respectively spend 10% and 20% of government expenditure on subsidies, particularly for energy. By keeping the price of fossil fuels artificially low, such price support encourages wasteful consumption and has a detrimental impact on the environment. Moreover, a high proportion of indirect subsidies distributed through local governments in some of the BIICS do not reach the poorest groups in society. Policies to provide more direct cash support to individuals and incentives for education or healthcare can be more effective in helping to sustainably raise incomes of the poorest segments of the population (see OECD, 2007a). As an example of this type of policy, Brazil has built a cash transfer program for families to incentivise them to send their children to school (modeled on Mexico's *Oportunidades* programme). Over the longer term, transfer and benefit systems can provide safety nets and redistributive tools that help to address broader welfare concerns.

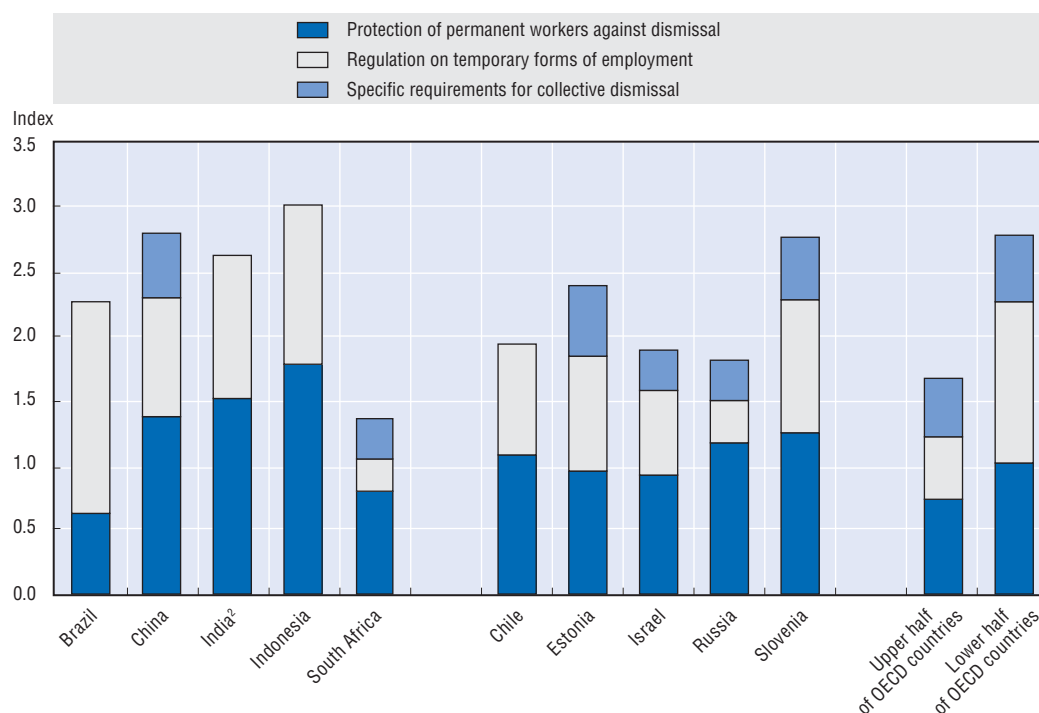
Labour market regulation

Employment protection legislation

Research on the impact of employment protection legislation (EPL) has found that overly-rigid labour regulations can reduce job flows and negatively impact on the employment prospects of some groups of workers, notably youth and women (OECD, 2004; Kahn, 2007; Haltiwanger *et al.*, 2008). Such labour market dualism may, in the context of BIICS, contribute to enlarged informal sectors. Overly strict EPL often fails to provide effective social protection for the most needy, given that it is not binding in the informal sector. Based on the experience of OECD countries, the employment and re-employment of workers can be better supported through the development of appropriate benefit schemes and activation systems, such as active labour market programmes (OECD, 2006). Strict EPL can also negatively impact productivity growth by restricting the movement of labour into emerging high-productivity activities and reducing incentives for firms to grow (Bassanini *et al.*, 2009).

The OECD's indicators of EPL imply that overall legislation in the BIICS is, with the exception of South Africa, on a par with those in the more restrictive OECD countries (Figure 7.13). In Indonesia and India, the cost of individual dismissal is in fact the most restrictive across all assessed countries, reflecting strict notification requirements that make it extremely difficult to lay off workers (OECD, 2007a; Dougherty, 2009). In turn, this deters firms from taking on new workers and encourages informality. EPL is also fairly restrictive in China, although the comparatively less stringent restrictions applying to fixed-term employment (until recently) have led to a preponderance of short-term contracts. In Brazil, and particularly South Africa, EPL on regular contracts does not appear to be overly stringent in international comparison. Instead, substantial (though falling) informal employment in Brazil and chronically high unemployment in South Africa suggests that the causes of labour market inefficiencies lie elsewhere.

Figure 7.13. **Employment protection legislation is stringent in the BIICS except South Africa¹**



1. Estimates are for 2008 for all countries. See Venn (2009) for details. The scale of the indicator ranges from 0 to 6, from least to most restrictive.

2. The indicator for India does not fully capture the effects of collective dismissal regulation under the Industrial Disputes Act (see OECD, 2007a).

Source: OECD Employment Outlook Database.

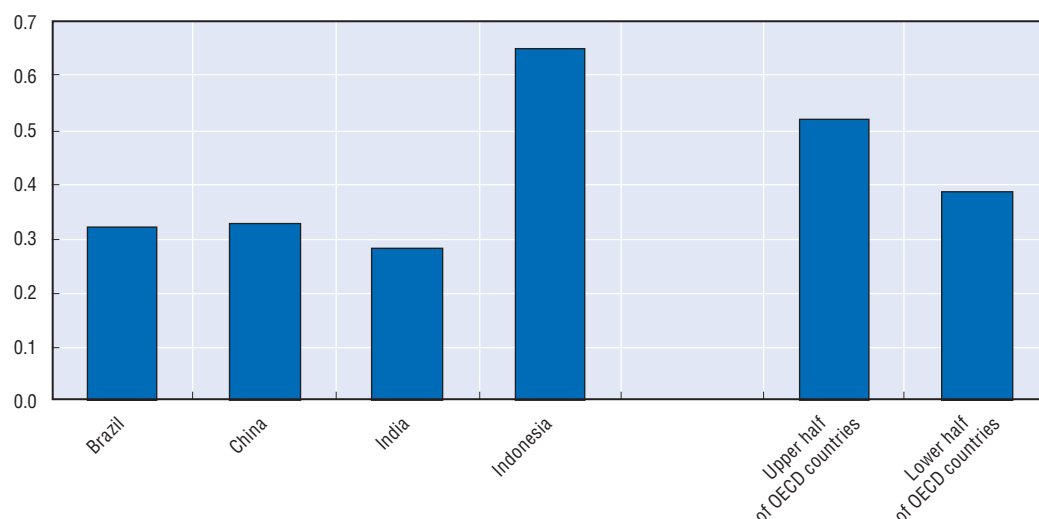
StatLink  <http://dx.doi.org/10.1787/786673262253>

Minimum wages

Minimum wages set too high relative to average wages truncate the earnings distribution in the formal sector and reduce demand for lower-skilled workers (OECD, 2004). Groups with weak labour market attachment – typically females, youths and less-educated individuals – are most likely to be adversely affected with greater risk of job losses and be trapped in the informal sector. The adverse effect of excessive minimum wages can therefore be particularly marked in emerging economies, characterised by relatively young and less-educated workforces (Kantor et al., 2006).

The relative minimum wage in Brazil, China and India are below the lower half of OECD countries where minimum wages exist (Figure 7.14). South Africa has no uniform statutory minimum wage, and sectoral minimum wages set by the government in sectors without bargaining councils are low and cover a relatively small number of employees. However, collective bargaining arrangements in South Africa impose *de facto* minimum wages on a number of additional sectors.¹⁷ Indonesia has one of the highest minimum wages in the world, equal to 65% of the median wage of salaried workers, which has had a detrimental impact on the labour market, especially by reinforcing a high degree of informality (Suryahadi et al., 2003; OECD, 2008).

Figure 7.14. **The minimum wage varies among the BIICS**
Relative gross minimum wage in selected countries¹



1. Ratio of minimum to median wage in 2005 for Indonesia; 2007 for OECD countries; ratio of minimum wage to average manufacturing wage in Brazil, China and India in 2005.

Source: OECD (2009), OECD Employment Outlook.

StatLink  <http://dx.doi.org/10.1787/786673262253>

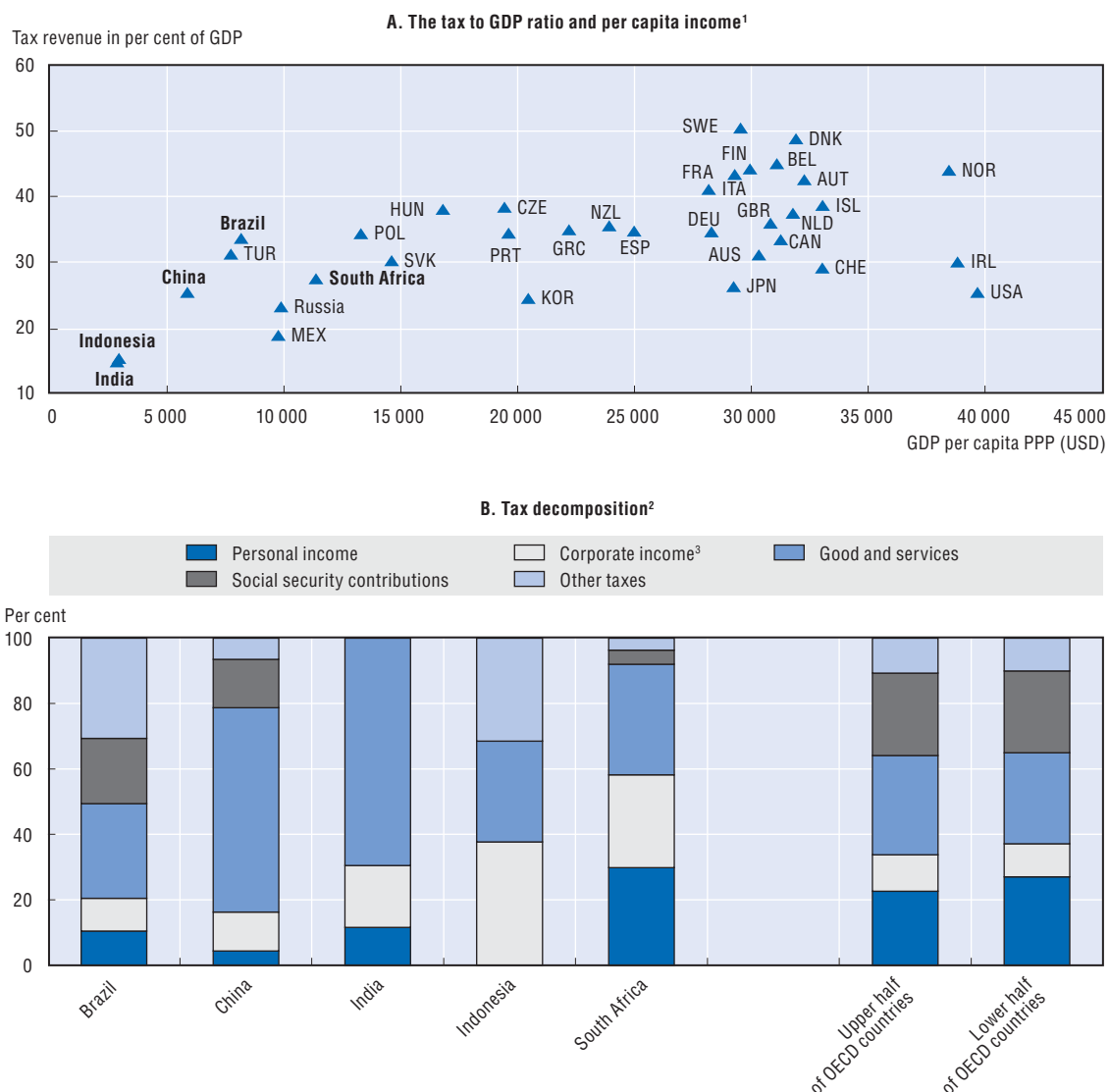
Taxation

Demand for social protection will increase as the BIICS continue to develop, as witnessed by the recent expansion of formal social safety nets in Brazil and China. This raises the question of the most appropriate way of financing social protection over the longer term. The relative roles of individuals and general taxation can vary *inter alia* according to social preferences. To the extent that taxation is used to finance social protection, along with other government spending priorities, the tax system needs to be designed to minimise efficiency costs. In particular, general property and consumption taxes are typically less distorting than capital and labour incomes taxes (OECD, 2009a). Minimising the tax burden on labour income and broadening the tax base beyond wage earners is particularly important in most of the BIICS given the risk of reinforcing already pervasive informality. In turn, informality narrows the tax base and shifts the tax burden disproportionately onto formal enterprises and individuals.

In Brazil, the overall tax take is high relative to income levels (Figure 7.15a), with a particularly heavy tax burden on labour income. The adverse labour market impact of high taxes may be reinforced by the complexity of the tax system, which features a multitude of payroll levies on top of social security contributions, though some reforms in this area are underway (OECD, 2009c). In India and Indonesia, tax revenues are low, reflecting the absence of social safety nets (for health, pensions and unemployment) beyond the employees of larger companies and the government. The overall tax burden in South Africa is broadly in line with other countries that have similar levels of GDP per capita. However, a large proportion of the tax take in South Africa comes from direct taxes on workers and firms (Figure 7.15b). In contrast, there has been a largely favourable trend across the BIICS characterised by an increasing dependence on indirect taxation. The emphasis on the taxation of consumption (*i.e.* of goods and services) rather than labour has to a large extent resulted from the difficulty of taxing income when there are a large number of potential

taxpayers with low incomes, often with only very basic education and when informality is widespread (for example only 2% of the adult population pays income taxes in India). However, the design of indirect tax systems in most countries tends to be inefficient, due to fragmentation, complexity and changing provisions.

Figure 7.15. **Tax to GDP ratios are typically higher in more advanced economies**



1. Data are for 2004.

2. Data reported are 2006 for Brazil and OECD countries; 2007 for China, Indonesia and South Africa; 2005 for India.

3. For Indonesia, includes both corporate and personal taxes.

Source: OECD (2007); OECD (2008b), OECD (2008c), OECD (2009c), IMF (2009).

StatLink  <http://dx.doi.org/10.1787/786673262253>

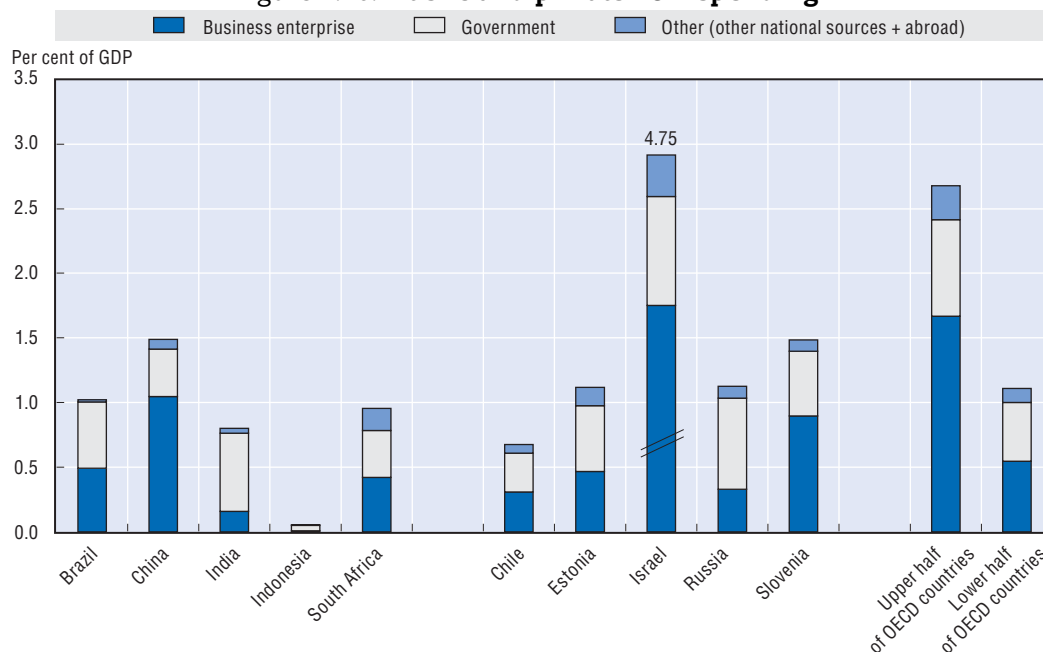
Research and development (R&D)

R&D investment enhances long-run income levels by facilitating innovation in countries near the technological frontier and increasing the “absorptive capacity” of countries lagging behind it. The process of transferring new technologies and production techniques from high to low-productivity countries is skill-intensive and requires

sufficient R&D in the recipient country to master new technologies and adapt them to local conditions (Howitt and Mayer-Foulkes, 2005). Solid framework conditions – including many of the policies previously discussed – that encourage human capital accumulation and facilitate trade and investment openness can stimulate businesses to invest in innovation activities. These conditions are important for economies to fully reap gains from R&D, which can yield a very high social rate of return (see *Going for Growth*, 2006).

As a share of GDP, R&D expenditures vary considerably across the BIICS but are typically lower than in the majority of OECD countries (Figure 7.16). In China, after a recent period of rapid growth, R&D expenditure is now around 1.5% of GDP, the highest among the BIICS (OECD, 2008c). R&D spending is broadly around 1% of GDP in Brazil and South Africa, slightly lower in India, and very low in Indonesia. While public-sector R&D can be particularly beneficial for creating new technologies with high social returns, private sector investments are crucial, and can be facilitated if the framework conditions provide sufficient incentives for businesses to invest. Most R&D in India is undertaken by the government, with private sector R&D relatively low. Indonesia's low expenditure on R&D reinforces the impact of low human capital and barriers to trade and foreign investment that inhibit the absorption of new technologies.

Figure 7.16. **Public and private R&D spending**¹



1. Data are for 2007 or most recent year available.

Source: OECD Science and Technology Indicators Database and UNESCO UIS Data Centre.

StatLink <http://dx.doi.org/10.1787/786673262253>

Provisional policy recommendations based on *Going for Growth*

Although extensive policy and institutional reforms have already been undertaken in the BIICS, more reforms will be needed to deliver sustained growth and rapid economic convergence going forward. Applying the *Going for Growth* framework to the policy and performance indicators outlined above points to a number of potential growth-enhancing policy priorities, summarized in Table 7.2 (for an overview of the *Going for Growth*

framework see OECD, 2009). However, a good deal more judgment is necessary in formulating these priorities than is typically the case with OECD countries, given the incomplete coverage of policy and performance indicators, as well as of relevant econometric work:

- With product market regulation much more restrictive of competition than in OECD countries, there are a number of areas in which each of the BIICS could make significant improvements. In China, India and Indonesia, further reductions in the size and scope of state enterprises would help reduce implicit barriers to entry and increase competition in a number of sectors. Also, the strategic decisions of SOEs in these countries can still reflect the government's intentions, implying that improvements in governance would already help SOEs to operate on commercial grounds and maintain an arm's length relationship between the state and market. Barriers to entrepreneurship also need to be lowered across the BIICS to improve the quality of the business environment. This entails cuts in red tape to reduce administrative burdens and the removal of legal barriers to entry, particularly in Indonesia, Brazil and South Africa. Restraints on FDI also need to be reduced, particularly in the services and network sectors in Indonesia, China and India. And tariffs need to fall further in India and Brazil, while bound rates should be reduced in India especially.
- In infrastructure sectors, entry barriers need to be reduced by unbundling competitive and monopoly market segments and strengthening the hands of the sectoral regulators to encourage private sector participation and reduce public sector domination. This is especially pressing in China, India and Indonesia. In Brazil, although the overall approach to regulatory reform in network industries is well thought-out, more needs to be done to reduce regulatory uncertainty in some sectors, particularly water and sanitation. In South Africa, legal barriers to entry in network sectors should be reduced and the government's role as owner and regulator clearly defined and separated.
- In the area of education, increased spending in India and Indonesia is warranted, whereas the quality of education could also be improved in India by strengthening incentives for teachers and effectively decentralising school management. Basic education also needs to be improved in South Africa to improve the prospects of low-skilled workers. Low levels of tertiary education attainment may constrain innovation especially in Brazil and South Africa, the two BIICS countries with the smallest labour productivity gap *vis-à-vis* OECD countries. The quality of education in these countries could also be improved by increasing the cost-efficiency of publicly-funded education, given that spending levels are already relatively high.
- In the area of labour market regulation, EPL needs to be relaxed to encourage employment in the formal sector by reducing the costs of adjustment and allow firms to exploit economies of scale. In Indonesia, in addition to moderating the excessively high minimum wage, a reduction of EPL is also needed. A reduction of EPL is also needed in India, where special restrictions of dismissals in large plants should be eased. In South Africa, although EPL is relatively flexible, there are deficiencies in its implementation that raise costs and impose delays, and collective bargaining agreements can impose additional restrictions on hiring and firing which result in greater *de facto* rigidity than is inherent in the law.
- Other policy reforms suggested by the indicators include reducing the tax burden and simplifying the tax code in Brazil, which will be partly addressed by carrying through

with proposed reforms. Incentives to increase R&D intensity need to be strengthened in Brazil and Indonesia to facilitate innovation and technological diffusion. In India and Indonesia, subsidies need to be reduced and, where used as social policy devices, spending should be better targeted to reach the poor.

Table 7.2. **Indicator-based policy priorities for the BIICS**

	Product market regulation				Education		Other policy areas				
	State ownership	Barriers to entry	Network regulation	Foreign investment	Primary and Secondary	Tertiary	EPL	Minimum wages	Tax policy	R&D	Subsidies
Brazil		X		X		X			X		
China	X		X	X	X	X					
India	X		X	X	X		X			X	X
Indonesia	X	X	X	X	X		X	X		X	X
South Africa		X			X	X	X				

Other policy reforms to speed up convergence

Other policy areas not currently covered in *Going for Growth* are of particular relevance to the long-term growth and convergence prospects of the BIICS.¹⁸ This section briefly reviews some of these areas and assesses the scope for growth-enhancing policy reform.

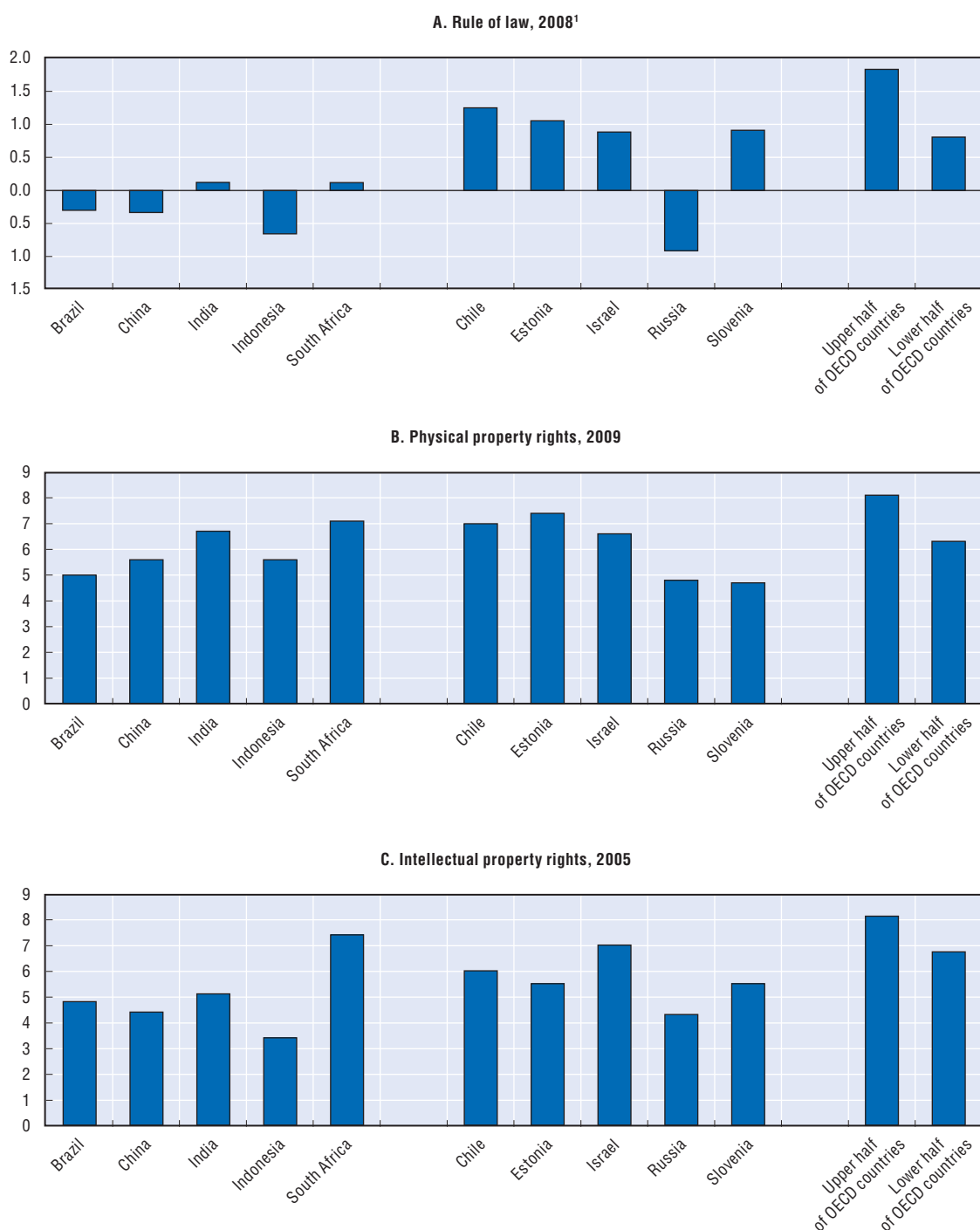
The pre-conditions for market-based economic activity

Property rights and the ability to enforce contracts are two critical elements of a country's institutional and legal framework. Secure property rights protect firms and citizens from expropriation while effective contracting institutions enable private contracts. Both are fundamental to the operation of market-based economies. A number of studies indicate that secure property rights and their associated legal systems have a first-order effect on long-run economic growth. In particular, countries with greater protection against expropriation have substantially higher income per capita (*e.g.* Beck and Laeven, 2005). Although the precise causal links can be hard to identify as growth itself can help to bring about these types of institutions, empirical evidence suggests that strengthening property rights promotes firm investment and financial sector development (Acemoglu *et al.*, 2005).¹⁹ Put simply, investors need security of ownership before undertaking investment and engaging in risk taking.

Assessing institutional frameworks that protect property rights and facilitate private contracting is not straightforward. The World Bank *Governance Matters* indicators, which are based on expert assessments and firm surveys, include an indicator of the rule of law that gauges confidence in the rules of society, notably the quality of contract enforcement. According to this indicator, legal institutions in the BIICS are generally less reliable than in OECD countries (Figure 7.17a), with India and South Africa having relatively more solid legal institutions. This general pattern is also depicted in the Property Rights Alliance's indicator of the strength of physical property rights, although the BIICS are assessed to be closer to countries in the tail end of the OECD distribution (Figure 7.17b). Similarly, the Park index of intellectual property rights protection shows India and South Africa as having relatively stronger institutions compared with Brazil, China and Indonesia (Figure 7.17c).

Although the above indicators suggest that more progress is needed, a number of recent policy initiatives have made some important improvements in protecting private

Figure 7.17. **Contracting institutions and property rights are less developed in the BIICS**



1. This indicator is constructed in a way such that its average across all countries is zero and the standard deviation is one.
2. The scale of the physical and intellectual property rights indexes are scaled to range from 0 to 10, with 10 representing the strongest level of property rights protection, and 0 a lack of any protection.

Source: Kaufmann et al. (2009); Property Rights Alliance (2009); Park and Lippoldt (2008).

StatLink  <http://dx.doi.org/10.1787/786673262253>

property rights in the BIICS. In China, a law introduced in 2007 explicitly recognises the equivalence of private assets with state and collective property, following up on the constitutional amendment in 2004 that recognised private property explicitly for the first time. In Indonesia, a new investment law enacted in 2007 clarified property rights protection by requiring that owners be compensated at the market value of assets should these be seized or nationalised. Indonesia ratified all major conventions concerning intellectual property rights (IPRs) in the early 2000s. And India strengthened its regime for protecting IPRs by adopting the WTO's TRIPS standards in 2005. Such strengthening of IPRs should help to promote investments in innovation and R&D, especially as incomes rise and indigenous technological capacity grows through improving human capital. In addition, it can also help to attract foreign investment in more advanced sectors that can have beneficial spillovers (Maskus *et al.*, 2005).

Policy implementation and enforcement

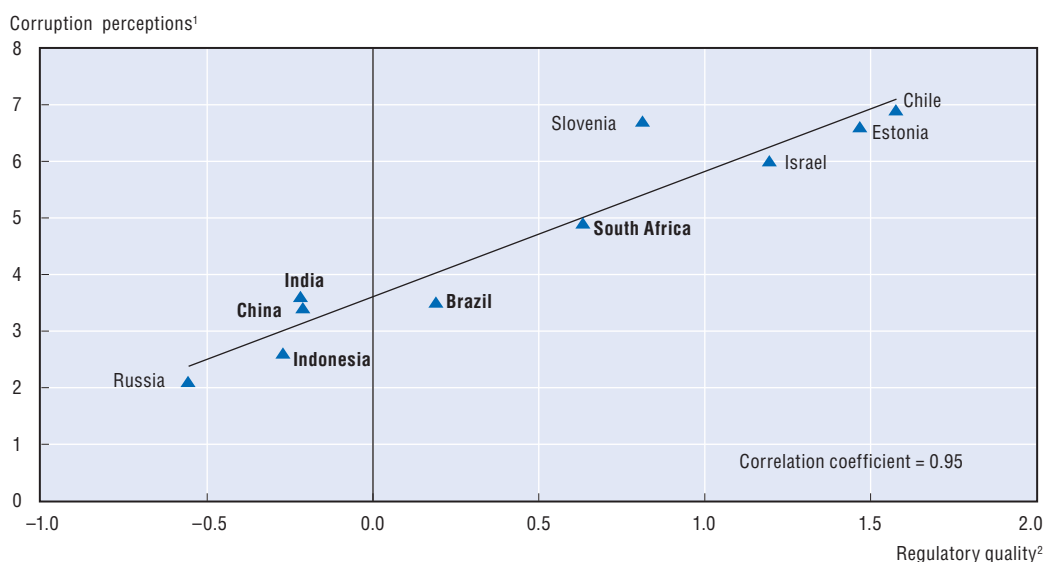
The effectiveness of a country's regulatory framework is not solely determined by the formal rules on the statute books but also by the effectiveness with which they are implemented and enforced. This enforcement effect is likely to be more important in countries where governance structures and judicial systems are weaker – and less independent from political interference – or when respect for formal laws and regulations is lacking. In addition, the incentive structures faced by government officials may also impact on the efficiency of policy enforcement (OECD, 2009d).

This suggests that the extent to which the business environment supports competition is a function of both regulations and the way they are enforced. Measuring policy enforcement is not straightforward. However, Kaufmann *et al.* (2005) find that indicators of corruption correlate with discrepancies in *de jure* and *de facto* measures of business regulation and therefore provide a reasonable proxy for enforcement. The extent of corruption in the BIICS is significantly higher than in the typical OECD country, according to perception-based indicators. Also, across the ten BIICS and OECD accession countries, perceived corruption is highly correlated with investors' perceptions of the quality of the business climate, suggesting that enforcement and implementation issues are of special importance (Figure 7.18).²⁰

According to this proxy indicator, enforcement is particularly weak in all BIICS except for South Africa, implying a risk that reforms aimed at changing formal policies may have a lower-than-expected impact on economic activity. In such a case, improvements in the institutional and administrative capacity for enforcing formal regulatory policies could magnify the effect of changes in formal policies on the business environment. Adoption of international rules such as the OECD Anti-Bribery Convention (already ratified by Brazil and South Africa) can be helpful in deterring corruption, especially important when there are foreign investors in industries with a significant risk of bribery, such as extraction and construction.

Financial sector development

Financial systems can have important effects on economic growth. Properly regulated, well-functioning banking systems and securities markets channel funds efficiently between savers and investors, diversify risks of households, and generate information on prospective as well as ongoing investment projects. The result is that scarce savings is allocated to investment projects with relatively high returns for individual investors and

Figure 7.18. **Enforcement and regulatory quality, 2008**

1. The corruption perceptions indicator is from Transparency International for 2008. It assesses the degree to which corruption is perceived to exist among public officials and politicians.
2. The indicator of regulatory quality is from the World Bank Governance Matters Database. It is perceptions-based and assesses the ability of government to formulate and implement sound policies and regulations that promote private sector development.

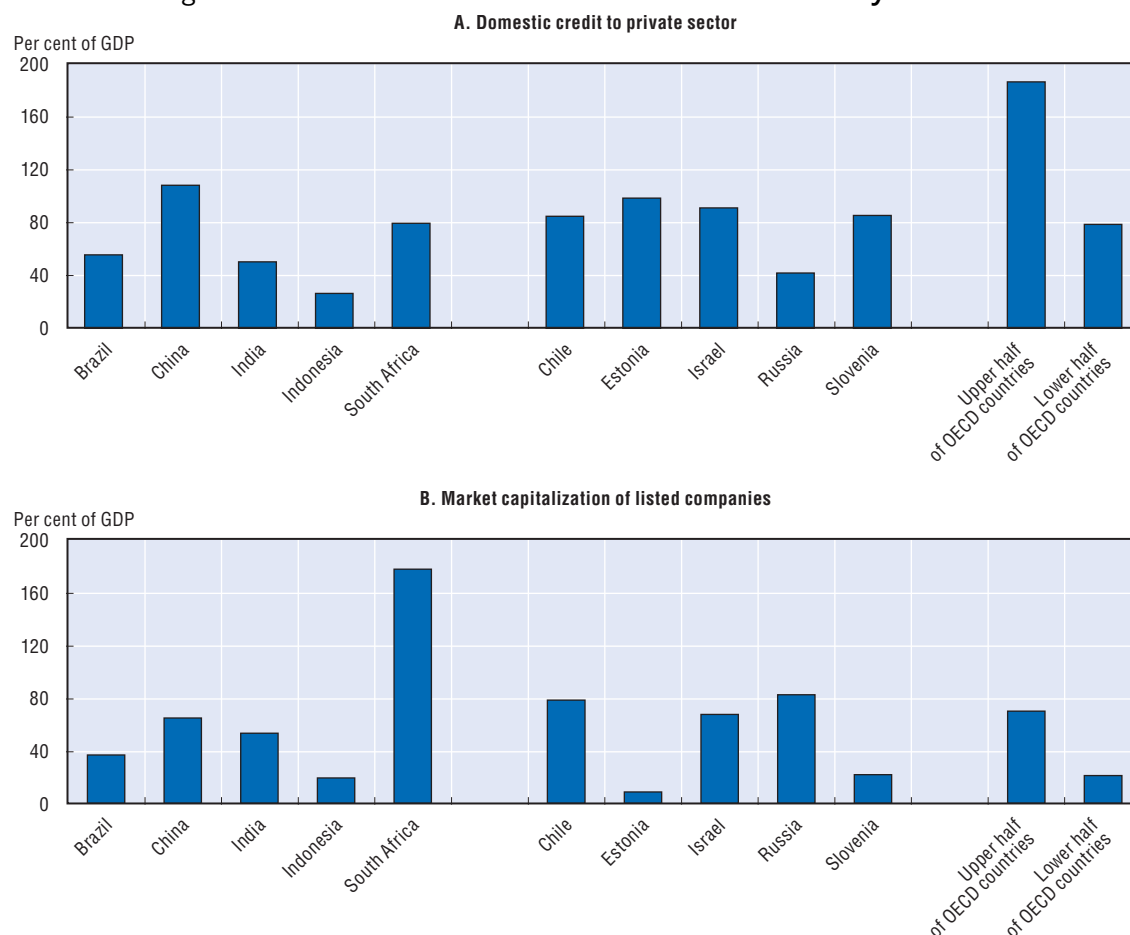
Source: Kaufmann et al. (2009); Transparency International.

StatLink  <http://dx.doi.org/10.1787/786673262253>

society at large (OECD, 2003). In the BIICS, financial markets are typically much shallower than in the upper half of OECD countries, implying low levels of financial inclusion and a more limited role for financial intermediation in capital allocation (Figure 7.19). To some extent, this reflects differences in regulation. In particular, international evidence suggests that high state-ownership of banks tends to depress financial sector development, with negative implications for economic growth (de Serres et al., 2006). These effects are found to be stronger for countries with relatively shallow financial markets such as the BIICS (la Porta et al., 2002).

Policy reforms to reduce informality

As discussed in Section 2, BIICS economies have substantial informal employment. While informal sectors absorb low-skilled workers and therefore reduce poverty and social exclusion, there are important reasons why a high degree of informality in labour markets should be of concern to policymakers. First, the informal sector may become a trap for unskilled workers, thus perpetuating a vicious circle of low human capital, low pay and high income inequality in a segmented labour market. Second, informality narrows the tax base, concentrating the tax burden on formal enterprises and individuals. This is also the case for existing or planned social security schemes, as long as entitlements are not strictly contribution-dependent. Finally, a lack of access to the financial sector increases the financing costs facing informal enterprises, resulting in low capital accumulation and small scale, which contribute to low productivity. Yet as industrialisation proceeds in BIICS countries, enterprises need to become increasingly capital-intensive, though increased economies of scale.

Figure 7.19. **Financial markets in the BIICS are relatively shallow**

Source: World Bank (WDI).

StatLink  <http://dx.doi.org/10.1787/786673262253>

The causes of informality are complex (OECD, 2009c). A high tax burden and product and labour market regulatory complexities that increase compliance costs are often considered to encourage firms to operate informally, and to force the low-skilled into low-productivity and insecure informal employment (Schneider and Enste, 2000; World Bank, 2007). In India and Indonesia, for example, highly restrictive labour market regulation has contributed to persistently high informality and a lack of dynamism in labour-intensive sectors, despite abundant low-cost labour (Dougherty *et al.*, 2009; OECD, 2008). In countries with a relatively well-developed social welfare system, such as Brazil, the combination of numerous social security charges, fiscal levies and mandated saving schemes has been found to have a negative impact on hiring of low-skilled workers (OECD, 2009c). On the other hand, schemes where benefit eligibility is not conditional on worker contributions reduces the opportunity cost of informality, and might encourage informality in the upper informal labour market tier (World Bank, 2007). In Indonesia, a very high minimum wage additionally depresses formal employment (OECD, 2008b). Large tax wedges and/or high minimum wedges can act as barriers to formal employment, especially for workers with low human capital. This interaction illustrates the potential for improved educational attainment to reduce informality.

Policy efforts to reduce informality need to focus on all these key areas. There is therefore a strong case for a multifaceted strategy pursuing four objectives: i) reducing barriers for firms to create more formal sector jobs, ii) giving informal workers the necessary means (legal, financial, educational) to shift to formal employment; iii) providing incentives to those who are located in the upper tier of informal employment to become formal; and iv) providing informal workers with basic social services without creating perverse incentives to stay informal. The emphasis should be on facilitating formal sector employment rather than on trying to suppress the informal sector, since the latter is likely to increase open unemployment (OECD, 2009b). The most fundamental policy challenge is to enhance human capital through improved education and incentives for on-the-job training, also in the informal sector. Labour market flexibility needs to be enhanced in most BIICS countries, while the safety net for unemployment should play a larger role relative to employment protection, all the more so as it is a more targeted, equitable and effective insurance device against the risk of income loss. However, it is equally important to strike the right balance in further development of the social safety net between adequate, cost-effective social protection and incentives to work in the formal sector (see OECD, 2008d). Employment-based contribution rates should be kept low for low-paid workers, while social entitlements may be partly linked to formal employment status in order to raise its attractiveness. Simplifying the tax system and reducing burdensome product market regulation would further improve entrepreneurship and formal job creation and should play a prominent role in any employment formalisation strategy. Finally, boosting the enforcement capacity of tax authorities could be used as a complement – although not as a substitute for – policies addressing the fundamental causes of informality.

Notes

1. The BIICS are also of increasing importance to the OECD. In May 2007, the OECD began strengthening its co-operation with the BIICS through enhanced engagement programmes with a view to possible membership. This recognised the growing importance of these countries in the global economy and reflects the OECD's principal goal of providing high-quality advice to enhance prosperity in member and non-member countries.
2. For an elaborated version of this chapter, refer to Conway *et al.* (2010).
3. The OECD is currently elaborating on a strategy to address “green growth” challenges.
4. As is the case with OECD countries in the *Going for Growth* framework, income convergence in the BIICS is assessed relative to average GDP per capita in countries in the upper half of the OECD income distribution through time. See Chapter 2.
5. This pattern is similar to the ten lowest-income OECD countries, in which gaps in GDP per capita are also primarily accounted for by labour productivity gaps while shortfalls in labour utilisation play a much smaller role (OECD, 2009a).
6. Informality is also an issue in several OECD countries (see OECD, 2008d, 2008e).
7. Throughout this chapter, wherever data permit, the OECD accession candidate countries – that is Chile, Estonia, Israel, the Russian Federation and Slovenia – are included as an additional point of reference in the figures. Upper and lower half of OECD country groupings are based on the value of the respective indicator.
8. See Duval and de la Maisonneuve (2010) for details.
9. This is consistent with the “new stylised facts of economic growth”, which find that TFP accounts for the bulk of differences in GDP per capita across a broad cross-section of countries (*e.g.* Easterly and Levine, 2001; Caselli, 2005; Caselli and Coleman, 2006).

10. A large share of FDI in OECD countries is for mergers and acquisitions, implying that comparisons with investment may exaggerate the importance of FDI as a source of new capital formation.
11. This is apparent from the wide range of theories of economic growth and the difficulty of indentifying the most robust drivers, see *e.g.* Sala-i-Martin *et al.* (2004).
12. However, spending ratios in some OECD countries may be higher in part because of the higher relative cost of labour in education services.
13. See Arnold *et al.* (2008) for a summary of this literature. Capital reallocation can potentially lead to large productivity improvements in emerging countries. For example, using microdata on manufacturing firms, Hsieh and Klenow (2009) find that reallocating capital and labour to equalise marginal products to the extent observed in the United States would increase manufacturing TFP by 30-50% in China and 40-60% in India.
14. For evidence of the relative inefficiency of state-owned enterprises in China and India, see Dougherty *et al.* (2007, 2009).
15. In China, for instance, increasing concentration of SOE in sectors deemed to be “strategic” has led to increasingly concentrated market shares in these sectors (OECD, 2010).
16. For example, see the World Bank’s Enterprise Survey for India (www.enterprisesurveys.com).
17. Such *de facto* minimum wages are set by sectoral bargaining councils and legally extended to firms and workers within the sector covered by each council; these minima in some cases depress demand for low-skilled labour in these sectors.
18. For a survey of indicators in some of these areas, see Mourougane and Furceri (2010).
19. De Soto (2000) argues that a lack of legal title to land and housing prevents workers from using their property as collateral for formal loans for business investment. This is seen as a key reason why informal employment persists in developing countries, since it poses a major barrier to small-scale entrepreneurship.
20. Indeed, in these ten countries, perceptions of the business climate are more highly correlated with corruption than they are with the PMR indicators, which measure *de jure* policy settings. In OECD countries, this result is reversed, implying that informal enforcement mechanisms play a greater role in shaping the business environment in the accession and BIICS countries.

Bibliography

- Acemoglu, D., S. Johnson and J. Robinson (2005), “Institutions as a Fundamental Cause of Long-Run Growth”, Chapter 6 in Aghion, P. and S. Durlauf (eds.), *Handbook of Economic Growth*.
- Aghion, P., W. Carlin and M. Schaffer (2002), “Competition, Innovation and Growth in Transition: Exploring the Interaction Between Policies”, *William Davidson Working Papers*, No. 501.
- Aghion, P. and R. Griffith (2005), *Competition and Growth*, The MIT Press, Cambridge, Massachusetts.
- Aghion, P. and P. Howitt (2006), “Appropriate Growth Policy: A Unifying Framework”, *Journal of the European Economic Association*, Vol. 4.
- Arnold, J., G. Nicoletti and S. Scarpetta (2008), “Regulation, Allocative Efficiency and Productivity in OECD Countries: Industry and Firm-Level Evidence”, *OECD Economics Department Working Papers*, No. 616.
- Bassanini, A. and R. Duval (2009), “Unemployment, Institutions, and Reform Complementarities: Re-Assessing the Aggregate Evidence for OECD Countries”, *Oxford Review of Economic Policy*, Vol. 25.
- Bassanini, A., L. Nunziata and D. Venn (2009), “Job Protection Legislation and Productivity Growth in OECD Countries”, *Economic Policy*, No. 58.
- Beck T. and L. Laeven (2005), “Institution Building and Growth in Transition Economies”, *World Bank Policy Research Working Paper Series*, No. 3657.
- Blanchard, O. and G. Giavazzi (2003), “Macroeconomic Effects of Regulation and Deregulation In Goods And Labor Markets”, *The Quarterly Journal of Economics*, Vol. 118.
- Blöndal, S. and S. Dougherty (2009), “Priorities for Growth in OECD Economies”, in C. Braga and P.-C. Padoan (eds.), *Innovation and Catch-up in a Globalized World*, OECD and The World Bank, Paris.
- Caselli, F. (2005), “Accounting for Cross-Country Income Differences”, in P. Aghion and S. Durlauf (eds.), *Handbook of Economic Growth*, Elsevier, Amsterdam.

- Caselli, F. and W. Coleman (2006), "The World Technology Frontier", *American Economic Review*, Vol. 96.
- Cohen, D. and M. Soto (2007), "Growth and Human Capital: Good Data, Good Results", *Journal of Economic Growth*, Vol. 12.
- Conway, P., D. de Rosa, G. Nicoletti and F. Steiner (2006), "Product Market Regulation and Productivity Convergence", *OECD Economic Studies*, No. 43.
- Conway, P., S. Dougherty and A. Radziwill (2010), "Going for Growth in Brazil, China, India, Indonesia and South Africa", *OECD Economics Department Working Papers*, forthcoming.
- Dougherty, S., R. Herd and P. He (2007), "Has a Private Sector Emerged in China's Industry? Evidence from a Quarter of a Million Chinese firms", *China Economic Review*, Vol. 18.
- Dougherty, S. (2009), "Labour Regulation and Employment Dynamics at the State Level in India", *Review of Market Integration*, Vol. 1.
- Dougherty, S., R. Herd and T. Chalaux (2009), "Microevidence on Structure and Productivity in Indian firms", *OECD Economic Studies*, Vol. 2009.
- Duval, R. and C. de la Maisonnette (2010), "Long-run Economic Scenarios for the World Economy", *Journal of Policy Modeling*, Vol. 32.
- Easterly, W. and R. Levine (2001), "It's Not Factor Accumulation: Stylized Facts and Growth Models", *The World Bank Economic Review*, Vol. 15, No. 2.
- Égert, B., T. Koźluk, and D. Sutherland (2009), "Infrastructure and Growth: Empirical Evidence", *OECD Economics Department Working Papers*, No. 685.
- Estache, A. and M. Fay (2007), "Current Debates on Infrastructure Policy", *World Bank Policy Research Working Paper*, No. 4410.
- Förster, M. and M. Mira d'Ercole (2005), "Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s", *OECD Employment, Labour and Social Affairs Working Papers*, No. 22.
- Golub, S. (2009), "Openness to Foreign Direct Investment in Services: An International Comparative Analysis", *The World Economy*, Vol. 32.
- Haltiwanger, J., S. Scarpetta and H. Schweiger (2008), "Assessing Job Flows Across-Countries: The Role of Industry, Firm Size and Regulations", *NBER Working Papers*, No. 13920.
- Hanushek, E. and L. Woessmann (2008), "The Role of Cognitive Skills in Economic Development", *Journal of Economic Literature*, Vol. 46.
- Howitt, P. and D. Mayer-Foulkes (2005), "R&D, Implementation and Stagnation: A Schumpeterian Theory of Convergence Clubs", *Journal of Money, Credit and Banking*, Vol. 37.
- Hsieh, C. and P. Klenow (2009), "Misallocation and Manufacturing TFP in China and India", *Quarterly Journal of Economics*, forthcoming.
- IMF (2009), "South Africa: 2009 Article IV Consultation – Staff Report; Staff Statement and Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for South Africa", *IMF Country Reports*, No. 09/273.
- Kahn, L. (2007), "The Impact of Employment Protection Mandates on Demographic Temporary Employment Patterns: International Microeconomic Evidence", *Economic Journal*, Vol. 117.
- Kantor, P., U. Rani and J. Unni (2006), "Decent Work Deficits in the Informal Economy: the Case of Surat", *Economic and Political Weekly*, 27 May.
- Kaufmann, D., A. Kraay and M. Mastruzzi (2005), "Governance Matters IV: Governance Indicators for 1996-2004", *World Bank Policy Research Working Papers*, No. 3630.
- Kaufmann, D., A. Kraay and M. Mastruzzi (2009), "Governance Matters VIII: Governance Indicators for 1996-2008", *World Bank Policy Research Working Papers*, No. 4978.
- Maskus K.E., S. Dougherty and A. Mertha (2005), "Intellectual Property Rights and Economic Development in China", in C. Fink and K.E. Maskus (eds.), *Empirical Investigations of the Effects of Intellectual Property Protection on Market Structure, Trade, and Direct Foreign Investment*, The World Bank and Oxford University Press.
- Mourougane, A. and D. Furceri (2010), "Taking Stock of Existing Structural Policy and Outcome Indicators", *OECD Journal: Economic Studies*, Vol. 2010.
- Nicoletti, G. and S. Scarpetta (2005), "Product Market Reforms and Employment in OECD Countries", *OECD Economics Department Working Paper* No. 471.

- Nicoletti, G. and A. Wölfl (2010), "Product Market Regulation: Extending the Analysis to Candidate Countries for Accession, Enhanced Engagement and Other Non-OECD Countries", *OECD Economics Department Working Papers*, forthcoming.
- OECD (2003), *The Sources of Economic Growth in OECD Countries*, Paris.
- OECD (2004a), *OECD Employment Outlook*, OECD, Paris.
- OECD (2004b), "Informal Employment and Promoting the Transition to a Salaries Economy", in *OECD Employment Outlook*, Paris.
- OECD (2005), *OECD Economic Surveys: China*, Paris.
- OECD (2006), *Economic Policy Reforms: Going for Growth*, Paris.
- OECD (2007a), *OECD Economic Surveys: India*, Paris.
- OECD (2007b), "Labour Markets in Brazil, Russia, Indian and China" in *OECD Employment Outlook 2007*, Paris.
- OECD (2008a), *OECD Economic Surveys: South Africa Economic Assessment*, Paris.
- OECD (2008b), *OECD Economic Surveys: Indonesia Economic Assessment*, Paris.
- OECD (2008c), *OECD Reviews of Innovation Policy: China*, Paris.
- OECD (2008d), *OECD Economic Surveys: Turkey*, Paris.
- OECD (2008e), *OECD Employment Outlook*, Paris.
- OECD (2008f), *OECD Environmental Outlook to 2030*, Paris.
- OECD (2009a), *Economic Policy Reforms: Going for Growth*, Paris.
- OECD (2009b), *Is Informal Normal? Towards More and Better Jobs in Developing Countries*, J. Jutting and J. Laigesia (eds.), Development Centre, Paris.
- OECD (2009c), *OECD Economic Surveys: Brazil*, Paris.
- OECD (2009d), *Government at a Glance*, Paris.
- OECD (2009e), *Globalisation and Emerging Economies – Brazil, Russia, India, Indonesia, China and South Africa*, Paris.
- OECD (2009f), *The Economics of Climate Change Mitigation: Policies and Options for Global Action Beyond 2012*, Paris.
- OECD (2010), *OECD Economic Surveys: China*, Paris.
- Park, W. and D. Lippoldt (2008), "Technology Transfer and the Economic Implications of the Strengthening of Intellectual Property Rights in Developing Countries", *OECD Trade Policy Working Papers*, No. 62.
- Porta La, R., F. Lopez-De-Silanes A. Shleifer (2002), "Government Ownership of Banks", *The Journal of Finance*, Vol. 57, No. 1.
- Property Rights Alliance (2009), *International Property Rights Index 2009 Report*, Hernando de Soto program, www.internationalpropertyrightsindex.org.
- Sala-i-Martin, X., G. Doppelhofer and R. Miller (2005), "Determinants of Long-Run Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach", *American Economic Review*, Vol. 20.
- Samir, K., B. Barakat, A. Goujon, V. Skirbekk and W. Lutz (2008), "Projection of Populations by Level of Education Attainment, Age and Sex for 120 Countries for 2005-2050", *International Institute for Applied Systems Analysis Interim Reports*, No. IR-08-038.
- Savvides, A. and M. Zachariadis (2005), "International Technology Diffusion and the Growth of TFP in the Manufacturing Sector of Developing Economies", *Review of Development Economics*, Vol. 9.
- Schneider, F. and D.H. Enste (2000), "Shadow Economies: Size, Causes and Consequences", *Journal of Economic Literature*, Vol. 38.
- de Serres, A., S. Kobayakawa, T. Sløk and L. Vartia (2006), "Regulation of Financial Systems and Economic Growth", *OECD Economics Department Working Papers*, No. 506.
- Suryahadi, A., W. Widyanti, D. Perwira and S. Sumarto (2003), "Minimum Wage Policy and Its Impact on Employment in the Urban Formal Sector", *Bulletin of Indonesian Economic Studies*, Vol. 39.

- Sutherland, D., S. Araujo, B. Égert and T. Koźluk (2009), "Infrastructure Investment: Links to Growth and the Role of Public Policies", *OECD Economics Department Working Paper*, No. 686.
- Urzúa, C.M. (2008), "Evaluación de los Efectos Distributivos y Espaciales de las Empresas con Poder de Mercado en México", Mexican Federal Competition Commission.
- Venn, D. (2009), "Legislation, Collective Bargaining and Enforcement: Updating the OECD Employment Protection Indicators", *OECD Social, Employment and Migration Working Papers*, No. 89.
- Wacziarg, R. (2001), "Measuring the dynamic gains from trade", *World Bank Policy Research Papers*, No. 2001.
- Wölfl, A., I. Wanner, T. Kozluk and G. Nicoletti (2009), "Ten Years of Product Market Reform in OECD Countries – Insights from a Revised PMR Indicator", *OECD Economic Department Working Papers* No. 695.
- Wölfl, A., G. Nicoletti, O. Röhn, I. Wanner (2010), "Product Market Regulation: Extending the Analysis to Candidate Countries for Accession, Enhanced Engagement Countries and Other Non-OECD Countries", forthcoming in *OECD Economic Department Working Papers*.
- World Bank (2007), *Informality: Exit and Exclusion*, World Bank, Washington, DC.

OECD PUBLISHING, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(12 2010 03 1 P) ISBN 978-92-64-07996-0 – No. 57173 2010

Economic Policy Reforms

Going for Growth

2010

The world is currently facing the aftermath of the worst financial crisis since the Great Depression. *Going for Growth 2010* examines the structural policy measures that have been taken in response to the crisis, evaluates their possible impact on long-term economic growth, and identifies the most imperative reforms needed to strengthen recovery. In addition, it provides a global assessment of policy reforms implemented in OECD member countries over the past five years to boost employment and labour productivity. Reform areas include education systems, product market regulation, agricultural policies, tax and benefit systems, health care and labour market policies.

The internationally comparable indicators provided here enable countries to assess their economic performance and structural policies in a wide range of areas.

In addition, this issue contains three analytical chapters covering:

- intergenerational social mobility;
- prudential regulation and competition in banking;
- key policy challenges in Brazil, China, India, Indonesia and South Africa.

www.oecd.org/economics/goingforgrowth

OECD's books, periodicals and statistical databases are now available via **www.SourceOECD.org**, our online library.

This book is available to subscribers to the following SourceOECD theme:
General Economics and Future Studies

Ask your librarian for more details of how to access OECD books online, or write to us at
SourceOECD@oecd.org

ISSN 1813-2715
2010 SUBSCRIPTION