## PRODUCTION

# 14. Value added

Value added reflects the contribution of labour and capital to production. It can be shown by: type of enterprise/establishment (activity, size, market/nonmarket, age, etc.); type of product, and institutional sector and combinations of these, and is a key variable in economic analyses such as productivity and structural analysis.

### Definition

Value added at basic prices can be simply defined as the difference between gross output (at basic prices) and intermediate consumption (at purchasers prices) and can be decomposed into the following components: Compensation of employees; Gross operating surplus; Mixed income; and Other taxes on production less Subsidies on production. It can also be derived as the difference between GDP (at market prices) and taxes on products less subsidies on products.

The SNA recommends the basic price valuation for value added but it can also be measured on different price bases such as producers prices and at factor cost.

One of the major advantages of value added is that it avoids problems inherent in the measurement of output which is a gross concept – gross in the sense that it counts the output of all production units. Countries with fragmented production networks therefore will have, all other things equal, higher output than those with more consolidated networks, complicating international comparisons. Indeed this is also a temporal problem as production networks can become more or less consolidated (through outsourcing for example) within a country from one year to another. Indeed production networks have become increasingly globalised in recent years, further affecting temporal and cross-country comparability.

Value added avoids these problems by measuring the value that a resident unit adds to that of the resident units that supply its inputs.

Like its GDP counterpart, value added can also be measured on a net basis, where the "net" refers to net of depreciation.

Like its nominal counterpart, real value added can be derived as the difference between real output and real intermediate consumption, an approach known as double-deflation. A useful additional comment worth making in the context of value added concerns non-market output. By convention, because market prices are not observable, non-market output is calculated on a sum of costs approach with value added set equal to depreciation only and no net return to capital imputed.

### Comparability

Not all countries produce value added on the basis of basic prices.

The tables and figures showing breakdowns by activity are based on the ISIC Rev. 3 industrial classification system. Countries generally collect information using their own industrial classification systems. The conversion from a national classification system to ISIC may create some comparability issues. For example, for Japan, Hotels (which form approximately 2.8-3.0% of value added) are included in Other services not wholesale, retail, etc. That said, at the 6 activity level presented here, for most countries the sectors are generally comparable.

Japan uses approximately market prices. New Zealand uses producer prices, and Iceland and the USA use factor costs.

#### Source

 OECD (2010), National Accounts of OECD Countries 2010, Volume I, Main Aggregates, OECD Publishing, http://dx.doi.org/10.1787/na\_vol\_1-2010-en.

### **Online database**

- OECD (2010), "Aggregate National Accounts: Gross domestic product", OECD National Accounts Statistics (database), http://dx.doi.org/10.1787/data-00001-en.
- OECD (2010), "Detailed National Accounts: Value added and its components by activity", OECD National Accounts Statistics (database), http://dx.doi.org/10.1787/data-00006-en.

### **Further reading**

- Lequiller, F. and D. Blades (2007), Understanding National Accounts, OECD Publishing, http://dx.doi.org/10.1787/9789264027657-en.
- OECD (2000), System of National Accounts, 1993

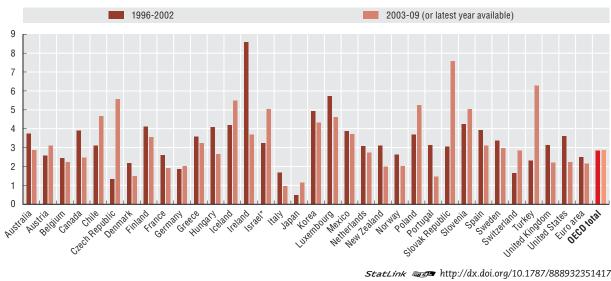
   Glossary, OECD Publishing, http://dx.doi.org/10.1787/9789264180871-en.
- UN, OECD, IMF and Eurostat (eds.) (1993), System of National Accounts 1993, United Nations, Geneva, http://unstats.un.org/unsd/sna1993.

### Table 14.1. Gross value added at basic prices, volume

Annual growth rates in percentage

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Australia	4.0	4.1	5.2	4.0	2.4	3.8	3.0	4.2	2.9	3.2	3.9	3.9	0.7	
Austria	1.8	2.9	3.5	3.0	3.6	0.7	1.7	1.0	2.6	2.6	3.9	3.8	2.5	-4.3
Belgium	1.0	3.5	1.9	3.3	3.5	1.3	1.2	1.0	2.7	1.7	2.6	2.9	1.3	-2.8
Canada	1.4 e	4.2 e	3.9	5.6	5.5	1.5	2.6	2.1	3.2	3.2	2.9	2.6	0.6	-3.1
Chile		6.4 e	3.0 e	-0.4 e	4.2 e	3.4 e	2.2 e	3.7 e	5.8	5.5	4.4	4.3	3.3	-1.4
Czech Republic	3.5	-1.6	-0.7	1.5	3.8	2.5	2.5	2.9	4.5	6.6	7.6	5.9	3.4	-4.5
Denmark	2.4	3.0	1.9	2.9	4.4	0.7	0.3	0.4	1.5	1.5	3.2	1.8	-0.5	-4.0
Finland	3.7	6.0	4.8	4.1	6.0	2.4	1.5	1.1	4.0	2.8	4.2	6.1	0.8	-8.4
France	1.1	2.4	3.5	3.2	3.7	1.8	1.0	1.0	2.6	1.8	2.2	2.5	0.5	-2.5
Germany	1.3	1.9	2.1	1.9	3.7	1.5	0.3	-0.1	1.6	0.9	3.5	3.1	1.1	-5.3
Greece	1.8 e	3.3 e	3.9 e	2.1 e	4.4 e	3.6	4.1	6.4	5.1	2.4	2.9	4.2	1.8	-1.8
Hungary	1.8	3.9	4.9	4.1	4.3	3.5	3.7	3.7	4.8	3.1	3.9	0.5	1.2	-7.0
Iceland	6.0	3.2	7.0	5.5	6.2	3.6	-0.2	3.7	7.1	7.1	6.3	7.4	-0.3	
Ireland	8.5 e	10.8	8.5	9.7	8.8	7.1	6.6	3.3	5.1	4.8	5.1	6.0	-2.2	-4.8
Israel*	5.4	2.9	4.1	3.4	9.2	0.1	0.0	1.4	5.0	4.9	5.4	5.4	4.5	0.6
Italy	1.1	1.6	1.2	1.2	3.7	1.8	0.6	-0.3	1.7	0.7	2.0	1.6	-1.2	-5.5
Japan	2.6	1.6	-1.8	0.2	2.2	0.1	0.8	1.4	2.0	2.4	1.4	1.6	-1.6	
Korea	6.9	5.6	-5.3	10.2	8.6	4.0	7.2	3.0	4.7	4.0	5.1	5.4	2.6	0.4
Luxembourg	1.5	5.2	6.4	8.1	7.5	3.3	3.9	1.4	3.9	5.6	5.4	6.8	1.5	-3.4
Mexico	4.9 e	6.9 e	5.0 e	3.8 e	6.6 e	0.1 e	1.0 e	1.6 e	4.2	3.6	5.2	3.8	1.9	
Netherlands	3.0	4.2	3.8	4.6	4.0	1.9	0.2	0.5	2.3	2.1	3.3	4.0	2.0	-3.4
New Zealand	3.6	1.9	0.5	5.3	2.5	3.7	4.8	4.0	3.8	3.3	1.0	3.2	-1.1	
Norway	4.7	5.4	2.4	2.0	3.3	1.7	1.2	1.0	3.2	2.4	1.6	1.9	1.0	-1.2
Poland	5.7	6.4	4.8	4.3	4.0	1.3	1.3	3.6	5.2	3.3	6.0	6.7	5.1	1.8
Portugal	3.4	4.2	4.2	3.5	3.8	2.4	0.8	-0.6	1.7	0.6	1.7	2.7	0.5	-2.3
Slovak Republic	7.2	5.6	2.9	0.3	0.5	5.0	4.2	3.8	4.4	5.9	10.1	10.7	6.9	-4.6
Slovenia	3.4	4.7	3.3	4.7	4.9	3.4	4.4	3.0	4.3	4.4	6.1	7.0	3.4	-8.1
Spain	2.3	3.6	4.2	4.5	5.1	3.7	2.5	2.7	3.1	3.3	4.1	3.9	1.1	-3.5
Sweden	1.8	3.1	4.2	4.6	5.0	1.1	2.4	2.4	4.5	3.0	4.4	3.3	-0.2	-5.3
Switzerland	0.6	1.6	2.6	0.7	3.3	1.1	0.6	-0.3	2.5	2.6	3.6	3.7	2.0	-1.9
Turkey	6.3 e	6.9 e	3.4 e	-3.0	6.5	-4.5	5.2	4.5	9.6	8.5	7.5	4.8	1.3	-3.5
United Kingdom	2.9	3.4	3.9	3.6	3.8	2.3	1.8	2.7	3.0	2.3	3.1	2.8	-0.2	-4.9
United States	3.9 e	5.0 e	5.1 e	5.0 e	4.3 e	1.2 e	1.3 e	2.2 e	3.3 e	2.9 e	2.6 e	2.1 e	0.3 e	
Euro area	1.6	2.6	2.8	2.7	4.0	2.0	1.0	0.7	2.3	1.7	3.0	3.1	0.7	-4.2
OECD-Total	3.1 e	3.7 e	2.9 e	3.5 e	4.1 e	1.3 e	1.5 e	1.8 e	3.1 e	2.7 e	3.0 e	2.7 e		

StatLink and http://dx.doi.org/10.1787/888932352006



### Figure 14.1. Gross value added at basic prices, volume

Average annual growth rates in percentage

StatLink ans http://dx.doi.org/10.1787/888932351417

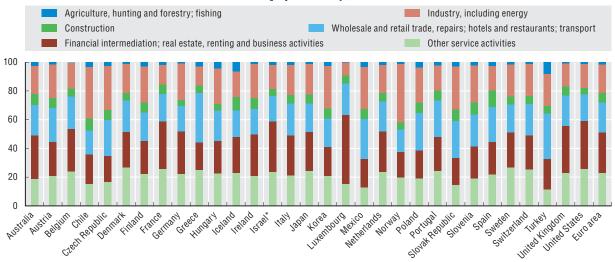
### 14. Value added

	Agriculture, hunting and foresty; fishing		Industry, including energy		Construction		Wholesale and retail trade, repairs; hotels and restaurants; transport		Financial intermediation; real estate, renting and business activities		Other service activities	
-	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008
Australia	3.2	2.6	20.4	19.7	6.5	7.4	22.9	21.3	27.6	30.5	19.4	18.6
Austria	2.2	1.7	22.9	23.2	8.0	7.1	24.7	23.7	20.7	23.8	21.6	20.6
Belgium	1.5	0.7	23.0	17.7	4.8	5.5	21.7	22.7	26.8	29.5	22.3	23.9
Canada	2.6		24.8		5.2		21.3		25.8		20.2	
Chile	5.3 e	3.5	24.2 e	35.6	8.8 e	8.3	22.4 e	17.1	24.4 e	20.5	15.8 e	15.1
Czech Republic	4.2	2.5	31.2	31.0	8.1	6.6	24.8	25.3	16.3	17.9	15.4	16.7
Denmark	2.7	1.2	20.4	20.2	5.3	5.5	22.2	21.8	22.0	24.7	27.5	26.7
Finland	3.5	2.9	28.6	25.0	5.8	7.2	20.6	19.7	19.7	23.1	21.7	22.1
France	3.2	2.0	18.4	13.6	5.0	6.7	19.2	18.9	29.5	33.4	24.7	25.4
Germany	1.2	0.9	25.3	25.6	5.6	4.0	18.1	17.8	27.1	29.5	22.6	22.2
Greece	7.4 e	3.2	13.9 e	13.0	6.6 e	5.2	29.0 e	34.6	21.3 e	19.1	21.6 e	25.0
Hungary	6.6	4.2	27.3	24.9	4.4	4.4	21.5	21.3	19.0	22.8	21.2	22.4
Iceland	10.3	6.4	19.8	17.9	8.5	9.4	22.3	18.5	15.9	24.9	23.3	22.9
Ireland	4.4	1.3	34.8	23.8	6.0	7.7	18.2	17.5	19.4	29.0	17.2	20.7
Israel*	2.1	1.9	19.2	16.7	6.6	4.9	18.4	17.8	28.2	35.3	25.4	23.4
Italy	3.1	2.0	24.5	20.8	4.9	6.2	24.2	22.3	23.0	27.7	20.3	21.0
Japan	1.8	1.4	24.5	21.3	7.5	6.0	20.8	20.1	23.8	26.9	21.5	24.3
Korea	4.9	2.7	29.0	29.4	8.8	7.0	18.9	19.8	21.3	20.3	17.1	20.8
Luxembourg	0.9	0.4	14.6	9.1	6.3	5.3	23.1	21.9	38.2	48.2	16.9	15.1
Mexico	5.4 e	3.3	30.9 e	29.3	5.8 e	7.1	28.2 e	27.7	21.4 e	20.0	11.9 e	12.7
Netherlands	3.0	1.8	19.9	19.8	5.3	5.8	22.9	21.2	26.6	27.8	22.3	23.6
New Zealand	6.5		19.8		4.3		23.0		28.9		17.5	
Norway	2.7	1.2	27.5	40.7	5.1	4.9	22.8	15.9	18.2	17.7	23.7	19.7
Poland	6.0	3.7	24.9	24.3	7.9	7.3	26.7	26.2	16.4	19.5	18.1	19.1
Portugal	4.2	2.3	21.9	17.4	7.3	6.8	25.4	25.7	19.7	23.5	21.5	24.3
Slovak Republic	5.4	3.1	27.4	29.7	7.2	8.3	27.2	25.9	16.4	18.5	16.4	14.5
Slovenia	4.0	2.5	29.8	25.5	6.6	8.3	21.2	22.6	19.0	22.3	19.4	18.8
Spain	4.9	2.7	21.8	17.0	7.3	11.4	26.5	24.5	18.6	22.9	21.0	21.6
Sweden	2.4	1.8	25.0	22.1	4.3	5.4	19.3	19.8	23.9	24.4	25.0	26.5
Switzerland	1.7	1.3	22.5	22.3	5.4	5.4	22.2	22.2	22.7	23.6	25.5	25.3
Turkey	12.9	8.5	27.7	22.0	6.0	5.2	28.5	31.9	15.6	21.0	9.4	11.4
United Kingdom	1.2	0.8	23.4	16.2	5.1	6.4	22.7	21.0	26.3	32.7	21.3	22.9
United States	1.3	1.2	19.4	16.6	4.7	4.7	20.4	18.2	30.3	33.8	23.9	25.5
Euro area	2.7	1.8	22.8	19.9	5.6	6.4	21.2	20.9	25.4	28.4	22.3	22.7
OECD-Total	2.5 e		22.5 e		5.6 e		21.5 e		26.2 e		21.7 e	

### Table 14.2. Gross value added by activity

Percentage of total activity

StatLink and http://dx.doi.org/10.1787/888932352025



### Figure 14.2. Gross value added by activity

Percentage of total activity, 2008

StatLink ans http://dx.doi.org/10.1787/888932351436

### 14. Value added

### Table 14.3. Contribution to gross value added growth by activity

Percentage

	Agriculture, hunting and foresty; fishing		Industry, including energy		Construction		Wholesale and retail trade, repairs; hotels and restaurants; transport		Financial intermediation; real estate, renting and business activities		Other service activities	
	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008
Australia	0.3	0.4	0.3	-0.3	0.6	-0.1	1.1	0.0	2.2	0.1	1.3	0.6
Austria	0.0	0.2	0.8	0.9	0.2	0.0	0.9	0.2	1.4	0.7	0.2	0.5
Belgium	0.0	-0.0	0.5	-0.1	-0.0	-0.0	-0.2	0.2	1.0	0.9	0.5	0.4
Canada	0.2		0.9		0.2		1.2		1.3		0.3	
Chile	0.1 e	0.2	0.3 e	-0.3	0.2 e	0.7	1.0 e	0.9	1.2 e	0.6	0.4 e	0.5
Czech Republic	0.3	0.1	-2.5	2.5	0.3	0.0	0.2	0.6	1.6	0.3	-0.6	-0.2
Denmark	0.1	0.0	0.1	-0.0	0.4	-0.3	0.2	-0.5	0.5	0.1	0.6	0.2
Finland	-0.4	0.2	2.3	-0.1	0.3	-0.0	1.5	0.0	0.8	0.6	0.2	0.1
France	0.1	0.1	0.9	-0.3	-0.0	0.0	1.1	0.1	1.1	0.3	0.3	0.3
Germany	-0.1	-0.1	0.3	-0.9	-0.2	-0.0	0.6	0.8	0.9	0.8	0.4	0.5
Greece	0.2 e	0.4	0.8 e	0.1	0.7 e	-1.0	1.1 e	0.4	0.9 e	0.6	0.2 e	1.3
Hungary	-0.1	2.2	1.9	-0.0	0.2	-0.5	1.1	-0.6	0.7	0.4	1.1	-0.3
Iceland	-0.5	-0.0	0.5	1.6	1.0	-1.5	2.2	-0.7	1.3	0.0	2.4	0.4
Ireland	-0.1	0.0	4.4	-0.2	0.4	-0.9	1.3	-0.5	1.5	-0.5	1.1	-0.1
Israel*	0.2	0.0	0.8	1.5	-0.5	0.2	0.9	0.7	2.1	1.3	0.5	0.8
Italy	0.1	0.0	0.2	-0.8	0.0	-0.1	0.6	-0.2	0.2	-0.0	0.1	0.0
Japan	0.0		-1.1		-0.3		-0.5		0.0		0.1	
Korea	-0.4	0.2	-1.9	0.9	-1.1	-0.2	-1.2	0.5	-0.4	0.6	-0.2	0.5
Luxembourg	0.1	-0.0	0.7	-1.3	0.3	-0.3	2.6	2.2	2.0	0.6	0.6	0.3
Mexico	0.2 e	0.1	2.1 e	-0.2	0.2 e	0.0	1.7 e	0.6	1.0 e	1.1	0.3 e	0.1
Netherlands	-0.2	0.0	0.4	0.1	0.2	0.3	1.7	0.2	1.3	0.9	0.4	0.5
New Zealand	-0.3		-0.5		-0.4		0.7		0.4		0.6	
Norway	0.0	0.1	-0.8	-0.4	0.2	0.1	1.5	0.4	1.1	0.3	0.4	0.6
Poland	0.2	-0.1	0.9	1.7	0.6	0.3	1.6	0.8	1.0	1.7	0.4	0.7
Portugal	-0.2	0.1	0.6	-0.5	0.3	-0.3	1.2	0.4	1.3	0.6	0.8	0.2
Slovak Republic	-0.1	-0.1	2.2	2.2	0.6	0.4	1.3	3.3	-0.3	1.9	-0.7	-0.8
Slovenia	-0.1	0.1	0.7	0.2	0.0	0.4	0.5	1.0	1.4	1.2	0.8	0.4
Spain	0.2	-0.1	1.0	-0.2	0.5	-0.2	0.8	0.2	1.1	0.4	0.7	1.0
Sweden	-0.1	0.0	1.9	-0.6	0.1	-0.1	1.1	0.1	0.8	-0.1	0.5	0.3
Switzerland	0.1	0.0	0.1	0.5	0.1	0.1	0.6	1.0	1.5	-0.4	0.1	0.8
Turkey	0.9	0.4	0.6	0.1	0.0	-0.4	0.8	-0.0	0.5	1.4	0.4	0.2
United Kingdom	0.0	-0.0	0.3	-0.5	0.1	-0.0	1.0	-0.3	2.2	0.6	0.4	0.0
United States	0.1	0.1	0.7	-0.5	0.3	-0.2	1.8	-0.4	1.9	0.6	0.3	0.7
Euro area	0.0	0.0	0.6	-0.4	0.0	-0.1	0.8	0.3	0.9	0.5	0.4	0.4
OECD-Total	0.1 e		0.3 e		0.1 e		1.0 e		1.2 e		0.3 e	

StatLink and http://dx.doi.org/10.1787/888932352044

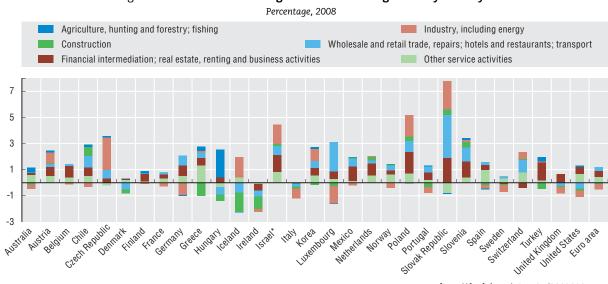


Figure 14.3. Contribution to gross value added growth by activity

StatLink and http://dx.doi.org/10.1787/888932351455

\* The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.



# From: National Accounts at a Glance 2010

Access the complete publication at: https://doi.org/10.1787/9789264095885-en

### Please cite this chapter as:

OECD (2011), "Value added", in National Accounts at a Glance 2010, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/na\_glance-2010-16-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

