REVISION OF GROSS DOMESTIC PRODUCT IN 2016

On 8 September 2016, Statistics Estonia released the national accounts time series with the following revisions:

- As part of the regular revision, the annual and quarterly national accounts for 2012 were revised according to the supply and use tables (SUT); and the accounts for 2014 were revised according to the yearly surveys of Statistics Estonia. The most important of them is the Structural Business Survey (SBS, or EKOMAR in Estonian). As a result of these revisions, the gross domestic product (GDP) for 2012 decreased by 0.4% and the GDP for 2014 by 1.0%. Due to the revisions made based on the above-mentioned data sources, the 2013 and 2015 calculations had to be reviewed as well. The chain-linked values of GDP for these years decreased by 1.0% and 0.7%, respectively. As 2015 is the base year for the calculation of the 2016 accounts, the accounts for the 1st quarter of 2016 released in June this year were also revised.
- For the accounting year 2010, SUTs were renewed. As a result, national accounts estimates for 2010 changed as well. GDP at current prices decreased by 0.01%.
- From 2014 onwards, mineral exploration and evaluation expenditures are considered as investments. So far, these expenditures had been recorded as current expenditure. As a result of this revision, GDP at current prices increased by 0.02% both for 2014 and 2015.

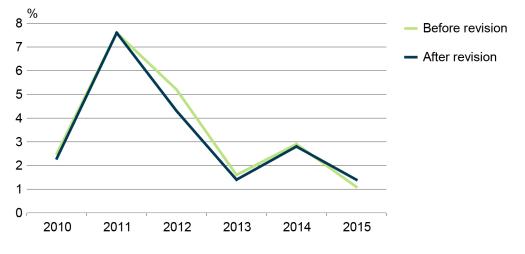
Ensuing from all these revisions, the annual GDP at current prices changed by -1.0% to 0.0% in the period 2010–2015 (Table 1).

	Before revision, million euros	After revision, million euros	Difference, %
2010	14,718.5	14,716.5	-0.01
2011	16,667.6	16,667.6	0.00
2012	18,006.0	17,934.9	-0.40
2013	19,014.8	18,890.1	-0.66
2014	19,962.7	19,758.3	-1.02
2015	20,460.9	20,251.7	-1.02

Table 1. GDP at current prices, before and after revision, 2010–2015
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During the same period, the real growth of the annual GDP changed by -0.9 to +0.3 percentage points (Figure 1).

Figure 1. Real GDP growth compared to the corresponding period of the previous year, before and after revision, 2010–2015



Methodological changes

Below is a more detailed description of the methodological changes.

I. Regular revision of national accounts time series

Ensuing from the regular revision made in 2016, the annual GDP at current prices decreased by 0.4% to 1.0% in the period 2012–2015.

The real growth of the annual GDP in the same period changed by -0.9 to +0.4 percentage points and the real growth of the quarterly GDP changed by -1.1 to 0.8 percentage points (Figure 2 and Table 2).

	20)12	2	2013		2014		2015		2016
Ō		ifference,		Difference,				Difference,		Difference,
	%	рр	%	рр	%	рр	%	рр	%	рр
1st quarter	r 5.1	-1.1	2.6	0.1	1.9	-0.6	1.2	0.2	1.5	-0.2
2nd quarte	er 5.0	-1.0	0.3	0.1	3.1	0.1	1.9	0.3		
3rd quarte	r 3.5	-0.8	0.8	-0.1	2.4	-0.4	1.9	0.8		
4th quarte	r 3.7	-0.6	2.0	-0.6	3.9	0.5	0.8	0.2		
Annual	4.3	-0.9	1.4	-0.2	2.8	-0.1	1.4	0.4		

Table 2. Revised real GDP growth rate compared to the same quarter of the previous year and difference from the previously published growth rate, 1st quarter 2012 – 1st quarter 2016

As a result of the regular revision, the total value added in 2012 decreased 0.4% compared to the previously published estimate. The biggest changes occurred in the value added of administrative and support service activities and in that of agriculture, forestry and fishing, which changed +8.7% and -8.7%, respectively. Domestic demand increased 1.1%, mainly due to increased investments.

Due to the revision, in 2014, the total value added at current prices decreased 1.2%, while domestic demand decreased 1.4%. The growth was the biggest in the value added of human health and social work activities. At the same time, the largest decrease was recorded in the value added in administrative and support service activities.

II. The revision of the 2010 estimates

In 2016, SUTs and national accounts time series for the accounting year 2010 were harmonised. More information about the revisions of national accounts estimates in 2015 is available via the <u>website</u> of Statistics Estonia.

In addition, all data were analysed and, as a result, investments, changes of inventories and the output of non-financial and financial enterprises were revised. The value added of both non-financial and financial corporations changed, resulting in a change in GDP as well. Table 3 shows the impact of balancing SUTs on the GDP by production approach.

Table 3. Impact of balancing of SUTs on components of GDP by production approach, by sector,
2010

Sector	Impact on component, million euros	Impact on component, %
Non-financial corporations	0.5	0.01
Financial corporations	-2.4	-0.47
General government	0.0	0.00
Households	0.0	0.00
NPISH	0.0	0.00
Value added, total	–1.9	-0.02
Taxes less subsidies on products	0.0	0.00
GDP	-1.9	-0.01

The components of the GDP by expenditure approach changed as well (Table 4).

Table 4. Impact of balancing	g of SUTs on	components of GDP k	by expenditure approach, 2010

Component	Impact on component, million euros	Impact on component, %
Household final consumption expenditure	0.0	0.00
General government final consumption expenditure	0.0	0.00
NPISH final consumption expenditure	0.0	0.00
Gross fixed capital formation and valuables	0.0	0.00
Changes of inventories	-2.0	-35.12
Domestic demand	–1.9	-0.01
Exports of goods and services	0.0	0.00
Imports of goods and services	0.0	0.00
GDP	–1.9	-0.01

III. Mineral exploration and evaluation expenditures

Mineral exploration and evaluation is the value of expenditure on exploration for mineral resources and subsequent evaluation of the discoveries made. This expenditure includes pre-licence costs, licence and acquisition costs, appraisal costs and the costs of actual test drilling and boring, as well as the costs of surveys, transportation costs, etc., incurred to make it possible to carry out the tests.

So far these expenditures were recorded under current expenditure, but now they are considered as fixed assets. Thus, there was a change in the following components: consumption of fixed capital,

intermediate consumption of the non-financial enterprises sector; intermediate consumption and final consumption expenditure of the government sector.

In national accounts for 2014 and onwards, the expenditures on mineral exploration and evaluation were removed from current expenditures and recorded under gross fixed capital formation. The earlier time series will be revised during the next major revision in 2019.

Table 5 shows the impact of the changes on GDP by production approach.

Table 5. Impact of capitalising of mineral exploration expenditures on components of GDP by production approach, by sector, 2014

Sector	Impact on component, million euros	Impact on component, %
Non-financial corporations	3.0	0.02
Financial corporations	0.0	0.00
General government	0.1	0.00
Households	0.0	0.00
NPISH	0.0	0.00
Value added, total	3.1	0.02
Taxes less subsidies on products	0.0	0.00
GDP	3.1	0.02

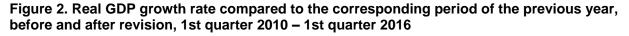
There were also changes in the components of GDP by expenditure approach (Table 6).

Table 6. Impact of capitalising of mineral exploration expenditures on components of GDP by expenditure approach, 2014

Component	Impact on component, million euros	Impact on component, %
Household final consumption expenditure	0.0	0.00
General government final consumption expenditure	-0.4	-0.01
NPISH final consumption expenditure	0.0	0.00
Gross fixed capital formation and valuables	3.5	0.07
Changes of inventories	0.0	0.00
Domestic demand	3.1	0.02
Exports of goods and services	0.0	0.00
Imports of goods and services	0.0	0.00
GDP	3.1	0.02



Figure 2 shows the growth rate of real GDP before and after all the revisions made in 2016.





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