

## *Chapter 4*

### **Priorities for growth in OECD economies**

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*This chapter discusses the main results of work carried out at the OECD to benchmark economic performance and policy in its member countries, in order to make policy recommendations that may improve economic performance. It examines differences in policy recommendations that have been made for countries at various levels of development, characterises the main challenges each group of countries faces, and considers the main distinctions between these countries and five emerging non-members. Product market competition and human capital reforms are found to be especially important priorities in lower-income countries, which face substantial gaps in productivity to the frontier countries.*

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## Benchmarking structural policies

Differences in material living standards across OECD countries reflect in part different structural policy settings, as well as deeper institutional characteristics. Relatively low income per capita and a failure to converge towards the highest-income countries can therefore be signs of policies that are not as growth-friendly as they could be. Successive empirical studies by the OECD and others have sought to identify the policy levers that influence GDP per capita and its growth.<sup>2</sup> As part of these studies, various indicators have been developed to summarise performance on key components of GDP per capita and the stance of related policies in a consistent way across countries and over time.

The OECD's *Going for Growth* report seeks to help policy makers to achieve improved standards of living for their citizens. Drawing on knowledge of economic circumstances in individual countries, the exercise applies a systematic international benchmarking framework to analyse indicators of policy and performance. On this basis, it then identifies five policy priorities for each country that would help promote higher GDP per capita. These policy priorities are discussed and vetted by member countries, and the report itself is published annually under the responsibility of the OECD Secretariat. The report, which began in 2005, serves as a vehicle for the OECD to issue recommendations for reform across a range of policy areas, as part of its multilateral surveillance work on structural issues.<sup>3</sup> This systematic benchmarking relies primarily on objective policy indicators that have been linked econometrically to economic performance.

Empirical research linking policy with performance includes a long series of studies performed on a large number of OECD countries. These studies include the *OECD Growth Study* (2003), the *OECD Jobs Strategy* (1994) and its reappraisal (2006), and associated background studies, which took inspiration and drew extensively from the academic literature. These studies included estimates of short-run and long-run effects of product and labour market policies on GDP per capita, documented, for example, in Bassanini *et al.* (2001), as well as examinations of the effects of policies on employment and unemployment, as in Bassanini and Duval (2006).<sup>4</sup> Many of the OECD studies were

2. *Going for Growth* focuses on GDP per capita as its principal measure of material living standards. Welfare includes material standards of living as well as the value of leisure, inequality of income, use of non-renewable resources and environmental services. Many of these aspects of welfare are difficult to measure and are not available on a timely basis. Earlier *Going for Growth* editions have shown that there is a close relationship in most cases between GDP per capita and broader, though less timely, measures of economic well-being. This relationship is currently being re-examined by the Stiglitz-Sen-Fitoussi Commission.
3. *Going for Growth* is a core part of the mutual accountability and peer pressure that are central to the OECD's mission. This horizontal structural surveillance exercise supplements the country-specific surveillance that is reported in *Economic Surveys*, as well as thematic reviews in specific areas such as agriculture, education, environment, innovation, investment and regulatory policy.
4. Bassanini *et al.* (2001) and Boulhol *et al.* (2008) estimated growth equations using the pooled mean group estimator for a panel of 21 OECD economies, and examined the role of various types of structural policies on long-run economic growth. Bassanini and Duval (2006) estimated unemployment and group-specific employment rate equations for a panel of 24 OECD economies using various panel data estimators (including that of Arellano and Bond) to examine the role of policy settings and their interactions in affecting participation. These studies did not include most of the middle-income OECD countries, owing to overly short data availability, though there now exists a sufficient number of observations to incorporate them into some types of panel data analysis.

carried out for OECD committees, and documented in OECD Working Papers and various other publications. While much related work has been done outside of the OECD, the vast majority lacks a direct link to policy recommendations (OECD, 2009).

The broader literature on growth and development has offered a range of important insights into the role of policies, although it has focused more on deeper institutions, such as types of legal or political systems, which are usually the result of an accumulation of policy reforms over long periods (IMF, 2008). More broadly, institutions do seem to play an important role in economic development, and countries with higher levels of GDP per capita have institutions of much higher quality according to many measures (Kauffman *et al.*, 2008). However, the direction of causality is not always clear: “deep” institutions are also highly endogenous, and it is not at all easy to determine their causal role with respect to income levels or economic growth (Glaeser *et al.*, 2004; Acemoglu *et al.*, 2005). Moreover, the role of geographic factors and trade openness appears to be closely linked to institutions, making their identification difficult (Rodrick *et al.*, 2004; Boulhol *et al.*, 2008).

So far, the *Going for Growth* exercise has focused heavily on product and labour market policies (rather than deeper institutions) that can be shown to increase GDP per capita in OECD countries in a straightforward fashion. To do this, it has relied on studies using specific quantifiable policy indicators that have been vetted by policy makers and can be directly linked to policy actions. Given this, virtually all policy indicators that are currently used are produced by the OECD Secretariat. Though a large number of organisations produce various types of indicators that could potentially be relevant, these indicators usually lack a direct connection to policy levers (Furceri and Mourganne, 2009). Indicators of regulation of financial market competition have been lacking, although the OECD has proposed to expand the coverage of its indicators in this area.

It is important to emphasise that the recent debacle in financial markets does not call into question the beneficial effects of reforms of product and labour markets. A number of reforms throughout OECD countries in recent years have demonstrably shown their power to raise employment and productivity, and acting on the recommended reforms would measurably strengthen economic performance in the long term. In addition, more flexible product and labour markets are likely to strengthen countries’ resilience and their capacity to weather future downturns with less disruption to output and employment.

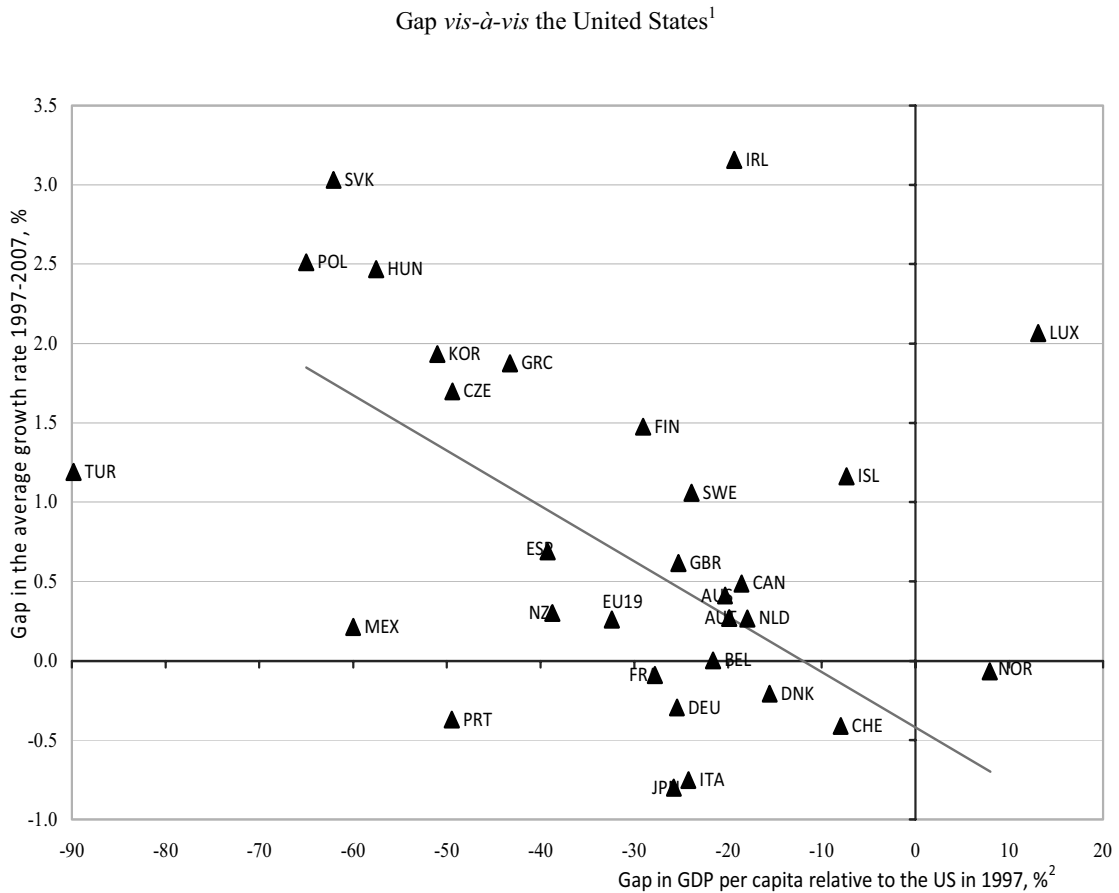
This chapter first examines patterns of convergence (Figure 4.1), then discusses how indicators are used to benchmark countries’ policy settings, and finally makes an assessment of the policy features that most distinguish middle-income OECD countries and some key emerging economies.

## Are the OECD countries converging?

The academic literature has found some support for long-run convergence of growth rates across countries, conditional on institutional settings, although the evidence is weaker within the OECD, likely a result of the smaller set of countries (Mankiw *et al.*, 1992; Durlauf *et al.* 2005). Convergence in income appears to have spread in the OECD area in recent years, as 21 of the 30 member countries, as well as the European Union (EU19) as a whole, made progress in converging towards the United States over the decade to 2007, as shown in Figure 4.1. This record represents an increase compared with an earlier assessment in *Going for Growth*, which placed three fewer countries in the convergence category, with the European Union diverging slowly. The recent shift

towards greater convergence of OECD countries was driven by an increase in labour utilisation in Europe, and a downward shift in productivity growth in the United States (OECD, 2009). While the fall in productivity growth in the United States appears to have been partly structural, it is still too early to tell whether the recent stabilisation in underlying trend productivity growth in Europe is durable.

**Figure 4.1. GDP per capita levels and growth rates**



Notes: The average growth rate of GDP per capita is calculated on the basis of volume data from national accounts sources. The level of GDP per capita is calculated on the basis of current purchasing power parities (PPPs). Ireland, Luxembourg and Turkey are detected as statistical outliers using the method of Hadi (1994). The regression line is estimated on individual countries excluding these outliers.

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

Source: OECD, *National Accounts Database*; OECD, *Labour Force Statistics Database* and *OECD Economic Outlook*, No. 84.

Only a few countries were catching up rapidly: with one exception,<sup>5</sup> only countries with levels of GDP per capita that are less than one-half that of the United States – Hungary, Poland and the Slovak Republic – converged at a rate that exceeds 2% per year.

5. In Ireland, a severe cyclical downturn has put at least a temporary halt on convergence. Moreover, its catch-up is more evident for output than for income per capita. The distinction is largely due to the large repatriation of profits from foreign-owned companies and terms-of-trade losses due to falling prices of domestically produced computers and related equipment.

The two lowest-income OECD countries are converging more slowly: Mexico, which has stagnated in recent years, and Turkey, which is a statistical outlier in an estimate of a standard convergence equation. The ongoing financial crisis and its impact on activity may make it even harder to discern convergence patterns in the years to come.

The gaps in GDP per capita *vis-à-vis* the numéraire country can be broken down into contributions from labour productivity and labour utilisation, as shown in Figure 4.2. This breakdown (which is not dependent on the choice of the numéraire) shows that the countries can be divided into three groups, depending on their relative contributions:

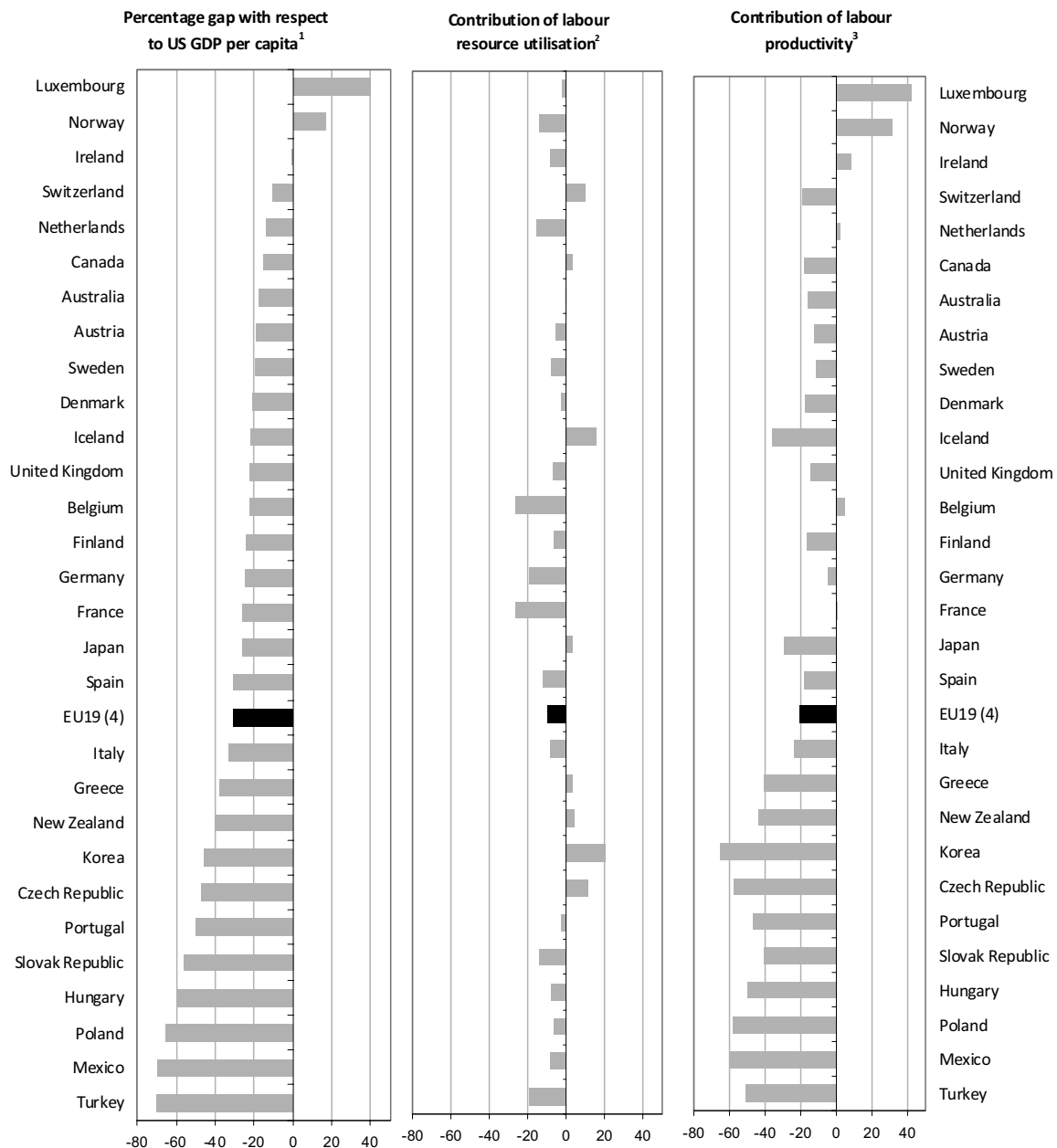
- *Mostly a productivity gap*: The gap for the ten lowest-income OECD countries is accounted for primarily by the effect of low labour productivity, given their lower levels of physical and human capital per worker, although the five lowest-income countries also have a substantial gap in measured labour utilisation. Among countries with higher incomes, the income gap for Australia, Canada, Iceland, Japan and Switzerland *vis-à-vis* the comparison country primarily reflects productivity shortfalls.
- *Mostly a labour utilisation gap*: The income gaps of Belgium, France, Germany and the Netherlands can be mostly accounted for by low labour utilisation. This divergence reflects a range of factors, including relatively shorter working hours, lower participation rates for older workers and higher unemployment.
- *Both significant productivity and labour utilisation gaps*: For the European Union, as well as the Nordic EU countries, Spain and Italy, the income shortfall reflects gaps with the United States in both productivity and labour utilisation.

While the United States is used as the numéraire in the convergence figure and the breakdown analysis, this does not reflect any prior judgement about the strength of its policy model. In fact, the performance comparisons made in *Going for Growth* have been shown to be unaffected by the choice of numéraire, although use of the United States provides a straightforward way of summarising the data and gauging how well OECD countries are performing relative to its largest and generally best-performing country, absent special factors in the case of Norway and Luxembourg (see OECD, 2009).

## Policy priority setting and results

The *Going for Growth* structural surveillance exercise seeks to identify five policy priorities for each OECD member country and the European Union, based on a systematic benchmarking approach. Three of these policy priorities are identified based on internationally comparable OECD indicators of policy settings and performance. The two additional priorities are often supported by indicator-based evidence, but may also draw on country-specific expertise. These priorities are meant to capture any potential policy imperatives in fields not covered by indicators. The policy indicators generally meet three main quality criteria: *i*) they can be tied to relevant performance indicators based on econometric evidence; *ii*) they relate to policies that are under the direct control of policy makers; and *iii*) they can be reliably measured with a sufficient degree of confidence to be credible to governments and the public.

Figure 4.2. The sources of real income differences



1. Based on 2007 PPPs. For Luxembourg, the population is augmented by the number of cross-border workers in order to take into account their contribution to GDP.

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. The EU19 is an aggregate of 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.

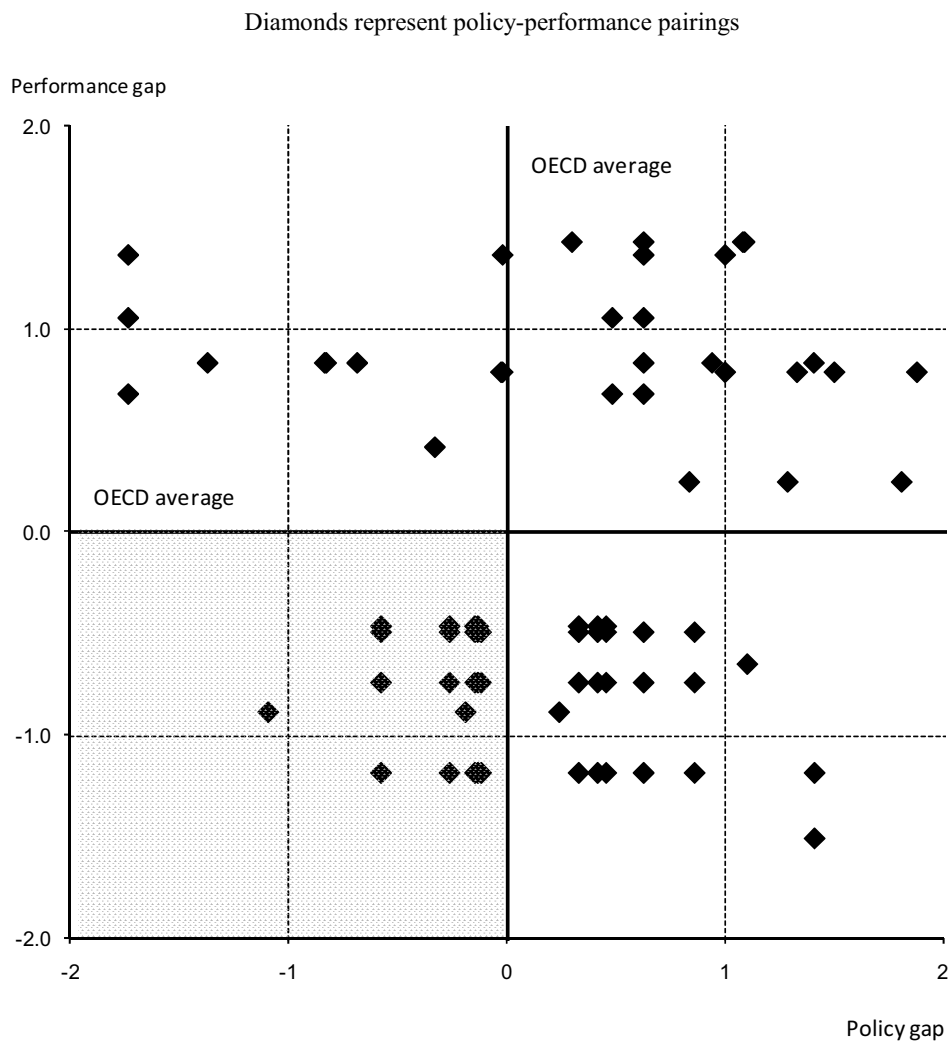
Source: OECD, *National Accounts Database*; OECD, *Economic Outlook 84 Database* and OECD (2008), *Employment Outlook*.

For the selection of the three indicator-based policy priorities, the starting point is a detailed examination of labour utilisation and productivity performance relative to the OECD average, so as to uncover specific areas of relative strength and weakness

compared with other OECD countries. Each performance indicator is juxtaposed to the corresponding policy indicators, for which OECD empirical research has shown a robust link to performance, to determine where performance and policy weaknesses appear to be linked. This evaluation process is carried out for each of the approximately 50 areas for which OECD policy indicators provide coverage.

As an example, Figure 4.3 shows, for a sample country, a scatter plot of pairings of policy indicators (on the horizontal axis) with corresponding performance indicators (on the vertical axis). Since many of the approximately 50 policy indicators are associated with more than one performance area, there are potentially well over 100 pairings to be examined. The indicators of policy and performance are standardised by re-scaling them so that each has a mean of zero and a cross-country standard deviation of one, with positive numbers representing positions more growth-friendly than the OECD average. The scatter plot is thus divided into four quadrants, depending on whether a country's policy-performance pairing is below or above the average policy or performance score.

**Figure 4.3. Example of selection of candidates for *Going for Growth* priorities**



Candidates for recommendations thus fall into the lower left quadrant, where policy indicators and corresponding performance are *both* below average. In most countries

there are more than three unique policy areas that qualify as potential priorities (for instance, Germany had 16 candidates in the 2009 exercise). When there are more than three candidate policy priorities, the list is narrowed using a combination of country expertise and the following criteria: *i*) the estimated quantitative impact of reforms in the policy area on GDP per capita as determined in previous OECD analysis; *ii*) the normalised distance of the policy stance from the benchmark (the OECD average), and *iii*) recent trends in policy and performance. The limit on the number of priorities means that for some countries, obvious policy imperatives may not be identified as priorities because other priorities are deemed more important.

**Table 4.1. Distribution of policy priorities by year**

30 OECD member countries and the EU

	2005	2007	2009	2009 MI-5 <sup>1</sup>
<b>Productivity</b>				
Product market regulation	47	39	38	7
Agriculture	7	7	7	0
Human capital	16	22	24	5
Other policy areas	28	23	21	3
<i>Total</i>	98	91	90	15
<b>Labour utilisation</b>				
Average and marginal taxation on labour income	12	11	13	3
Social benefits	27	31	27	2
Labour market regulation and collective wage agreements	16	18	20	3
Other policy areas	2	4	5	2
<i>Total</i>	57	64	65	10
<b>Overall</b>	155	155	155	25

1. Priorities for the five middle-income OECD countries shown in this column (Hungary, Mexico, Poland, Slovak Republic, Turkey).

Source: OECD (2009), *Going for Growth*, OECD, Paris.

## Priorities for OECD countries

Over the course of the *Going for Growth* process since 2005, the composition of policy priorities has gradually shifted from productivity-augmenting priorities towards those that are more focused on labour utilisation, although the largest number of priorities remains associated with improving labour productivity, as shown in Table 4.1. The decrease in productivity-enhancing policy priorities has been driven primarily by progress in reducing anti-competitive product market regulations, with part of this decrease balanced by shifting priorities towards policies that enhance human capital. A larger shift has occurred towards priorities aimed at boosting labour utilisation, notwithstanding improvements in labour market performance in recent years, with much of this shift focused on priorities to reform labour market regulations (while the priorities dealing with labour taxes and social benefits have remained more stable), reflecting much slower



progress in this area: a concern highlighted in previous work on the political economy of structural reform (OECD, 2007). It should be kept in mind that labour-market related policies may have an impact on productivity as well as labour market performance. For example, overly stringent job protection legislation has been found to reduce productivity (Bassanini *et al.*, 2009).

The policy priorities for the five middle-income OECD countries (using the 2007 World Bank classification, and dubbed the MI-5 here) have been in a narrower range of policy areas that are more focused on productivity-related policies (Table 4.1, last column). This heavier weight on productivity-enhancing policies reflects these countries' relative weakness in these areas. Distributions of policy priorities by policy area are shown by country grouping in Table 4.2.

**Table 4.2. Distribution of policy priorities by country grouping**

Percent of total in 2009

	OECD+EU	EU only <sup>1</sup>	Lowest income 10 <sup>2</sup>	MI-5 <sup>3</sup>
<b>Productivity</b>				
Product market regulation	25	21	26	28
Agriculture	5	1	2	0
Human capital	15	16	20	20
Other policy areas	14	10	14	12
<i>Total</i>	58	48	62	60
<b>Labour utilisation</b>				
Average and marginal taxation on labour income	8	11	8	12
Social benefits	17	21	10	8
Labour market regulation and collective wage agreements	13	15	14	12
Other policy areas	3	5	6	8
<i>Total</i>	42	52	38	40
<b>Overall</b>	100	100	100	100

1. Priorities for the 19 EU countries that are OECD members, plus the European Union as a whole.

2. Priorities for the 10 lowest-income OECD countries (MI-5, plus the Czech Republic, Greece, Korea, New Zealand and Portugal).

3. Priorities for the five middle-income OECD countries (Hungary, Mexico, Poland, the Slovak Republic, Turkey).

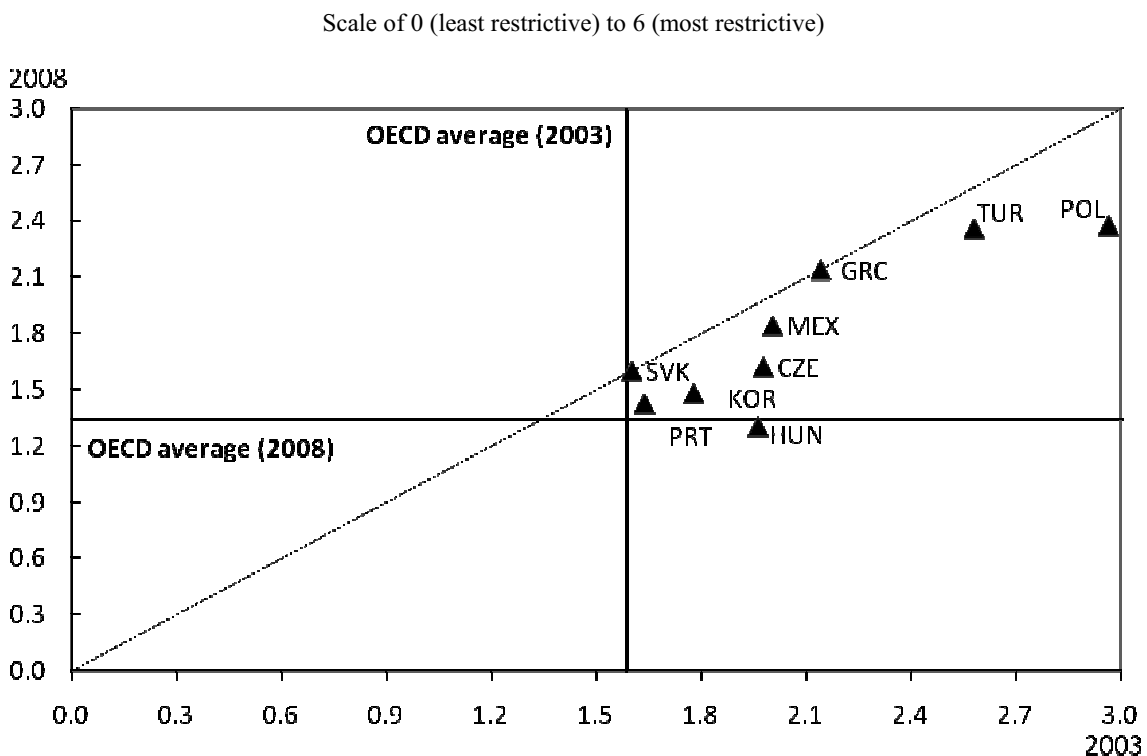
Source: OECD (2009), *Going for Growth*, OECD, Paris.

Differences in the share of policy priorities by area are quite stark across country groupings, reflecting differences in weaknesses in performance for each group of countries. In particular, the EU countries have a greater share of recommendations in the labour utilisation area than the OECD as a whole, a sign of their relative weakness in this area. In contrast, the ten lower-income OECD countries have more recommendations for productivity-enhancing reform than the OECD as a whole, as do the five middle-income OECD countries. These recommendations are mostly concentrated in the areas of product market regulation and human capital policy. Such differences may not fully reflect the

relative importance of reforms in each area, as the distance from best practice is probably larger for productivity-enhancing reforms among the lower-income OECD countries.

Product market regulation shows the large distance from best practice among the ten lower-income OECD countries. While reform has occurred in this area in these countries, their overall stance is still more restrictive than the OECD average, in some cases strikingly so. The overall score for this indicator is shown in Figure 4.4. The specific areas of policy weaknesses for these countries vary somewhat; entry barriers, public ownership and trade restrictiveness are particularly notable.

**Figure 4.4. Restrictiveness of economy-wide product market regulation<sup>1</sup>**



1. Because data for Greece and the Slovak Republic are not available for 2008, only 2003 data are shown.

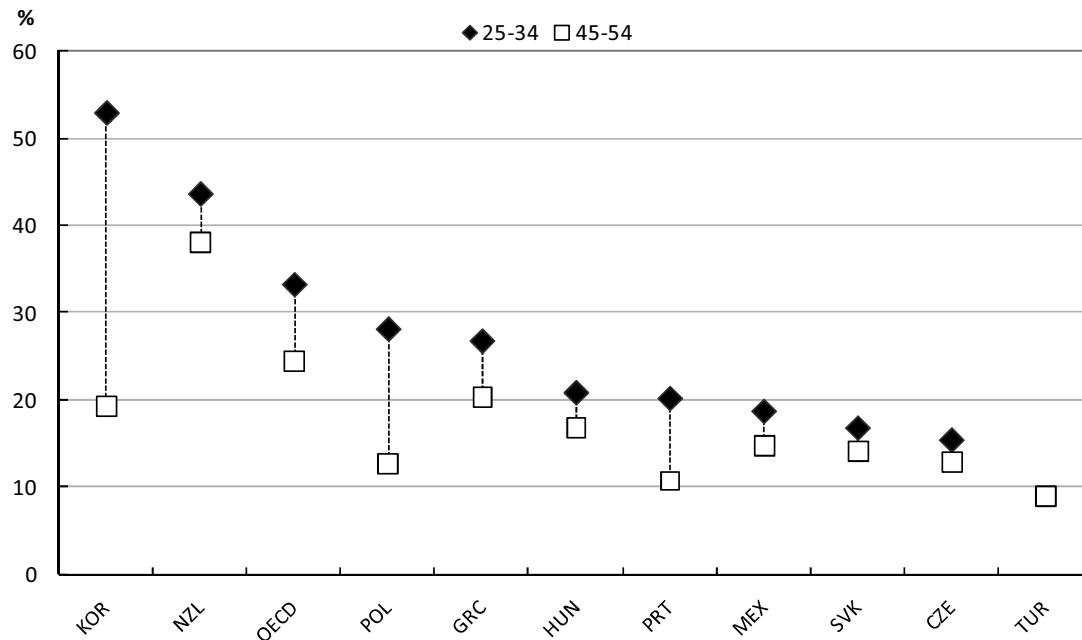
Source: OECD, *Product Market Regulation Database*, [www.oecd.org/eco/pmr](http://www.oecd.org/eco/pmr).

Human capital is another area with large differences from best practice in policy settings among the lower-income OECD countries. While differences in secondary school achievement are not as great, achievement levels are still well below the OECD average for higher education, except in Korea and New Zealand (Figure 4.5). In Korea, very rapid progress has been made in raising achievement levels for the younger cohorts. Progress has been much slower in the lowest-income countries. This is disappointing, as the impact of changes in education policies can take many decades to be fully felt, even though it can be very large in the long run (OECD, 2009).

Policy reforms in the areas of product market regulation and human capital would often help to improve the convergence of the lower-income countries towards the frontier. However, it is important to realise that policies do not work in isolation; for instance, improvements in the intensity of competition may only enhance growth if they are accompanied by flexible labour market policies. It is important to consider policies as a

package rather than in isolation, given interaction effects; moreover, policies may have different effects depending on a country's stage of development and the sophistication of its firms.

**Figure 4.5. Tertiary education: achievement levels**



Source: OECD (2008), *OECD Education at a Glance 2008*, OECD, Paris.

One issue often discussed is the role of R&D and innovation support for countries that are far from the technological frontier. While innovation may play less of a role in the development of countries at earlier stages of development, R&D investment can play an important role in improving absorptive capacity, especially when it complements education policies. The effect of policies may not always be linear with respect to development, and there is some evidence of a possible hump-shaped relation of some policies with levels of development (Aghion *et al.*, 2009; see also Chapter 2 in this volume).

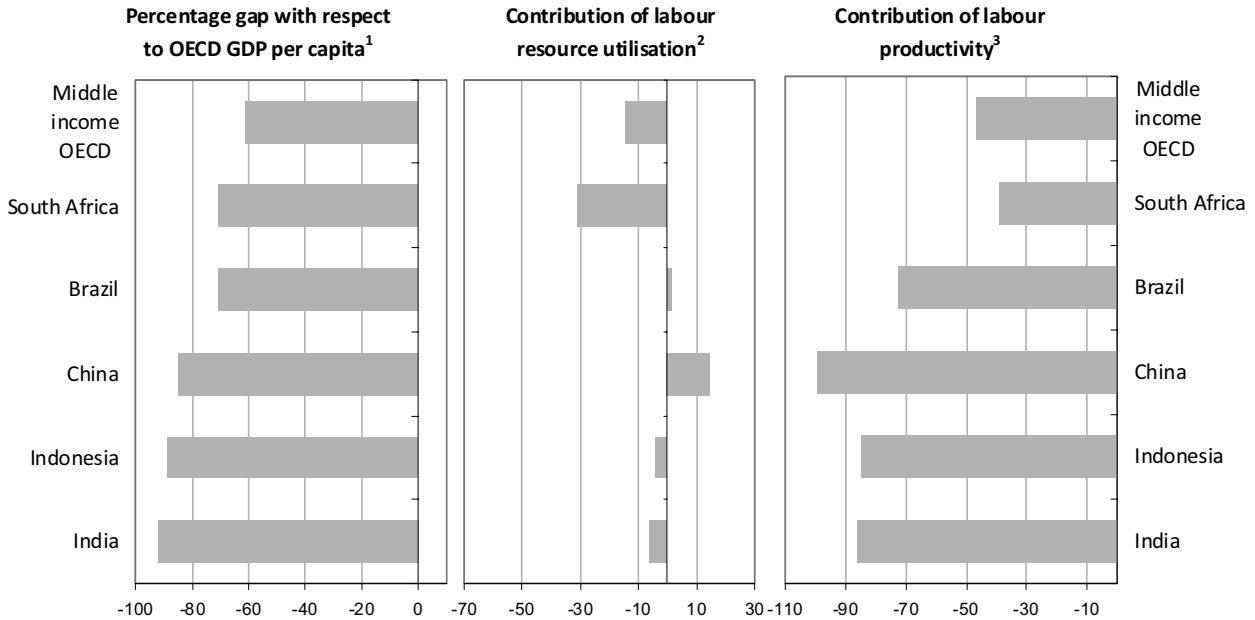
Higher levels of competition can also strengthen productivity growth through creative destruction. The entry of new businesses and the exit of laggards is a key mechanism in dynamic economies, bringing fresh ideas, business models and new products, and strengthening economic performance. These dynamics are particularly important for realising the reallocative efficiency gains that can arise from engaging in international trade (Dougherty, 2009), particularly as the global economy has become more and more integrated through trade and investment.

### Priorities for emerging economies

The large emerging economies play an increasingly central role in the global economy, and the OECD has engaged with many of them. A special relationship of “enhanced engagement” has been offered to Brazil, China, India, Indonesia and South

Africa.<sup>6</sup> These countries’ distinguishing characteristics relate to their large size and openness. They also have a lower level of GDP per capita than the OECD economies.

**Figure 4.6. The sources of income differences for middle-income and emerging economies**



1. The middle-income OECD countries are Hungary, Mexico, Poland, the Slovak Republic and Turkey. GDP per capita is based on revised 2006 purchasing power parities (PPPs) from the World Bank.

2. Labour resource utilisation is measured as the employment rate, based on national labour force surveys, except for India where it is an OECD estimate based on the National Sample Survey.

3. Labour productivity is measured as GDP per employee.

Source: OECD and The World Bank.

Looking towards the future, the addition of new countries to the OECD *Going for Growth* exercise would raise a number of questions. For example: Do the same (linear) empirical relationships still hold; are the same policy indicators still relevant, for instance in countries where there are large informal sectors and weak property rights; and is the average performance still the relevant benchmark if new countries at an earlier stage of development are added?

The source of relative weaknesses for the large emerging countries – a shortfall in labour productivity – is quite similar to that of the middle-income OECD countries, as Figure 4.6 demonstrates (using a breakdown analogous to that of Figure 4.2, but not accounting for differences in working hours, since these are not available). With the exception of South Africa, the shortfall of these countries’ level of GDP per capita relative to the OECD average is primarily in the labour productivity domain.

In terms of policies, some relevant policy indicators are already available for these large emerging countries, as a result of *OECD Economic Surveys* of non-members. This work suggests that, as for middle-income OECD countries, large weaknesses exist in the

6. The Organisation is also presently in the process of formally enlarging its membership. Five candidate countries are presently in the accession process: Chile, Estonia, Israel, the Russian Federation and Slovenia.

product market regulation and education domains. Moreover, country-specific analysis also suggests that policy recommendations are heavily weighted in this area as well. If such analogous differences hold for other policies, it may be relatively straightforward to extend the framework to the large emerging economies.

## Annex 4.A1

### The indicators used in *Going for Growth*

The current set of policy indicators used in the *Going for Growth* exercise is shown in Table 4.A1.1. The main types of indicators are shown with their source and most recent year. Most of the individual indicators are illustrated in a special chapter of the report. Forty-five detailed policy indicators are regularly used. All are produced within the OECD through its committees, and all are subject to vetting by country authorities. Most of the indicators are compiled directly by the Secretariat based on primary information, although some – such as the labour tax wedge – rely heavily on Eurostat or national authorities for compilation.

**Table 4.A1.1. OECD structural policy indicators currently used in *Going for Growth***

Type of indicators (number)	Latest data
Minimum and median wages (1)	2007
Net unemployment benefit replacement rates (2)	2006
Average tax wedge on labour income (2)	2007
Marginal tax wedge on labour income (3)	2007
Social security contribution paid by employers (1)	2007
Implicit tax on continued work at older ages (2)	2007
Childcare/implicit tax on returning to work (2)	2004
Support for disability and sickness (2)	2006
Employment protection legislation (3)	2008
Collective bargaining and trade union density (1)	2003/04
Product market regulation (8 overall + 7 sectoral)	2008
Foreign direct investment restrictiveness (1)	2006
Educational attainment (2)	2006
PISA scores (1)	2006
Producer support estimates (1)	2006
Weighted trade/tariffs barriers (1)	2007
Health expenditure (1)	2005
Public investment (1)	2007
Subsidies to private R&D (3)	2006/07

A key feature of the policy indicators used is that the specific indicators are tied directly to performance outcomes in empirical studies, typically based on analysis of

panel data. The coverage of the policy indicators thus closely follows work carried out by the OECD Secretariat in the context of its regular work programme. Areas that are well covered by this work include many policies in the areas of labour and product markets, as well as education and innovation.

The use of the OECD indicators is not always comprehensive: judgement about the quality, ongoing availability and reliability of indicators in some areas has limited their use, despite some empirical support. Some very recent OECD studies offer some room for expanding the indicator base relatively easily, including in the area of taxation (*e.g.* corporate tax rates), infrastructure (*e.g.* the regulatory independence indicator), and tertiary education (*e.g.* the structure of supply indicator). Studies in these areas have recently be completed, and preferred policy indicators from the analyses are being incorporated. Other projects currently under way which could be taken advantage of include those on health care and social mobility.

The performance indicators used in *Going for Growth* are principally based on a mechanical breakdown of GDP per capita, which includes employment, demographics, capital intensity, as well as productivity-related subcomponents of performance (Table 4.A1.1). These subcomponents are intended to measure key outcomes that relate to GDP per capita; contributions to productivity are somewhat more complex. For instance, trade and investment openness are treated as outcomes in this context (only *barriers* are included as policy indicators), since they play an important role in facilitating productivity gains through reallocation, as noted in the 2008 edition of *Going for Growth*.

## Policy indicators

What criteria should be used to select the indicators? Following the original conception of *Going for Growth*, three main criteria have been used to date for selecting policy indicators: *i*) the extent of the empirical evidence; *ii*) the ability of policy makers to affect them; and *iii*) reliability of measurement. Each criterion is dealt with in turn.

First, *solid empirical evidence* based on theory is needed to tie policy indicators to relevant performance measures. A relatively high standard has been used for this determination: only indicators that were used in econometric analysis, and were demonstrated to be tied to improved economic performance, are included. This demonstration has come in the form of review by OECD committees, and has ensured considerable buy-in by member governments.

Second, policy indicators are usually under the *direct control* of policy makers. This criterion ensures that if weakness is found for a policy indicator, any resulting policy recommendations for a country can be traced back to specific reforms that need to be undertaken. Generally, this requirement has meant that only *fact-based*, and not *perception-based*, indicators would be considered, since perceptions may or may not be closely tied to actual policy settings. (At the same time, varying enforcement of objective policy settings may matter, and can be used as a useful complement to analysis; see Nicoletti and Pryor, 2006.) While indicators do not necessarily have to be based on primary data sources, a highly transparent and objective compilation methodology is essential. For instance, in order to measure product market regulation, synthetic indicators that measure regulatory settings in specific sub-domains are used, rather than the aggregates.

Third, policy indicators should be *reliably measured* with a sufficient degree of confidence to be credible to the government and the public. At a basic level this criterion

requires that indicators measure what they aspire to measure (“construct validity”), are comparable across countries, and are recent (and can be regularly updated). But more fundamentally, in order to ensure the confidence of policy makers, policy indicators need to use objective compilation methods and be vetted by governments (*i.e.* through OECD committees), and made available to the public for review. In cases where secondary or commercial data sources are used (for components of the tariff indicator, for instance), governments need to have the opportunity to ensure the correctness of indicator values.

The criteria set out above are quite limiting in terms of the scope they offer for expanding the indicator base. The first criterion seems essential, although committee review may not be necessary if academic review is used; the second criterion could be relaxed to allow for some expert or perception-based indicators; however, this could make it hard to relate policy indicator underperformance to specific actionable policy recommendations, and could limit government buy-in of the results; the third criterion leaves little room for compromise given the role of committees at the OECD.

### **Performance indicators**

For performance indicators, the criteria for their inclusion are simpler, and essentially statistical: relevance, comparability and timeliness. Given that the original motivation of the *Going for Growth* exercise is to improve material living standards, a mechanical breakdown of GDP per capita essentially defines the set of indicators that should be included. This limits the scope for broadening the set of performance indicators considerably, although there is some room for bringing in complementary indicators, especially those that relate to productivity. For instance, “entrepreneurship” or business demographics indicators such as firm entry and gross job creation rates (based on microdata) might be used as supplementary productivity performance indicators, if they are available on a regular basis, since firm dynamics were shown to be closely associated with productivity gains in the *OECD Growth Study* (2003) and in related research.



## *References*

- Acemoglu, D., S. Johnson, and J. Robinson (2005), “Institutions as a Fundamental Cause of Long-run Growth”, in Aghion, P. and S.N. Durlauf (eds.), *Handbook of Economic Growth*, Volume 1A, North-Holland, Amsterdam.
- Aghion, P., N. Bloom, R. Blundell, R. Griffith and P. Howitt (2005). “Competition and Innovation: An Inverted U-relationship”, *Quarterly Journal of Economics*, Vol. 120, pp. 701-728.
- Bassanini, A. and R. Duval (2006), “Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions”, OECD Economics Department Working Paper No. 486.
- Bassanini, A., L. Nunziata and D. Venn (2009), “Job protection legislation and productivity growth in OECD countries”, *Economic Policy*, Vol. 24, Issue 58, pp. 349-402.
- Bassanini, Andrea, S. Scarpetta and P. Hemmings (2001), “Economic Growth: The Role of Policies and Institutions – Panel Data. Evidence from OECD Countries”, 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.
- Dougherty, S. (2009), “Regulatory Costs and Trade-Related Reallocation in the OECD”, paper presented at the Paris School of Economics GSIE Seminar, March.
- Durlauf, S.N., P.A. Johnson and J.R.W. Temple (2005), “Growth Econometrics”, in P. Aghion and S.N. Durlauf (eds.), *Handbook of Economic Growth*, Volume 1A, North-Holland, Amsterdam.
- Furceri, Davide and Annabelle Mourougane (2009), “Taking Stock of Existing Structural Policy and Outcome Indicators”, OECD Economics Department Working Papers, No. 676.
- Glaeser, E., R. La Porta, F. Lopez-de-Silanes and A. Shleifer (2004), “Do Institutions Cause Growth?”, *Journal of Economic Growth*, Vol. 9, pp. 271-303.
- Hadi, A.S. (1994), “A Modification of a Method for the Detection of Outliers in Multivariate Samples”, *Journal of the Royal Statistical Society*, Series B, Vol. 56.
- IMF (2008), “Structural Reforms and Economic Performance in Advanced and Developing Countries”, IMF Research Department Board Paper, [www.imf.org/external/np/res/docs/2008/pdf/061008.pdf](http://www.imf.org/external/np/res/docs/2008/pdf/061008.pdf)
- Kauffman, D., A. Kraay and M. Mastruzzi (2008), “Governance Matters VII: Aggregate and Individual Governance Indicators 1996 – 2007”, World Bank Working Paper No. 4654.

Mankiw, N. Gregory, D. Romer and D.N. Weil (1992), “A Contribution to the Empirics of Economic Growth”, *The Quarterly Journal of Economics*, MIT Press, Vol. 107, No. 2, pp. 407-37.

Nicoletti, G. and F. Pryor (2006), “Subjective and Objective Measures of Governmental Regulations in OECD Nations”, *Journal of Economic Behavior and Organization*, 59, pp. 433-449.

OECD (1994), *The OECD Jobs Study: Facts, Analysis, Strategies*, OECD, Paris.

OECD (2003), *The Sources of Economic Growth in OECD Countries*, OECD, Paris.

OECD (2006), *Employment Outlook: Boosting Jobs and Incomes*, OECD, Paris.

OECD (2007, 2008, 2009), *Economic Policy Reforms: Going for Growth*, OECD, Paris.

OECD (2008), *Education at a Glance*, OECD, Paris.

Rodrick, D., A. Subramanian and F. Trebbi (2004), “Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development”, *Journal of Economic Growth*, 9, pp. 131-165.