LABOUR PRODUCTIVITY GROWTH

Productivity growth is measured by relating changes in output to changes in one or more inputs to production. The most common productivity measure is labour productivity, which links changes in output to changes in labour input. It is a key economic indicator and it is closely associated with standards of living.

Definition

The output measures used for calculations are Gross Domestic Product estimates from OECD Annual National Accounts database, based on the *1993 System of National Accounts* Labour input measures used are estimates of the hours actually worked. They 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.

Comparability

OECD and National statisticians work together to ensure that the data on hours actually worked are as comparable as possible, though they are based on a range of different sources of varying reliability. In most countries, the data are taken from household labour force surveys, while the rest use establishment surveys, administrative sources or a combination of sources. One problem is that for several EU countries, the estimates are made by the OECD using results from the Spring European Labour Force Survey. The results reflect a single observation in the year, and the survey data have to be supplemented by information from other sources for hours not worked due to public holidays and annual paid leave. Annual working hours reported for the remaining countries are provided by national statistical offices and are estimated using the best available sources. In general, the data are best used for comparisons of trends over time rather than for inter-country comparisons of level of productivity.

Although the GDP estimates are based on common definitions, the methods used by most countries to estimate value added in government services assume that labour productivity growth is zero. This means that countries with large government sectors or with government sectors that were growing during the period considered will, by assumption, have lower growth in GDP per hour worked than other countries.

Note that in the chart, OECD total excludes Poland and Turkey.

Long-term trends

Labour productivity growth varies considerably among OECD countries. For example, in the last half of the 1990s, labour productivity growth in Ireland, Korea, Poland and the Slovak Republic ranged from 4.8 to 6.2% to a growth rate of less than 1.0% in Italy and Spain.

In a number of OECD countries, labour productivity growth accelerated in the second half of the 1990s but slowed again in the first half of the new millennium. Between 2001-2007 and 1995-2000, the Czech Republic, Hungary and the Slovak Republic were the only countries which experienced a significant acceleration of growth in GDP per hour worked while over the same period, Ireland, Poland and Portugal saw a strong deceleration in labour productivity growth. The rates shown here are not adjusted for differences in the business cycle; cyclically adjusted estimates might show a somewhat different pattern.

Source

- *OECD Productivity Database.*

Further information

Analytical publications

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

Methodological publications

- OECD (2001), "The Measurement of Productivity: What Do the Numbers Mean?", *Measuring Productivity – OECD Manual Measurement of Aggregate and Industry-level Productivity Growth*, OECD, Paris, Chapter 3, pp. 29-61.
- OECD (2004), "Clocking In (and Out): Several Facets of Working Time", *OECD Employment Outlook: 2004 Edition*, Chapter 1, see also Annex I.A1, OECD, Paris.
- Pilat, D. and P. Schreyer (2004), "The OECD Productivity Database – An Overview", *International Productivity Monitor*, No. 8, Spring, CSLS, Ottawa, pp. 59-65.
- Schreyer, P. and D. Pilat (2001), "Measuring Productivity", *OECD Economic Studies*, OECD, Paris.
- Van Ark, B. (2004), "The Measurement of Productivity: What Do the Numbers Mean?", Fostering Productivity – Patterns, Determinants and Policy Implications, G. Gelauff, L. Klomp, S. Raes and T. Roelandt (eds.), Elsevier, Amsterdam; Boston, Chapter 3, pp. 29-61.

Websites

- OECD Compendium of Productivity Indicators, *www.oecd.org/statistics/productivity/compendium*.
- OECD work on productivity, *www.oecd.org/statistics/productivity/*.

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GDP per hour worked

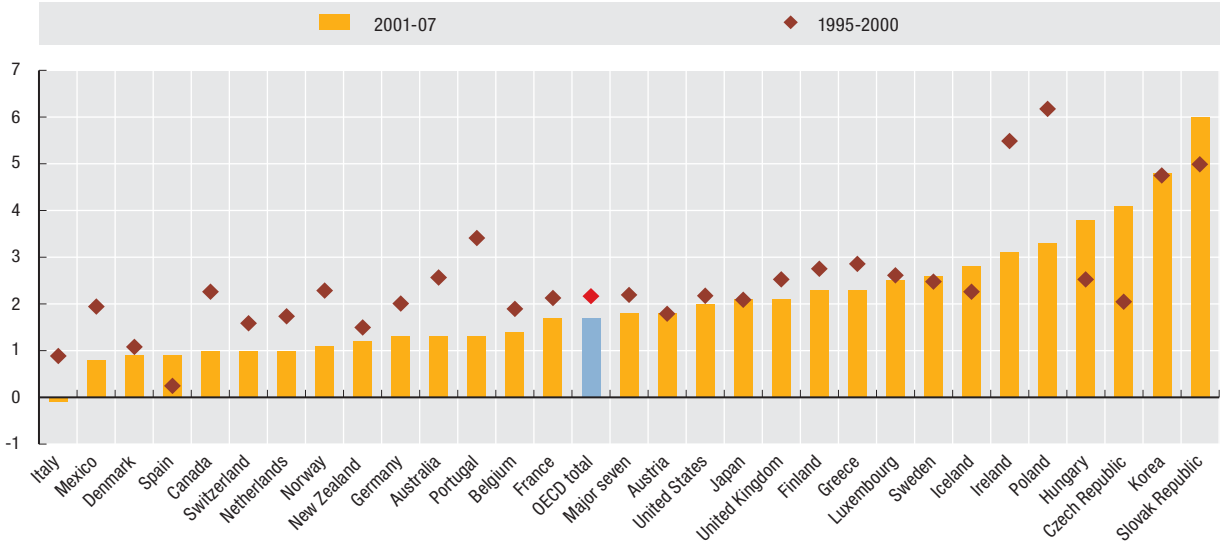
Annual growth in percentage

	1971	1980	1985	1995	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Australia	1.9	0.4	2.2	0.8	3.4	2.5	-1.2	3.9	1.8	2.2	0.9	0.1	1.2	1.6
Austria	..	..	..	..	2.4	2.3	2.1	-0.1	1.9	0.2	1.8	2.4	2.3	2.1
Belgium	3.5	5.7	0.9	-0.8	-0.6	1.9	3.4	-2.1	1.5	1.2	3.9	-0.5	1.2	1.2
Canada	2.8	0.6	1.2	1.4	1.8	2.6	2.9	1.1	1.4	0.4	0.3	2.0	1.3	0.5
Czech Republic	..	..	..	4.0	0.4	4.2	3.5	6.5	2.3	5.3	3.3	4.3	5.2	3.7
Denmark	4.7	-1.0	2.5	2.0	-0.4	0.9	2.0	-0.7	0.8	1.7	2.7	1.4	0.9	-2.0
Finland	4.8	3.2	3.1	2.0	3.6	1.1	3.6	2.0	1.0	2.1	3.0	1.8	3.2	2.5
France	5.3	2.1	2.9	2.7	2.6	1.7	3.6	0.9	3.1	1.2	0.5	1.5	2.4	1.3
Germany	4.3	0.9	2.3	2.5	1.2	1.4	2.6	1.8	1.5	1.2	0.6	1.4	2.4	0.6
Greece	..	..	0.2	1.7	-0.6	1.2	3.9	3.9	1.9	4.0	5.0	1.1	-1.0	2.7
Hungary	..	..	..	4.6	3.4	0.0	4.1	5.8	3.7	4.3	5.5	4.0	3.6	1.3
Iceland	9.6	3.1	-0.3	-3.9	3.3	-2.6	1.6	4.2	3.5	2.5	7.7	4.9	-0.7	-1.3
Ireland	4.5	3.9	2.0	4.8	4.3	5.7	4.6	3.2	5.3	3.9	1.7	2.4	2.2	2.8
Italy	4.4	1.9	2.0	2.9	-0.5	0.6	2.5	0.8	-0.6	-1.2	1.1	0.4	0.1	-0.2
Japan	4.1	2.3	5.1	2.5	0.4	3.0	2.8	1.6	2.4	1.7	3.1	2.2	1.4	1.5
Korea	..	..	3.8	5.7	2.9	7.0	3.3	2.3	5.7	4.5	4.0	4.5	4.0	5.4
Luxembourg	..	..	1.0	-1.8	2.3	3.4	3.1	-1.9	1.6	-	5.0	3.2	0.5	4.7
Mexico	..	..	..	-6.5	4.9	0.3	6.1	1.2	-2.8	2.3	1.0	-0.6	2.7	2.1
Netherlands	3.9	1.0	1.8	2.3	2.3	3.4	2.3	-0.1	1.3	-0.3	3.2	0.6	0.3	0.9
New Zealand	2.7	1.1	-1.8	0.1	0.8	2.9	1.1	1.9	2.1	1.5	-0.1	0.8	0.7	2.0
Norway	5.8	2.0	2.9	3.2	0.2	1.2	3.9	3.4	2.2	3.1	2.0	1.3	-0.9	-1.2
Poland	..	..	..	6.7	4.9	8.9	6.4	4.1	4.2	4.7	4.0	0.7	3.2	2.6
Portugal	..	..	..	1.7	2.7	1.7	4.4	0.0	0.3	1.2	0.4	1.9	0.5	3.7
Slovak Republic	..	..	..	4.1	6.7	2.1	3.1	3.4	8.1	7.1	3.3	3.0	5.4	7.8
Spain	4.2	5.8	3.9	0.9	-0.2	0.1	0.1	0.7	0.6	0.9	0.7	0.8	0.9	1.8
Sweden	2.6	1.3	0.9	2.0	2.2	1.9	3.3	0.4	3.8	3.3	3.2	3.0	2.8	-0.6
Switzerland	2.7	3.0	1.8	1.6	0.8	-0.8	2.8	1.8	1.0	-0.6	0.4	2.7	1.5	0.9
United Kingdom	5.0	0.8	0.4	1.6	2.9	2.7	3.4	1.4	2.4	2.9	2.0	0.8	2.4	2.3
United States	3.8	-	1.8	0.1	2.0	2.5	2.3	2.0	2.9	3.0	2.4	1.4	0.9	1.3
Major seven	4.1	0.9	2.5	1.5	1.8	2.5	2.7	1.7	2.4	2.0	2.1	1.5	1.4	1.2
OECD total	..	..	..	1.2	2.2	2.1	2.9	1.5	2.1	2.4	2.1	1.5	1.6	1.4

StatLink http://dx.doi.org/10.1787/541051616402

Growth in GDP per hour worked

Average annual growth in percentage



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