

HIGHLIGHTS

This third edition of the *OECD Compendium of Productivity Indicators* brings together the latest data and productivity indicators in four broad areas: a) economy-wide productivity growth and b) levels; c) productivity growth by industry; and, d) impact of labour productivity on unit labour costs. Concerning economy-wide indicators of **productivity growth** the main highlights are as follows:

- Over the period 1970-2006, average annual growth in **GDP per capita** has been above 2% in most OECD countries, even exceeding 4% in Ireland and Korea. In the second half of the 1990s, Hungary, Ireland, Korea, Poland and the Slovak Republic experienced the highest rates of GDP per capita growth. More recently, however, several OECD countries have experienced a productivity growth slowdown compared to long-term trends, in particular Italy and Portugal. In parallel, since the beginning of the new millennium, the rate of labour utilisation has also decreased in many European countries. Both trends have induced a deceleration of GDP per capita growth. In contrast, the Japanese economy has experienced a recent pick-up in both labour utilisation and productivity growth.
- **Labour productivity growth** (or GDP per hour worked) has varied considerably among OECD countries. For example, in the first half of the 2000s, labour productivity growth in Hungary, Korea and the Slovak Republic ranged from 4.3 to 5.2%, while Italy and Mexico experienced less than 0.5% growth. In a number of OECD countries, labour productivity growth had accelerated in the second half of the 1990s but slowed again in turn of the millennium. Between 1995-2000 and 2001-2006, Australia, Ireland, Mexico and Portugal display a particularly strong deceleration.
- As an alternative measure of productivity, **GDI (Gross Domestic Income) per hour worked** displays approximately the same profile as GDP per hour worked over the past twenty years. Only in countries, such as Australia and Korea, that have experienced largest shifts in terms of trade and/or where foreign trade accounts for a large share of GDP, the differences between the two measures are more significant.
- The user costs of capital relative to labour have declined. Reflecting the relative abundance of capital resources, **capital productivity** has decreased almost everywhere since 1985 (notably in Canada, Spain and the United Kingdom), with the exception of Finland where output per unit of capital input displays on average positive growth over the last decade.
- In most OECD countries, **GDP growth** was mainly driven by capital and Multi-Factor Productivity (hereafter, MFP) growth. From 1985 to 2006, capital inputs accounted for around one third of GDP growth. Information and Communication Technologies (ICT) explains the bulk of capital's contribution to GDP growth in Australia, Denmark, France, New Zealand, Sweden, the United Kingdom and the United States. Despite this fact, the **contribution of ICT capital** to GDP growth fell in most OECD countries between the periods 1985-2006 and 2001-2006 (notably in Austria, Portugal, Sweden, Switzerland and the United States).
- **Multi-factor productivity** (MFP) was particularly important for overall growth performance in Belgium, Finland, Ireland and Japan. It also helped strengthen growth in Sweden, the United Kingdom and the United States in more recent years (2001-2006). But, in many other countries, MFP growth has slowed down significantly, in particular Italy, New Zealand, Portugal and Switzerland. Italy and Switzerland even experienced negative MFP growth between 2001 and 2006.
- Still, growth in **labour inputs** contributed significantly to GDP growth in Australia, Canada, Ireland, the Netherlands, Spain and the United States, while fast ageing countries, such as Germany and Japan, experienced negative growth in labour inputs.

The second section presents **productivity levels**, as key indicators of economic convergence across countries. Main results are:

- In 2006, Ireland, Luxembourg, Norway and the United States had the highest levels of **per capita income**. **GDP per capita** ranged from over USD 39 000 in Ireland, Luxembourg, Norway and the United States to less than USD 17 000 in Mexico, Poland and Turkey. As a general pattern, most OECD countries have higher levels of **GDP per hour worked** than GDP per capita relative to the United States. The differences in GDP per capita are therefore due to lower levels of labour utilisation than in the United States (though this could be partly due to disparities in measurement of working hours).
- Since the 1970s, GDP per capita and labour productivity have broadly converged in the OECD area, with Ireland and Korea displaying the highest rates of catch-up in terms of GDP per capita. Economies that had relatively high income levels in the 1970s have had lower rates of catch-up. In terms of average labour productivity levels, several European countries have recently surpassed the United States, while Australia, Canada, Mexico and New Zealand are still below the United States.
- Differences between GDP, **Net Domestic Product** (NDP) and **Gross National Income** (GNI) per hour worked are relatively small, as gross income inflows from abroad tend to be offset by gross outflows. This suggests that GDP per hour worked can be used as a relatively good proxy for other alternatives measures of output and productivity levels.
- There is considerable heterogeneity in labour productivity figures across countries and industries. Comparisons of labour productivity by size class show that for most industries, particularly in the manufacturing sector, the larger the business the higher the labour productivity level. This, in part, reflects higher degrees of capital intensity in larger businesses and economies of scale.

The third section presents indicators of **productivity growth by industry**. It shows that:

- For most OECD countries, manufacturing productivity growth has slowed down recently, but large cross-industry differences can be observed. High- and medium-high technology industries, such as electrical and optical equipment and transport equipment, have typically experienced relatively higher rates of productivity growth than low-technology manufacturing industries. In many countries, the highest aggregate labour productivity growth performances are still in the manufacturing sector. This was the case for example in the Czech Republic, Finland, Korea, the Slovak Republic and Sweden.
- Overall Market Service labour productivity growth also decreased during the period 2000-2005 compared to 1995-2000, although service sectors that invest more in ICT and have more highly skilled workforces displayed higher productivity growth. These include post and telecommunications, finance and insurance, and computer services.
- Reflecting the growing importance of the service sector, over the period 2000-2006, Market Services accounted for more than half of labour productivity growth in Greece, Luxembourg, New-Zealand, Norway, the United Kingdom and the United States. Between 1995-2000 and 2000-2006, the contribution of Market Services to labour productivity growth has also increased in Belgium, the Czech Republic, France, Luxembourg and New Zealand. This growing contribution of Market Services is sometimes linked to an increasing share in total value added, but can also reflect genuine faster labour productivity growth in services.

The last section presents the impact of labour productivity on an important indicator of competitiveness, the **unit labour costs**. Stronger growth in labour productivity than in average labour compensation will have a downward impact on growth in unit labour costs, though developments in average labour compensation also matter. Main results are as follows:

- Reflecting a certain wage equalisation within economies, a similar development for annual growth rates of average labour compensation can be observed both for Industry and Market Services in most countries. Given the typically higher annual average growth rates for labour productivity in Industry, noted above, unit labour costs for Industry have tended to decrease relative to Market Services. This reflects to some extent the impact of globalisation on Industry, as well as a more intensive use of capital.
- The gap between unit labour costs and productivity in Market Services was particularly marked in Poland, Hungary, Slovak Republic and Turkey. In these countries, long-run annual average growth rate (1986-2006) for unit labour costs in Market Services has been around or above 10%, while average annual labour productivity growth in Market Service sectors has been less than 3%.