INVESTMENT IN ICT

Investment in information and communication technology (ICT) has been the most dynamic component of investment in late 1990s and early 2000s. This investment has enabled new technologies to enter the production process, to expand and renew the capital stock, and to sustain economic growth.

Definition

Investment is defined in accordance with the 1993 System of National Accounts. ICT investment 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

Data availability and measurement of ICT investment vary considerably across OECD countries, especially in terms of measurement of investment in software, deflators applied, breakdown by institutional sector and temporal coverage.

In the national accounts, expenditure on ICT is considered as investment only if the products can be physically isolated (*i.e.* ICT embodied in equipment is considered not as investment but as intermediate consumption). This means that ICT investment may be underestimated, with the size of the underestimation differing depending on how intermediate consumption and investment are treated in each country's accounts. In particular, it is only recently that expenditure on software has started being treated as investment in the national accounts, and methodologies still vary across countries. The difficulties of measuring software investment are also linked to the ways in which software can be acquired, *e.g.* via rental and licences or embedded in hardware. Moreover, software is often developed on own account. International comparability of ICT investment has improved over the recent years but some differences remain across OECD countries.

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 excluded from ICT investment as defined here.

Overview

ICT shares in total non-residential investment in 2009 (or the latest year available) differ significantly among OECD countries but were particularly high (at 20% or more of the total) in the United States, Sweden, Japan and New Zealand, while they were below 10% in Ireland, and below 12% in Italy, Korea and Spain.

Software has been the main component of ICT investment in many countries, its share in non-residential investment in 2009 (or the latest year available) was highest in Sweden, the United States, Denmark, New Zealand and the United Kingdom while it was below 5% in Portugal and Ireland. The share of IT equipment was highest in Belgium, Denmark and the United Kingdom but lowest in Korea, Ireland and Spain.

In 2009, communication equipment was the major component of ICT investment in Portugal, while IT equipment was the major component in Belgium.

Sources

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Further information

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- *STAN: OECD Structural Analysis Statistics*.

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Shares of ICT investment in non-residential gross fixed capital formation

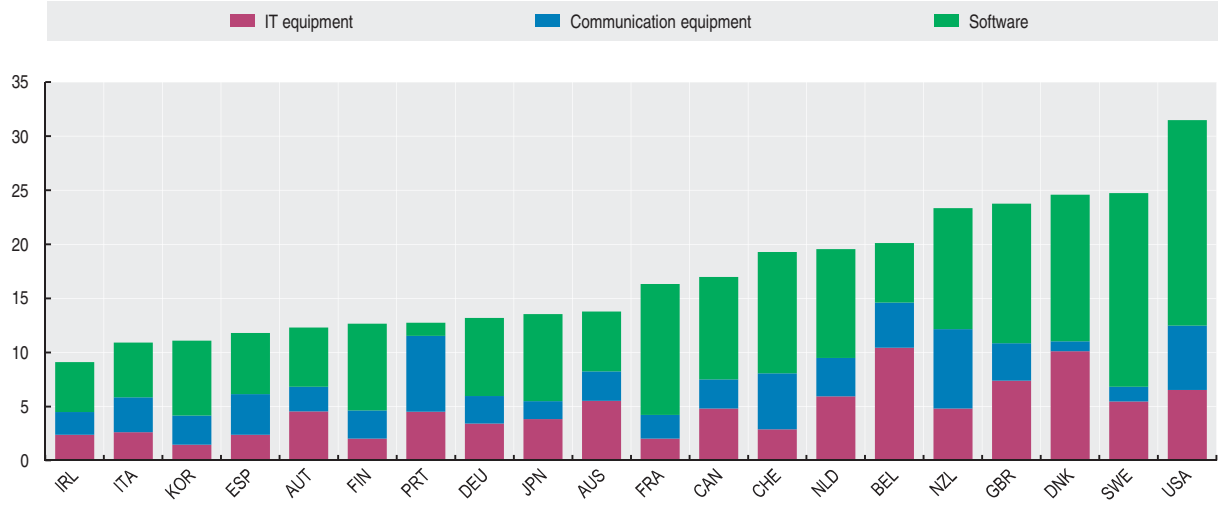
As a percentage of total non-residential gross fixed capital formation, total economy

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Australia	19.2	20.4	20.2	21.5	24.0	22.5	19.9	19.7	17.3	15.3	14.6	14.2	13.8	..
Austria	10.8	11.2	12.6	13.5	13.4	14.0	14.5	13.1	12.4	11.9	12.1	12.3	..	..
Belgium	18.4	19.4	21.5	21.7	24.2	23.3	20.3	19.9	20.1	..	..	..	..	..
Canada	18.0	17.5	18.8	19.9	20.6	20.2	19.2	18.8	18.5	17.6	16.8	16.7	15.9	17.0
Denmark	18.5	19.8	19.5	21.6	19.9	19.2	22.0	22.1	23.7	24.8	24.5	24.6	..	..
Finland	17.5	17.5	18.7	19.4	19.5	17.9	18.5	20.1	19.2	15.0	15.4	14.3	12.8	12.7
France	15.5	17.5	18.7	19.9	19.2	20.5	19.2	18.6	17.6	17.5	17.0	16.2	16.2	16.3
Germany	14.1	14.5	15.3	16.6	17.5	17.8	17.0	15.3	14.8	15.2	15.3	14.1	13.0	13.2
Ireland	11.4	9.6	11.0	10.1	10.1	9.9	8.2	7.9	7.9	7.5	9.0	8.9	7.5	9.1
Italy	13.6	14.8	14.1	13.8	14.6	13.6	12.3	11.6	11.4	11.7	10.9	10.7	10.4	10.9
Japan	12.6	12.1	12.0	13.0	15.0	15.1	14.8	14.8	14.6	14.3	13.4	13.2	22.5	..
Korea	10.0	10.9	12.8	15.8	18.0	17.0	15.7	13.2	11.9	12.2	12.4	12.1	11.7	11.1
Netherlands	16.4	17.9	18.9	19.1	19.9	19.9	19.1	20.0	21.3	22.0	22.3	19.5	..	..
New Zealand	18.9	20.6	24.4	23.3	26.1	22.3	21.1	21.8	21.7	21.6	22.3	22.4	22.9	23.3
Portugal	12.2	12.0	13.0	13.4	12.4	13.1	11.9	13.6	12.9	12.7	..	..	..	..
Spain	14.6	14.5	14.7	14.9	14.7	14.3	13.8	13.6	13.3	12.7	12.7	13.1	13.6	11.8
Sweden	23.3	24.8	27.1	28.7	31.3	28.7	26.3	24.7	24.3	25.1	24.4	23.0	21.9	24.7
Switzerland	16.2	17.9	18.0	19.1	18.9	19.3	20.7	20.7	21.9	19.0	18.5	18.2	18.3	19.3
United Kingdom	25.1	23.8	25.6	27.2	30.0	28.0	26.5	24.5	25.0	24.6	24.7	23.8	..	..
United States	27.8	28.9	29.1	30.6	32.0	30.3	29.1	28.9	28.1	27.8	26.7	26.3	26.7	31.5

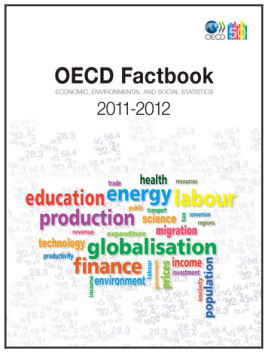
StatLink http://dx.doi.org/10.1787/888932506039

Shares of ICT investment in non-residential gross fixed capital formation

As a percentage of total non-residential gross fixed capital formation, total economy, 2009 or latest available year



StatLink http://dx.doi.org/10.1787/888932506058



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