SIZE OF THE ICT SECTOR

Information and communication technologies (ICT) have been at the heart of economic changes for more than a decade. ICT-producing sectors and ICT employment contribute to technological progress and productivity growth.

Definition

The industry-based definition of the ICT sector is based on Revision 3 of the International Standard Industrial Classification (ISIC Rev. 3).

The principles underlying this definition are the following. For manufacturing industries, an ICT product must fulfil the function of information processing and communication, including transmission and display; and they must use electronic processing to detect, measure and/or record physical phenomena or control a physical process. For services industries, ICT products must enable information processing and communication by electronic means. These two measures of ICT production are expressed as a share of the total value added in the manufacturing and business services.

Two measures of ICT employment are shown here: a narrow measure, comprising ICT specialists whose job is directly focused on ICT such as software engineers; and a broader measure including jobs that regularly use ICT but are not focused on ICT per se (these occupations include scientists and engineers, as well as office workers, but exclude teachers and medical specialists for whom the use of ICT is not essential for their tasks). These two measures of ICT employment are expressed as a share of total employment.

Comparability

The existence of a widely accepted definition of the ICT sector is the first step towards making comparisons across time and countries possible. However, this definition is not yet consistently applied. Data provided by OECD countries have been combined with different data sources to estimate ICT aggregates compatible with national accounts totals. For this reason, statistics presented here may differ from data contained in national reports and in previous OECD publications.

Data on ICT employment for EU countries are based on the International Standard Classification of Occupations (ISCO 88) while data for non-EU countries are based on national classification systems. The classification and the selection of occupations are not harmonised internationally. This implies that the level of the indicators is not directly comparable across countries. Furthermore, there may be differences in ICT usage in occupations, both within and between countries, even when they are based on the same classification.

Overview

In 2008, the ICT sector accounted for between 3.7% (Switzerland) and 13.9% (Finland) of value added in manufacturing and business services of the 28 OECD countries with available data. The average share for the OECD was 8.2%. Over 1995-2008 the ICT share in value added has increased in all OECD countries except Austria (-1.3%), Australia and Canada (-0.8% both).

In 2010, the narrow definition of ICT employment (ICT specialists) accounted for between 1.7% (Turkey) and 5.4% (Sweden) of total employment of the OECD countries with available data. Over 1995-2010 this share has been rising in most countries, despite the stagnation of employment in the ICT sector. The broader group of ICT-using occupations (specialists, advanced and basic users) accounts for over 20% of total employment in most countries, ranging from 10.9% (Turkey) and 35.3% (Luxembourg).

Sources

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Websites

- OECD Key ICT indicators, *www.oecd.org/sti/ictindicators*.
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- OECD Telecommunications and Internet Policy, *www.oecd.org/sti/telecom*.

Share of ICT in value added and in employment

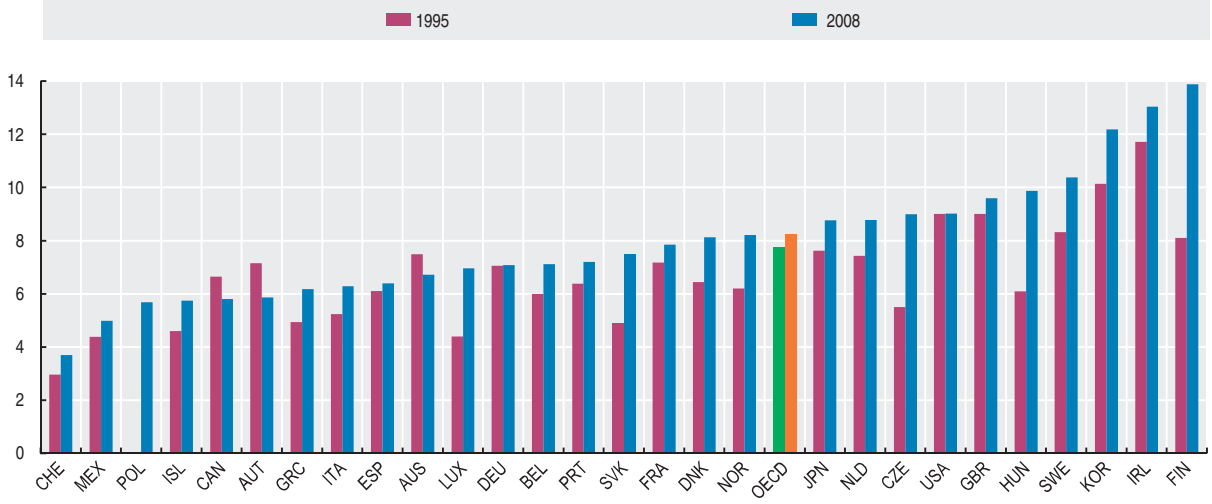
Percentage

	Share of ICT value added in business sector value added		Share of ICT-related occupations in total employment			
			ICT specialists *As a percentage of total employment*		ICT specialists, advanced and basic users *As a percentage of total employment*	
	2008	Percentage point change 1995-2008	2010	Percentage point change 1995-2010	2010	Percentage point change 1995-2010
Australia	6.7	-0.8	3.6	0.5	22.1	0.4
Austria	5.9	-1.3	3.2	0.6	20.8	5.8
Belgium	7.1	1.1	3.1	1.1	22.7	4.0
Canada	5.8	-0.8	4.4	1.4	21.2	0.5
Czech Republic	9.0	3.5	4.7	0.8	22.8	4.2
Denmark	8.1	1.7	4.4	1.5	27.3	6.9
Estonia	..	..	3.2	3.2	24.1	24.1
Finland	13.9	5.8	4.5	1.8	25.5	5.5
France	7.8	0.7	3.1	0.2	20.7	2.1
Germany	7.1	0.0	3.5	1.3	22.5	2.1
Greece	6.2	1.2	2.2	0.0	15.2	4.9
Hungary	9.9	3.8	2.7	2.7	22.5	22.5
Iceland	5.7	1.1	3.5	3.5	23.0	23.0
Ireland	13.0	1.3	2.8	0.1	24.0	9.5
Israel	..	..	..	..	..	..
Italy	6.3	1.0	3.1	0.6	20.4	-0.5
Japan	8.8	1.1	..	..	..	..
Korea	12.2	2.0	..	..	..	..
Luxembourg	7.0	2.6	4.4	1.5	35.3	12.4
Mexico	5.0	0.6	..	..	..	..
Netherlands	8.8	1.4	4.0	0.8	23.5	0.4
Norway	8.2	2.0	4.7	4.7	24.1	24.1
Poland	5.7	..	2.8	2.8	19.5	19.5
Portugal	7.2	0.8	2.6	-0.2	15.0	-1.4
Slovak Republic	7.5	2.6	2.9	2.9	20.8	20.8
Slovenia	..	..	3.0	3.0	24.0	24.0
Spain	6.4	0.3	3.1	0.9	19.5	3.7
Sweden	10.4	2.1	5.4	1.6	26.5	6.1
Switzerland	3.7	0.7	5.0	5.0	23.6	23.6
Turkey	..	..	1.7	1.7	10.9	10.9
United Kingdom	9.6	0.6	3.3	0.4	28.1	0.3
United States	9.0	0.0	4.0	0.7	20.3	-0.9
OECD average	8.2	0.5	..	..	..	..

StatLink http://dx.doi.org/10.1787/888932506001

Share of ICT in value added

As a percentage of business sector value added



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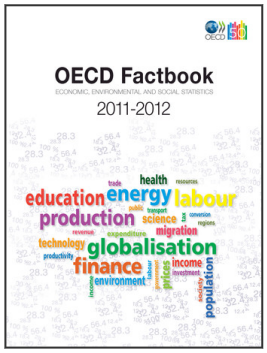

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