

Monthly indicator of gross domestic product

BRIEF OVERVIEW

GDP (total output) every month. Includes volume index series starting from January 1985. The data are in index form, the base year being 1995. The data are calculated as original for the whole national economy and for six main industries. In addition, a trend cycle series is calculated on the level of the whole national economy.

The monthly indicator is used to anticipate the development of the volume of GDP on the monthly level.

CONTEXT – NATIONAL ACCOUNTS

The system of national accounts registers the supply and demand of goods and services on the market of the national economy during the year (in Finland also during the quarter, cf. quarterly accounts).

$$\text{GDP} + \text{M} = \text{C} + \text{I} + \text{G} + \text{X}$$

$$\text{Supply} = \text{Demand}$$

The purpose of the monthly indicator of gross domestic product is to indicate the development of the domestic supply factor (GDP) monthly. The development of imports (M) and of the following demand components:

C = private consumption

I = investments

G = public expenditure

X = exports

is published in Finland for the first time in the quarterly accounts released after three monthly indicators. In the quarterly accounts the GDP data are also considerably more exhaustive. The aim of the monthly indicator of gross domestic product is to anticipate the development of the volume of GDP to be published in the quarterly accounts.

CONTENTS, SOURCES AND RELIABILITY OF THE MONTHLY INDICATOR OF GROSS DOMESTIC PRODUCT

The volume index series of gross domestic product (1995=100) for the following industries (Standard Industrial Classification 1995): agriculture and forestry, manufacturing, construction, trade, transport, other services and public services. The trend series for monthly GDP.

DATA SOURCES

Agriculture and forestry: milk received by dairies, meat production, plant production, fellings.

Manufacturing: Volume index of industrial output (calculated per working day)

Construction: Index of construction materials, employment data in the Labour Force Statistics.

Trade: Volume indices of sale of motor vehicles, wholesale trade and retail trade. Indices adjusted per trading day in sale of motor vehicles and retail trade.

Transport: Hauled freight in gross tonne-kilometres in rail goods transport, sale of diesel oil and production of post and telecommunications as anticipated in accordance with the quarterly accounts.

Services and public services: the data of the quarterly accounts.

PURPOSE OF USE AND CONDITIONS OF DELIVERY

The purpose of use is cycle monitoring of economic development. The monthly indicator of gross domestic product is economic trend statistics subject to insider rules. Released to all simultaneously at a pre-announced time. Public upon release.

COMPARABILITY AND RELIABILITY

The monthly indicator of gross domestic product aims as a rough indicator to anticipate the GDP volume series of the quarterly accounts.

This index series can be compared with the GDP volume series of the quarterly accounts.

The sum of the index figures for three successive monthly indicators can be compared with the sum of the point figures for the previous year's corresponding months. This change usually describes very closely the annual change in the GDP volume at basic prices in the corresponding quarter in the quarterly accounts.

From the viewpoint of cycle monitoring it is probably most interesting to compare the correspondence of the trend cycle series with the monthly trend cycle series formed of the GDP volume of the quarterly accounts. Reliability has been good in this examination as well.

Publication of the monthly indicator (electronic Excel file)

The monthly indicator of gross domestic product (total output) is published 12 times a year (at the end of each month). The publication presents the volume of the whole national economy divided into six main industries in index form. The seasonally adjusted GDP (total output) trend cycle series is also published. The publication contains monthly data starting from January 1990 until two months prior to the month of publication (lag T+2 months).

The publication file is named GDPxxyy.xls, where xx stands for the statistical year and yy for the newest published statistical month. For example, the publication containing the data for January 2002 for the first time is named GDP0201.

Previously published monthly data will be revised to some extent in the next months. *It is advisable to use always the latest publication, also when examining times series backwards.* Some of the fastest monthly source series will be revised with time, which means that the index figures for the main industries in the monthly indicator of gross domestic product and the original GDP series and the trend cycle series will also be revised. (Series that are revised will be stabilised when calculating changes generally not later than within six months).

Variables in the publication:

- **Statistical year**
- **Month**

The month indicates the month under review (statistical month). NB The data of the monthly indicator are revised about six months backwards.

- **Indicator of Gross Domestic Product (Total Output)**

The monthly volume index of total output indicates the development of the monthly volume of GDP.

When calculating monthly changes the monthly observation of this original GDP series must be compared with the observation of the previous year's corresponding month because different months differ from one another and without seasonal adjustment different months cannot be compared with each other.

The industries of the monthly indicator of GDP indicate the development of the volume of value added in the industries of the quarterly accounts discussed below.

Agriculture and forestry

In the monthly indicator of GDP agriculture and forestry anticipates the development of the volume of value added in primary production in the quarterly accounts.

This group contains the following industries in accordance with the Standard Industrial Classification (Statistics Finland's Classification Database, Standard Industrial Classification 1995, version 36, 1.4.1999, based on NACE Rev. 1):

A Agriculture, hunting and forestry
B Fishing

(In quarterly accounts
1001 Agriculture
1002 Forestry
1003 Hunting and fishing)

Manufacturing

In the monthly indicator of GDP manufacturing anticipates the development of the volume of value added in manufacturing industries in the quarterly accounts.

This group contains the following industries in accordance with the Standard Industrial Classification (Statistics Finland's Classification Database, Standard Industrial Classification 1995, version 36, 1.4.1999, based on NACE Rev. 1):

C Mining and quarrying
D Manufacturing
E Electricity, gas and water supply

(In quarterly accounts
1004 Mining and quarrying
1005 Manufacturing
- 1006 Wood and paper industry
- 1007 Metal industry
- 1008 Other manufacturing
1009 Electricity, gas and water supply)

Construction

In the monthly indicator of GDP construction anticipates the development of the volume of value added in construction in the quarterly accounts.

This group contains the following industries in accordance with the Standard Industrial Classification (Statistics Finland's Classification Database, Standard Industrial Classification 1995, version 36, 1.4.1999, based on NACE Rev. 1):

F Construction

(In quarterly accounts

1010 Construction

- 1011 Building construction
- 1012 Civil engineering)

Trade

In the monthly indicator of GDP trade anticipates the development of the volume of value added in trade in the quarterly accounts.

This group contains the following industries in accordance with the Standard Industrial Classification (Statistics Finland's Classification Database, Standard Industrial Classification 1995, version 36, 1.4.1999, based on NACE Rev. 1):

G Trade

(In quarterly accounts

1013 Trade

- 1014 Wholesale trade
- 1015 Retail trade
- 1016 Sale and repair of motor vehicles)

Transport

In the monthly indicator of GDP transport anticipates the development of the volume of value added in the transport, storage and communication industries in the quarterly accounts.

This group contains the following industries in accordance with the Standard Industrial Classification (Statistics Finland's Classification Database, Standard Industrial Classification 1995, version 36, 1.4.1999, based on NACE Rev. 1):

I Transport, storage and communication

(In quarterly accounts

1018 Transport, storage and communication)

Public services and other services

In the monthly indicator of GDP public services and other services anticipates the development of the volume of value added in public services and other service industries than transport and trade in the quarterly accounts.

This group contains the following industries in accordance with the Standard Industrial Classification (Statistics Finland's Classification Database, Standard Industrial Classification 1995, version 36, 1.4.1999, based on NACE Rev. 1):

H Hotels and restaurants
J Financial intermediation
K Real estate, renting and business activities
L Public administration and defence; compulsory social security
M Education
N Health and social work
O Other community, social and personal service activities
P Private households with employed persons

and public services and other (non-profit) services in national accounts.

(In quarterly accounts)

1019 Financial intermediation and insurance

1020 Letting and operation of dwellings

1021 Business services

2022 Other private services

1025 Other services (non-profit services)

1026 Public services

- 1027 Central government and social security funds

- 1028 Local government (incl. the regional government of Åland))

Trend cycle series

Seasonally adjusted series of monthly GDP. Different monthly observations of this series can be compared with one another even within the same year.

The point figure of the original GDP series is thought to be divided into:

- the trend cycle component
- the seasonal variation component
- the random variation component.

In addition to the seasonal variation component, the original series is also adjusted for the random variation component. What remains is the trend cycle component describing more stable changes.

Seasonal variations are adjusted with generally used statistical methods (when completing this document on 15 January 2002 with X11ARIMA models).

APPENDIX:

The source statistics

Series

Milk received by dairies

Meat production

Plant production

Fellings

Volume index of industrial output

Index of construction materials

Employment of construction industry

Volume index of sale of motor vehicles

Volume index of wholesale trade

Volume index of retail trade

Hauled freight in gross ton-kilometres
in rail goods transport

Sale of diesel oil

PublisherInformation Centre of the Ministry of
Agriculture and ForestryInformation Centre of the Ministry of
Agriculture and ForestryInformation Centre of the Ministry of
Agriculture and Forestry

Finnish Forest Research Institute

Statistics Finland

Finnish Association of Construction Products Industries

Statistics Finland

Statistics Finland

Statistics Finland

Statistics Finland

VR Group (Finnish Railway Company)

Finnish Oil and Gas Federation