INVESTMENT IN ICT

Investment in physical capital is important for growth. It is a way to expand and renew the capital stock and enable new technologies to enter the production process. Information and communication technology (ICT) has been the most dynamic component of investment in recent years.

Definition

Investment is defined in accordance with the 1993 *System of National Accounts*. It covers the acquisition of equipment and computer software that is used in production for more than one year. ICT has three components: information technology equipment (computers and related hardware), communications equipment and software. Software includes acquisition of pre-packaged software, customised software and software developed in house.

The investment shares shown in the table and graph are percentages of each country's gross fixed capital formation, excluding residential construction.

Comparability

Correct measurement of ICT investment in both nominal and volume terms is crucial for estimating the contribution of ICT to economic growth and performance. Data availability and measurement of ICT investment based on national accounts vary considerably across OECD countries, especially as regards the measurement of investment in software, the methods of deflation, the breakdown by institutional sector and the length of time series.

Expenditure on software has only recently been treated as investment in the national accounts, and methodologies still vary across countries. The United States is among the few countries that produces estimates of expenditure on the three separate software components; other countries usually provide estimates for some software components only. To tackle the specific problems relating to software in the national accounts, a joint OECD-EU task force on the measurement of software in the national accounts has developed recommendations concerning the capitalisation of software.

Note that ICT components that are incorporated in other products, such as motor vehicles or machine tools, are included in the value of those other products and are excluded from ICT investment as defined here.

Long-term trends

ICT shares in total non-residential investment doubled, and in some cases, almost quadrupled between 1980 and 2005. In 2003/2005, ICT shares were particularly high in Sweden, Finland, Australia, the United Kingdom and the United States.

Software has been the fastest growing component of ICT investment. In many countries, its share in non-residential investment multiplied several times between 1980 and 2003. Software's share in total investment is highest in Denmark, Finland, France, Sweden and the United States.

Source

- OECD (2007), *OECD Communication Outlook*, OECD, Paris.

Further information

Analytical publications

- OECD (2003), *ICT and Economic Growth: Evidence from OECD countries, industries and firms*, OECD, Paris.
- OECD (2005), *OECD Communications Outlook*, OECD, Paris.
- OECD (2005), *OECD Science, Technology and Industry Scoreboard*, OECD, Paris.
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Statistical publications

- OECD (2006), *National Accounts of OECD Countries*, OECD, Paris.
- OECD (2007), *STAN Industry Structural Analysis Database on CD-Rom*, OECD, Paris.

Methodological publications

- Ahmad, N. (2003), *Measuring Investment in Software*, OECD Science, Technology and Industry Working Papers, No. 2003/6, OECD, Paris.
- Lequillier, F. *et al.* (2003), *Report of the OECD Task Force on Software Measurement in the National Accounts*, OECD Statistics Working Papers, No. 2003/1, OECD, Paris.
- Schreyer, P., P.-E. Bignon and J. Dupont (2003), *OECD Capital Services Estimates*, OECD Statistics Working Papers, No. 2003/6, OECD, Paris.

Online databases

- *STAN: OECD Structural Analysis Statistics – online database.*

Websites

- OECD Productivity Database, *www.oecd.org/statistics/productivity*.

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