

## Revision of gross domestic product in 2020

On 31 August 2020, Statistics Estonia published the national accounts time series revised for 2016–2019 as part of a regular revision.

The revision took account of

- supply and use tables (SUT) for 2016;
- the Structural Business Survey (SBS, or EKOMAR in Estonian) of 2018;
- changes and corrections in other sources (balance of payments, accounting balances, etc.).

As a result of the revision, the real gross domestic product (GDP) for 2016 increased by 0.5%, and the GDP for 2018 decreased by 0.1%. As a result, the calculation bases for 2017 and 2019 changed as well. The GDP values for these years increased by 0.3% and 0.5%, respectively. In connection with the 2019 revision, the GDP for the first quarter of 2020 was revised as well.

The changes of the GDP at current prices were in the range -0.4% to 1.1% during the period under revision (see Table 1).

**Table 1. GDP at current prices before and after revision, 2016–2019**

	Before revision, million euros	After revision, million euros	Difference, %
2016	21,693.6	21,931.5	1.1
2017	23,775.8	23,857.7	0.3
2018	26,035.9	25,937.6	-0.4
2019	28,037.8	28,112.4	0.3

During the same period, the annual real GDP growth changed by -0.4 to 0.7 percentage points (Figure 1) and the quarterly growth by -1.2 to 1.5 percentage points (Table 2).

**Figure 1. Real GDP growth compared to same period of previous year, before and after revision, 2010–2019**



**Table 2. Revised real GDP growth compared to same quarter of previous year and difference from previously published growth rate, 1st quarter 2016 – 1st quarter 2020**

	2016		2017		2018		2019		2020	
	Growth, %	Difference, pp	Growth, %	Difference, pp	Growth, %	Difference, pp	Difference, pp	Growth, %	Difference, pp	Growth, %
1st quarter	6.1	1.3	4.6	-1.2	4.2	-0.5	5.1	0.3	-0.7	0.0
2nd quarter	1.3	0.6	6.6	-0.7	3.5	-1.1	3.3	-0.7	..	..
3rd quarter	1.9	0.6	3.8	-0.5	5.0	0.3	6.3	1.5	..	..
4th quarter	3.8	-0.2	6.9	1.3	4.8	-0.3	5.3	1.4	..	..
<b>Annual</b>	<b>3.2</b>	<b>0.6</b>	<b>5.5</b>	<b>-0.2</b>	<b>4.4</b>	<b>-0.4</b>	<b>5</b>	<b>0.7</b>	..	..

.. – Data were not collected

## 2016 estimates

Supply and use tables is a framework of tables where supply and demand are balanced. As a result of compiling these tables, real GDP growth increased by 0.6 percentage points. The value added of the total economy in 2016 increased by 0.8% compared to the previously published estimate.

The GDP change was affected the most by a 7.5% increase in the value added of financial and insurance activities and a 3.9% increase in the value added of trade. In addition, value added increased significantly in professional, scientific and technical activities (4.1%) and manufacturing (1%). Value added decreased the most in administrative and support service activities (2,4%).

As for consumption, domestic demand did not change considerably, but net exports decreased by 46.2 million euros. According to the revised data, investments increased by 5.2%. Here, correction of the changes of inventories had a balancing effect; the decrease was 301.2 euros.

**Table 3. Impact of balancing of SUT on GDP components, 2016**

Sector	Impact on component, million euros	Impact on component, %
Non-financial corporations	175.9	1.3
Financial corporations	55.8	7.6
General government	5.6	0.2
Households	-0.9	-0.1
NPISH	0.9	0.5
<b>Value added, total</b>	<b>237.3</b>	<b>1.3</b>
Net indirect taxes	0.6	0.0
<b>GDP</b>	<b>237.9</b>	<b>1.1</b>
Household final consumption expenditure	34.9	0.3
General government final consumption expenditure	6.6	0.1
NPISH final consumption expenditure	0.9	0.3
Gross fixed capital formation and valuables	262.0	5.2
Changes of inventories	-301.2	-67.3
<b>Domestic demand</b>	<b>3.2</b>	<b>0.0</b>
Exports of goods and services	-55.0	-0.3
Imports of goods and services	8.8	0.1
Statistical discrepancy	298.5	..

## 2017 estimates

The calculations for 2017 were also revised, as 2016 is the base year for 2017 data. As a result of the revision, the real GDP growth decreased by 0.2 percentage points. At current prices, the value added of the total economy increased by 81.9 million euros (0.3%) and domestic demand by 105.5 million euros (0.5%). Value added increased the most in trade (5.6%). The value added of transportation and storage was reduced the most (3.2%).

**Table 4. Impact of regular revision on GDP components, 2017**

Sector	Impact on component, million euros	Impact on component, %
Non-financial corporations	45.4	0.3
Financial corporations	28.4	3.5
General government	7.2	0.2
Households	0.6	0.0
NPISH	0.4	0.2
<b>Value added, total</b>	<b>81.9</b>	<b>0.4</b>
Net indirect taxes	0.0	0.0
<b>GDP</b>	<b>81.9</b>	<b>0.3</b>
Household final consumption expenditure	46.9	0.4
General government final consumption expenditure	3.1	0.1
NPISH final consumption expenditure	-2.4	-0.6
Gross fixed capital formation and valuables	40.7	0.7
Changes of inventories	17.3	4.1
<b>Domestic demand</b>	<b>105.5</b>	<b>0.5</b>
Exports of goods and services	-56.6	-0.3
Imports of goods and services	16.8	0.1
Statistical discrepancy	49.8	..

## 2018 estimates

In the calculations of the 2018 estimates, the initial data from the quarterly data sources used so far were replaced by the information received from annual questionnaires.

The most important additional sources were:

- SBS (EKOMAR);
- economic indicators of agricultural, forestry and fishing enterprises;
- research and development activities (in enterprises);
- research and development activities;
- financial intermediation and auxiliary services;
- insurance;
- energy;
- industrial production;
- non-profit institutions.

In addition, annual reports of enterprises in the Commercial Register and datasets of the Tax and Customs Board were used.

As a result of the data revision, GDP decreased by 0.4%. This was mostly driven by decreases in the value added of agriculture, forestry and fishing (28.8%), real estate activities (6.9%) and construction (7.5%). In contrast, the value added of trade increased significantly (14.6%).

During the revision, domestic demand was increased by 192.9 million euros. This was mainly caused by the 2.7% growth in investments. Private consumption increased by 0.7%.

**Table 5. Impact of regular revision on GDP components, 2018**

Sector	Impact on component, million euros	Impact on component, %
Non-financial corporations	-194.5	-1.2
Financial corporations	24.2	2.7
General government	3.2	0.1
Households	69.7	4.2
NPISH	0.8	0.3
<b>Value added, total</b>	<b>-96.7</b>	<b>-0.4</b>
Net indirect taxes	-1.5	0.0
<b>GDP</b>	<b>-98.2</b>	<b>-0.4</b>
Household final consumption expenditure	90.6	0.7
General government final consumption expenditure	-6.4	-0.1
NPISH final consumption expenditure	-3.2	-0.7
Gross fixed capital formation and valuables	165.1	2.7
Changes of inventories	-53.1	-8.7
<b>Domestic demand</b>	<b>192.9</b>	<b>0.8</b>
Exports of goods and services	-108.7	-0.6
Imports of goods and services	136.4	0.7
Statistical discrepancy	-46.1	..

## 2019 estimates

Using annual data sources for 2018 calculations had an effect on the basis of the 2019 calculations. As a result, the GDP for 2019 increased by 0.3%. The changes in the value added resulted from corrections in the prior year data and were in the same ranges. Domestic demand did not change significantly. Revisions in the changes of inventories offset increases in private consumption and investments. As for foreign demand, both exports and imports increased about the same; therefore, trade balance remained at the same level as before.

**Table 6. Impact of regular revision on GDP components, 2019**

Sector	Impact on component, million euros	Impact on component, %
Non-financial corporations	22.1	0.1
Financial corporations	13.1	1.2
General government	9.6	0.2
Households	16.1	0.9
NPISH	6.4	2.6
<b>Value added, total</b>	<b>67.2</b>	<b>0.3</b>
Net indirect taxes	7.4	0.2
<b>GDP</b>	<b>74.6</b>	<b>0.3</b>
Household final consumption expenditure	87.7	0.7
General government final consumption expenditure	6.2	0.1
NPISH final consumption expenditure	13.2	2.9
Gross fixed capital formation and valuables	35.5	0.5
Changes of inventories	-134.5	-24.5
<b>Domestic demand</b>	<b>8.1</b>	<b>0.0</b>
Exports of goods and services	89.5	0.4
Imports of goods and services	101.9	0.5
Statistical discrepancy	79.0	..

In conclusion, the introduction of the 2016 supply and use tables reduced to some extent the GDP quarterly growths of the following year. The new data sources used for 2018 improved primarily the growth rates of the second half of 2019.

**Figure 2. Real GDP growth compared to same period of previous year, before and after revision, 1st quarter 2016 – 1st quarter 2020**

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