

## LABOUR PRODUCTIVITY GROWTH

Labour productivity growth is a key dimension of economic performance and an essential driver of changes in living standards.

### Definition

Labour productivity is defined as GDP per hour worked. Growth in per capita GDP is broken down into the contribution of labour productivity growth, on one side, and changes in labour utilisation (measured as hours worked per capita), on the other. Changes in living standards can result from changes in labour productivity and in labour utilisation. High labour productivity growth can reflect greater use of capital, falling employment of low-productivity workers or general efficiency gains and innovation.

The indicators shown here are based on measures of GDP and population coming from the *OECD Annual National Accounts*. Actual hours worked are derived from either the *OECD Annual National Accounts* or the *OECD Employment Outlook*. Hours worked reflect regular hours worked by full-time and part-time workers, paid and unpaid overtime, hours worked in additional jobs, and time not worked because of public holidays, annual paid leaves, strikes and

labour disputes, bad weather, economic conditions and other reasons.

For zone aggregates, GDP estimates have been converted to constant US dollars using 2005 constant Purchasing Power Parities (PPPs).

### Comparability

Although national accounts data are based on common definitions, methods used by countries may differ in some respects. In particular, data on hours worked are based on a range of primary sources. In most countries, the data are drawn from labour force surveys, but other countries rely upon establishment surveys, administrative sources or a combination of both. Annual working hours for non-European countries are provided by national statistics offices. In general, these data are most suited for comparing changes rather than levels of hours worked across countries.

The estimates shown here are not adjusted for differences in the business cycle; cyclically adjusted estimates might show different patterns.

### Overview

Over the period 2009 to 2011, average growth in GDP per capita was rather contrasted across countries. Highest growth was recorded in Turkey, followed by Chile, Estonia, the Russian Federation and Korea, whilst the greatest decrease occurred in Greece. Growth in income over the same period was essentially driven by growth in labour productivity.

The economic downturn following the global financial crisis of 2007 was reflected in most countries recording negative GDP per capita growth in the 2007-09 period. In some cases like Estonia, Iceland and Ireland, this led to a significant decline in labour utilisation. However, from 2009 to 2011, Estonia and, to a lesser extent, Iceland have shown evidence of a strong rebound in their labour utilisation rates; Ireland still lags behind.

Between 2009 and 2011, nearly all countries experienced increases in labour productivity growth. In some countries, the turnaround in labour productivity growth between 2007-09 and 2009-11 was high, notably this was the case for Luxembourg, Slovenia, Finland and Turkey. For other countries however, comparing labour productivity growth between the two periods of 2007-09 and 2009-11 revealed a different pattern. Growth in GDP per hour worked decreased in Australia, Iceland, Greece and New Zealand, whilst it saw a moderate upturn in Canada, Ireland, Spain and the United States.

### Sources

- OECD (2012), *OECD Productivity Statistics* (database).

### Further information

#### Analytical publications

- Ahmad, N., F. Lequiller, P. Marianna, D. Pilat, P. Schreyer and A. Wöfl (2003), "Comparing Labour Productivity Growth in the OECD Area: The Role of Measurement", *OECD Science, Technology and Industry Working Papers*, No. 2003/14.

#### Statistical publications

- OECD (2012), *OECD Compendium of Productivity Indicators*, OECD Publishing.

#### Methodological publications

- OECD (2004), "Clocking In (and Out): Several Facets of Working Time", *OECD Employment Outlook: 2004 Edition*, OECD Publishing. See also Annex I.A1.
- OECD (2001), *Measuring Productivity – OECD Manual: Measurement of Aggregate and Industry-level Productivity Growth*, OECD Publishing.
- Pilat, D. and P. Schreyer (2004), "The OECD Productivity Database – An Overview", *International Productivity Monitor*, No. 8, Spring, CSLS, Ottawa, pp. 59-65.


#### Websites

- OECD Compendium of Productivity Indicators, [www.oecd.org/statistics/productivity/compendium](http://www.oecd.org/statistics/productivity/compendium).
- OECD Productivity, [www.oecd.org/statistics/productivity](http://www.oecd.org/statistics/productivity).

## Contribution of labour productivity and labour utilisation to GDP per capita

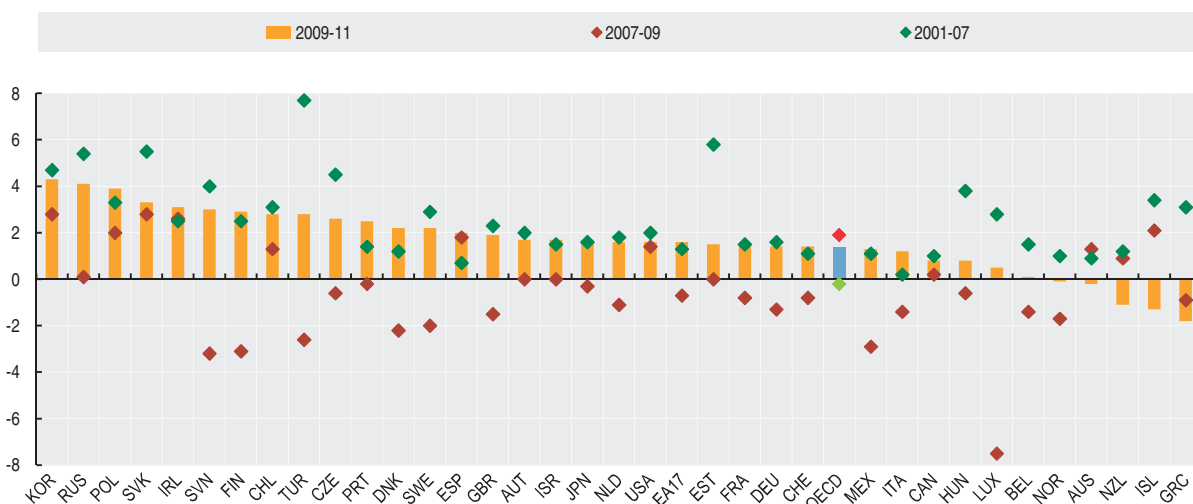

Percentage change, annual rate

	GDP per capita			GDP per hour worked			Labour utilisation		
	2001-07	2007-09	2009-11	2001-07	2007-09	2009-11	2001-07	2007-09	2009-11
Australia	2.0	-0.2	0.7	1.0	1.1	-0.1	1.0	-1.3	0.8
Austria	1.9	-1.6	2.3	2.0	0.0	1.7	-0.1	-1.6	0.6
Belgium	1.6	-1.7	1.2	1.5	-1.4	0.1	0.1	-0.3	1.1
Canada	1.6	-2.2	1.7	1.0	0.2	0.8	0.6	-2.4	0.9
Chile	3.9	0.1	5.0	3.1	1.3	2.8	0.8	-1.2	2.2
Czech Republic	4.8	-1.7	1.9	4.5	-0.6	2.6	0.4	-1.1	-0.7
Denmark	1.4	-3.9	0.6	1.2	-2.2	2.2	0.2	-1.7	-1.6
Estonia	8.2	-9.1	4.9	5.8	0.0	1.5	2.4	-9.0	3.4
Finland	3.1	-4.6	2.8	2.5	-3.1	2.9	0.5	-1.6	-0.1
France	1.1	-2.2	1.1	1.5	-0.8	1.4	-0.4	-1.4	-0.2
Germany	1.4	-1.8	3.4	1.6	-1.3	1.4	-0.2	-0.5	2.0
Greece	3.7	-2.1	-5.3	3.1	-0.9	-1.8	0.6	-1.2	-3.5
Hungary	3.7	-2.9	1.7	3.8	-0.6	0.8	0.0	-2.3	0.8
Iceland	3.2	-4.1	-0.5	3.4	2.1	-1.3	-0.2	-6.1	0.8
Ireland	2.9	-6.1	-0.1	2.5	2.6	3.1	0.4	-8.7	-3.2
Israel	1.7	0.5	3.0	1.5	0.0	1.7	0.2	0.6	1.3
Italy	0.5	-4.0	0.7	0.2	-1.4	1.2	0.3	-2.6	-0.6
Japan	1.5	-3.2	1.3	1.6	-0.3	1.7	-0.1	-2.9	-0.4
Korea	4.3	0.7	4.3	4.7	2.8	4.3	-0.4	-2.1	0.1
Luxembourg	3.1	-4.1	0.0	2.8	-7.5	0.5	0.2	3.5	-0.5
Mexico	2.0	-3.4	3.8	1.1	-2.9	1.3	0.8	-0.5	2.4
Netherlands	1.6	-1.3	0.9	1.8	-1.1	1.6	-0.1	-0.2	-0.7
New Zealand	2.0	-1.2	-0.3	1.2	0.9	-1.1	0.8	-2.0	0.8
Norway	1.6	-2.1	-0.2	1.0	-1.7	-0.1	0.7	-0.4	-0.1
Poland	4.6	3.3	4.0	3.3	2.0	3.9	1.3	1.3	0.2
Portugal	0.5	-1.6	-0.2	1.4	-0.2	2.5	-0.9	-1.4	-2.7
Slovak Republic	6.6	0.1	3.5	5.5	0.0	3.3	1.0	0.1	0.3
Slovenia	4.4	-2.9	0.3	4.0	-3.2	3.0	0.4	0.3	-2.7
Spain	1.7	-2.6	0.1	0.7	1.8	2.0	1.0	-4.4	-1.9
Sweden	2.8	-3.6	4.2	2.9	-2.0	2.2	0.0	-1.7	1.9
Switzerland	1.3	-1.1	2.0	1.1	-0.8	1.4	0.2	-0.3	0.5
Turkey	5.4	-3.2	7.4	7.7	-2.6	2.8	-2.3	-0.7	4.6
United Kingdom	2.3	-3.4	0.6	2.3	-1.5	1.9	0.1	-1.9	-1.2
United States	1.6	-2.8	1.5	2.0	1.4	1.9	-0.4	-4.2	-0.4
EU 27	..	..	..	..	..	..	..	..	..
OECD	1.9	-2.5	1.8	1.9	-0.2	1.4	0.0	-2.3	0.4
Brazil	..	..	..	..	..	..	..	..	..
China	..	..	..	..	..	..	..	..	..
India	..	..	..	..	..	..	..	..	..
Indonesia	..	..	..	..	..	..	..	..	..
Russian Federation	7.5	-1.4	4.8	5.4	0.1	4.1	2.1	-1.5	0.7
South Africa	..	..	..	..	..	..	..	..	..

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## Growth in GDP per hour worked

Average annual growth in percentage


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