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The Policy Agenda for Growth

An Overview of the Sources of Economic Growth
in OECD Countries



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

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Les sources de la croissance économique dans les pays de l'OCDE

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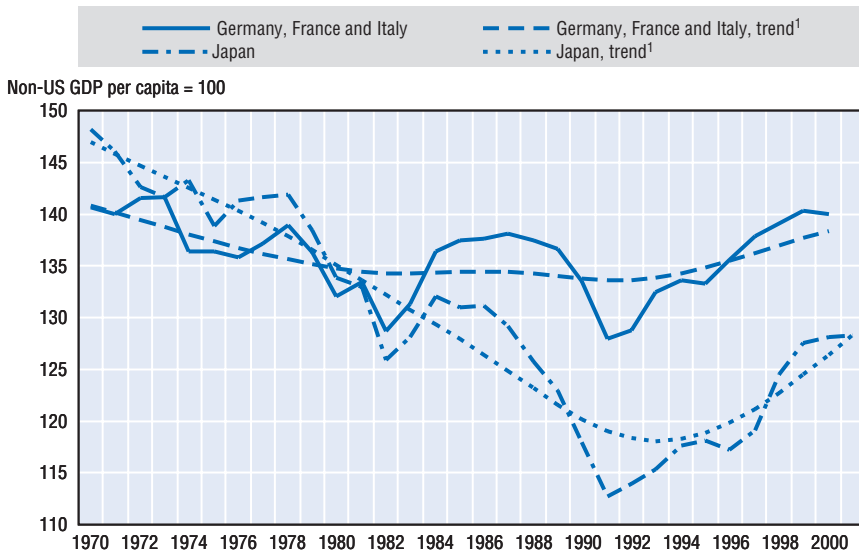
The Policy Agenda for Growth

Growth paths in the OECD area are diverging...

The pattern of growth across the OECD area is changing. In most of the post-war era there has been a general tendency for countries with relatively low GDP per capita to catch up with the leading countries. This pattern of convergence was somehow reversed during the 1990s: the United States, which already had one of the highest levels of GDP per capita, drew strongly ahead of the field again (Figure 1). The sources of this growth gap have been widely debated: was it mainly driven by temporary factors such as an exuberant US upswing or did it reflect long-lasting features of that economy? The recent economic downturn has come a long way in settling this debate; US productivity gains remained strong even when the economy was weaker (Figure 2). More generally it appears that, like the United States, Australia, Canada and Ireland also experienced much higher growth over the past few

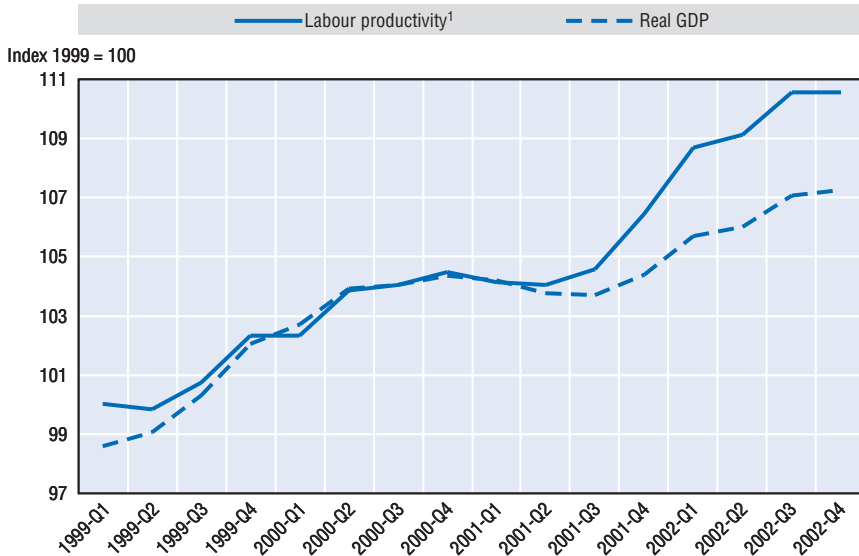
Figure 1. **GDP per capita in the United States draws ahead in the 1990s**

Real per capita GDP in the United States relative to other major economies based on 1995 PPPs and 1995 prices



1. The trend is calculated using a Hodrick-Prescott filter (smoothing parameter set to 100).

Source: OECD Annual National Accounts.

Figure 2. **US productivity growth remains strong**

1. Labour productivity is measured as the non-farm business output per hour.

Source: OECD, BLS.

years than continental Europe or Japan. Within Europe, sizeable differences in long-term growth have also materialised over the past decade. While manufacturing growth has been relatively even across the continent, growth in the non-manufacturing sectors has been lagging behind in some EU countries.

... raising questions about the breadth and pace of economic reforms...

With hindsight these diverging growth performances appear well entrenched. They still prevail today at a time when Europe and the United States share the same cyclical weaknesses. Looking beyond cyclical developments, several factors can explain why OECD economies may be setting on divergent growth paths. These differences stem in part from demographics, with some countries experiencing relatively strong increases in active population. But policies matter too, as some OECD economies have made considerable progress in improving the workings of labour and product markets with very positive consequences for innovation, technical progress and job creation.

... and prompting a major programme of work on growth by the OECD

To be sure, bringing back the world economy into sustained recovery will require good macroeconomic policies. However, to achieve full success it will

also be necessary to speed up economic reforms. Learning about successful policies and spreading good practices is at the heart of the OECD mission. This is why over the past few years it has carried out a vast body of empirical research, much of which is summarised in the just-published *The Sources of Economic Growth in OECD Countries*. This research enables us to understand better what needs to be done and how much additional growth we can expect from good policies and bold economic reforms. Looking at quantitative estimates in *The Sources of Economic Growth*, it seems the pay off from successful reforms is indeed very large.

What's been driving divergence? The roles of employment and productivity

There are basically two reasons why some countries' GDP per capita may be lagging behind. First, labour utilisation may be too low, for instance because too many people are left out of labour markets. Such a weak participation in labour markets largely explains why GDP per capita in the European Union is 25 per cent less than that in the United States (Figure 3). Second, productivity may be another weak spot. In Japan, lower productivity is at the root of the present shortfall in GDP per capita relative to the United States. In this country, high investment did not translate into commensurate productivity improvements, most likely for lack of well-functioning product and capital markets. Weak competition in service and product markets may also help explain why productivity growth and ICT diffusion have remained disappointing in a number of European countries.

The policy agenda is broad

These contrasting performances illustrate that the full mobilisation of labour and capital resources will remain a perennial challenge in the future. As this document intends to show, efforts should involve all areas of policymaking. Macroeconomic policies will be key to re-establishing a stable environment in which labour and capital can securely operate. Labour market policies will have to improve decisively in many countries to ensure full employment in the broadest sense. Appropriate financial supervision and regulation will also be needed to restore confidence in the capacity of markets to channel savings where they are most useful. It will be essential, finally, to nurture and, in many countries, strengthen incentives to compete and innovate with a view to spread more widely productivity gains across the OECD and fully reap the benefits of ICT.

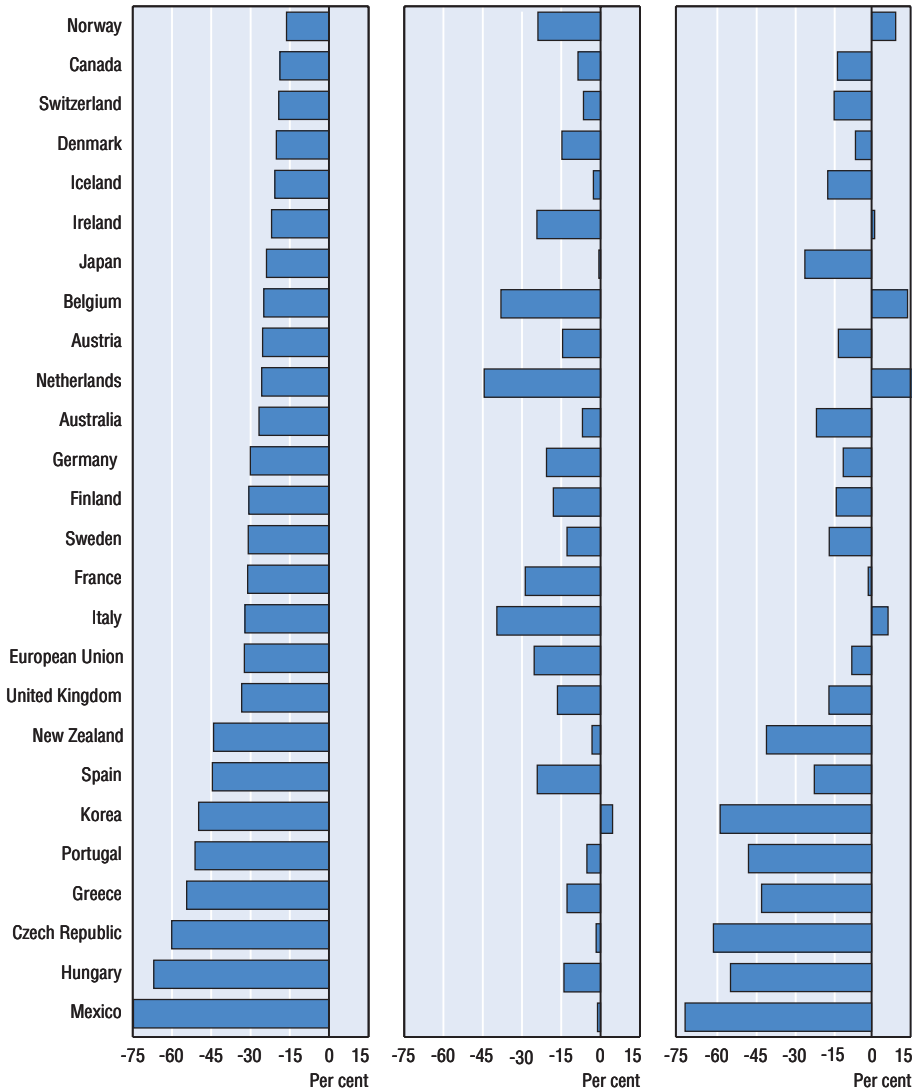
Good macroeconomic policies are essential

Macroeconomic policies not only play a role in shaping the business cycle but they also impact the underlying trend of growth. Take policies aimed at

Figure 3. Differences in GDP per capita: the roles played by labour utilisation and productivity

Percentage point differences in trend, PPP-based, GDP per capita with respect to the United States, 2000

Percentage gap with respect to US GDP per capita = Effect of labour utilisation^{1,2} + Effect of labour productivity³



1. Demographic effects due to changes in the ratio of the working-age population to the total population are not shown in the figure. The effects are relatively small, less than 5% for all countries.
2. Based on employment rates and average hours worked.
3. GDP per hour worked.

Source: OECD.

price stability. OECD evidence suggests that the reduction in the level of inflation between the 1980s and 1990s boosted GDP per capita by about 2 per cent by encouraging stronger investment (Table 1). Also, the reduction in the volatility of inflation is estimated to have increased GDP per capita by about 1 to 1½ per cent by providing a secure framework to allocate resources. Globalisation seems to be paying off: increased international trade is estimated to have brought about 4 per cent additional GDP per capita over the same period. On the other hand, evidence suggests that increased tax burdens have taken 1 per cent off GDP per capita between the 1980s and 1990s.

Table 1. **Stylised facts to emerge from macroeconomic growth regressions¹**

Variable	Impact on output per working age person (per cent) ²			Memorandum:
	Effect via economic efficiency	Effect via investment	Overall effect	Between the 1980s and 1990s... ³
Rate of inflation, fall of 1% point		0.4 to 0.5	0.4 to 0.5	... inflation fell by about about 4% points...
Variability of inflation, fall of 1% in the standard deviation of inflation	2.0		2.0	... the standard deviation of inflation fell by about 0.7% points...
Tax burden, increase of 1% point ⁴	-0.3	-0.3 to -0.4	-0.6 to -0.7	... tax burdens fell by about 1.5% points
Business R&D intensity, increase of 0.1% points ⁴	1.2		1.2	... business R&D intensity increased by about 0.1% points...
Trade exposure, increase of 10% points ⁴	4.0		4.0	... trade exposure increased about 10% points.

1. The values reported in this table are the estimated long-run effects on output per working-age person of a given policy change. The range reported reflects the values obtained in different specifications of the growth equation.
2. The direct effect refers to the impact on output per capita over and above any potential influence on the accumulation of physical capital. The indirect effect refers to the combined impact of the variable on the investment rate and, by that channel, on output per capita.
3. Average change from the 1980 average to the 1990 average in the sample of 21 OECD countries, excluding new members as well as Iceland, Luxembourg and Turkey.
4. In percentage of GDP.

Source: OECD.

Labour market reform is still high on the agenda...

The lower levels of labour utilisation in Europe compared with the United States are partly due to high levels of unemployment and shorter working hours. They are also due to relatively large numbers not participating at all in the labour

market: in the European Union about 30 per cent of the working-age population is neither in employment nor seeking work, compared with less than 25 per cent in the United States. In much of Europe there have been increases in those retiring early and in some countries many women still have insufficient incentives and opportunities to engage in a prolonged working life. In addition, the incidence of unemployment is often highly concentrated among the unskilled and the young. In many countries, especially in Europe, a lot of work remains to be done to restore healthy incentives to work and employ. Tax and benefit reforms, lower non-wage labour costs, balanced employment protection and more focussed active labour-market programmes are often needed.

... policies to increase workforce skills generate growth...

The “quality” of the labour force, as seen in education and skills, also has measurable effects on growth. Currently, the working-age populations of most OECD countries have between 10 and 14 years of education per capita, compared with about 7 and 11 years in 1970. This improvement in education is estimated to have increased GDP per capita in the range of 10 to 20 per cent, bringing high returns to individuals but also for society as a whole.

... as well as policies promoting knowledge capital through R&D

Evidence shows a strong link between research and development (R&D) and growth. Business-sector R&D has the most direct influence on growth, largely because it is often research with an immediate objective to improve productivity. OECD evidence shows that increases in business-sector R&D between the 1980s and 1990s boosted output per capita by over 1 per cent (Table 1). Public sector research understandably has a more complex relationship with growth as it is less focussed on commercial applications but is nevertheless often the generator of important basic knowledge and often works in tandem with commercial enterprise. Indeed, much of R&D policy now focuses on improving the link between the public and private sector research.

The role of pro-competitive product-market regulation is essential for growth

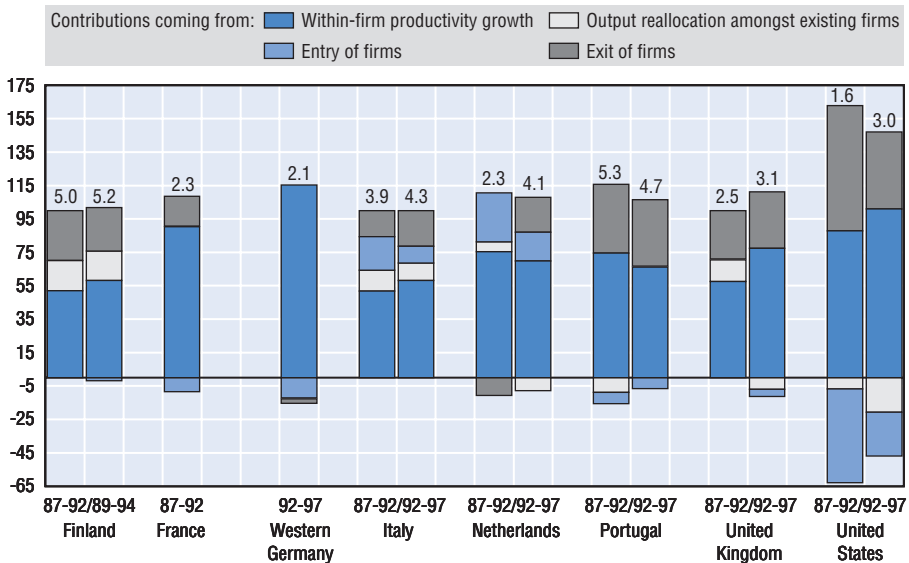
Pro-competitive product-market regulation helps growth in a variety of ways. Indeed, OECD evidence shows how restrictive product-market regulations make it particularly difficult for firms to catch up with the leaders in their field. Pro-competitive product-market regulations promote managerial efficiency and, ultimately, innovation, the adoption of new technologies and growth. Notably, one reason why many European countries are lagging behind in the development of the ICT industry is because stringent regulation has held

them back. For example, it is estimated that if many continental European countries were to reform their regulatory stance, their lagging industries could reduce productivity gaps by as much as 10 per cent.

At the firm level, regulatory frameworks allowing for “creative destruction” are important...

Behind increases in average productivity in a given industry lies a turbulent world in which productivity is increasing in some firms and falling in others. At the same time new firms are coming onto the market, and existing firms are expanding, contracting or going out of business. In the first international study of firm-level data that was made as consistent as possible across countries, OECD research has been able to find out more about how productivity is generated. The study showed that in most industries between about one half and three-quarters of productivity gains are driven by gains in productivity within individual, ongoing enterprises. In the majority of cases the remainder of productivity growth comes from low-productivity enterprises closing down (Figure 4). However, the entry of above-average productivity firms does matter significantly for productivity in certain sectors,

Figure 4. The role of “creative destruction” in productivity growth¹
 Decomposition of labour productivity growth in manufacturing
 Percentage share of total annual productivity growth of each component²



Figures above bars are overall productivity growth rates (annual percentage change).

1. See OECD (2003), *The Sources of Growth in OECD Countries* for details.

2. Components may not add up to 100 because of rounding.

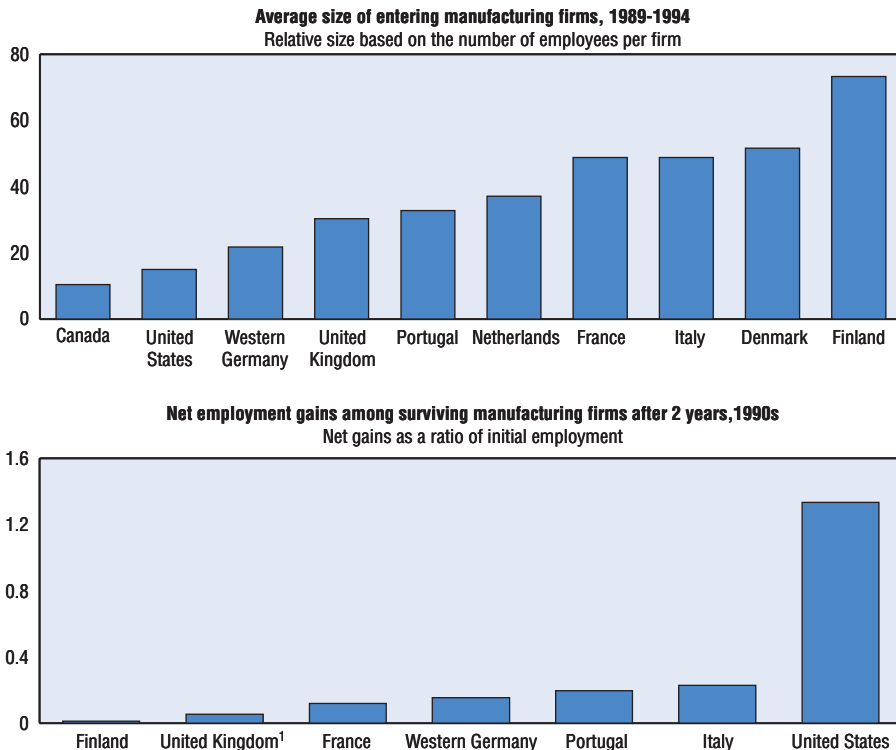
Source: OECD.

importantly in high-tech industries. New firms tend to provide a larger contribution to overall efficiency by infusing markets with more modern technologies compared with incumbents. Also, new firms can more easily ensure that their workforce, capital equipment and production techniques are suited to market conditions without the adjustment costs, and sometimes inertia in attitudes that incumbent firms face.

... but also different across countries

Firm start-ups in the United States tend to be smaller and, on average, less productive than those in the European Union but those that survive tend to grow much faster (Figure 5). What appears to be going on is that the low administrative costs of setting up a firm in the United States, along with relatively light labour-market regulations, encourage entrepreneurs to start on a small scale. In contrast, higher entry and labour-adjustment costs in Europe

Figure 5. New firms in the United States start smaller but those that survive grow faster than in Europe



1. Net employment data for the United Kingdom refer to cohorts of firms that entered the market in the 1985-1990 period.

Source: OECD.

encourage more pre-entry evaluation of business plans – with consequently less market experimentation and ostensibly slower firm expansion. While there are undoubted merits to the more prudent approach, the more fluid, riskier, approach seems more suited to the development of ICT. Although the current downturn is showing that some of the exuberant entrepreneurial activity of the late 1990s was probably excessive, much of it has led to path-breaking innovation and rapid diffusion of technology to firms and households. To further technological advance in this entrepreneurial fashion, easing regulations to stimulate firm-entry would therefore appear particularly beneficial.

As a result of good policies some industries, notably ICT, are having a broad impact on growth

Information and communication technology (ICT) in the form of computer hardware and software, as well as products and services in telecommunications, is having a significant and continually evolving economic impact. While some of the more fanciful tales that ICT had created a “new economy” have proved unfounded, there is growing evidence that it has been increasing productivity. First, a number of OECD countries, notably Finland, Ireland and the United States, have enjoyed increased productivity because firms that produce ICT equipment and services have become an important part of their economies. Many parts of this industry have had massive growth in productivity with falling prices of comparable units of equipment contributing to an ever-expanding market of new users and a healthy demand from existing users to replace old equipment and software. ICT industries currently account for over 10 per cent of business-sector output in several OECD countries. Second, the very broad workplace applications of ICT have been boosting productivity across many industries, not least because traditional tasks, such as accounting and administration, can be performed more effectively. Third, these technologies are allowing new ways of organising production, consumption and markets, giving rise to so-called “spillover” or “network” gains in productivity. The OECD is continuing to monitor the economic impact of the ICT industry.*

Well-developed and regulated financial markets are also crucial

Financial markets not only channel savings towards investments but also ensure that investment is made efficiently and that risks are diversified. Indeed, OECD evidence confirms that, broadly speaking, market depth is

* The latest OECD evaluation of the ICT industry, *Seizing the Benefits of ICT: An International Comparison of the Impacts of ICT on Economic Performance*, has recently been published.

associated with higher investment levels. While OECD countries all have comparatively well-developed and often inter-linked financial markets, there can be some important differences that raise policy issues. Japan's poor growth record in recent years, despite high investment levels, can partly be blamed on badly working financial markets. The important role that venture capital has been playing in some countries in the development of hi-tech industries raises the question that other countries may be imposing excessive constraints to high-risk investment. New challenges have emerged recently with the unfolding of the equity-market bubble calling for an overhaul of the regulatory framework. The severity of the various accounting scandals has raised questions about accounting systems, conflicts of interest in accounting and corporate governance issues. Restoring the integrity and effectiveness of financial markets will necessitate, however, a fine balancing between the need to tighten oversight and regulations without impairing the self-correcting properties of markets.

Where should policy focus in the various areas of the OECD?

With so many policies influencing growth, priorities are essential. There are some distinctions in what policymakers should perhaps be first thinking of with regard to growth. Top of the growth agenda for much of Europe remains the issue of getting the unemployed back into work and stemming the flows into early retirement. Moving faster towards unified and highly competitive service and product markets is also of utmost importance to foster better ICT diffusion and better employment prospects. In Japan, the poor utilisation of capital is reflecting a range of structural problems, in finance and banking as well as corporate and public-sector governance. While the United States, more than most countries, has demonstrated the benefits of good macroeconomic policymaking over the 1990s and beyond, it is essential that this be continued so as to avoid destabilising fiscal and international imbalances. At the same time, a number of policies should be on the agenda across almost all OECD countries. The important role of education as a means of increasing workforce skills and generating knowledge for innovation suggests it should have a permanent place on growth agendas. Also, much can be done to improve R&D policy to increase the effectiveness of the governments' role in generating innovation. It is also clear that improvements in product-market regulations pay a growth dividend, especially at the current time those improvements that help widen the diffusion of new technologies.

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