GROSS DOMESTIC PRODUCT REVISION PRINCIPLES IN STATISTICS ESTONIA

Statistics Estonia and Eesti Pank (the central bank of Estonia) follow the same principles of revising statistics, which are in line with the principles of the revision policy recommended by the European Commission and the European Central Bank.

Revisions can be regular or irregular.

1. Regular GDP revisions

A regular revision is made to accommodate new or corrected data or other additional information.

Regular updates of gross domestic product (GDP) calculations are required due to regular reception and correction of data used in the calculations. The majority of developed countries regularly update their GDP calculations. However, different countries update their GDP at different times, depending on the data reception time and quality of data, the national accounts labour force input, operation processes, etc.

Normally these revisions are planned and recalculated estimates are published according to a publicly available pre-announced release calendar.

In Estonia, the following GDP estimates are published:

- The first quarterly GDP estimate is released two months after the end of the accounting period, calculated by the production, expenditure and income approaches.
- Every year, national accounts estimates are revised on the basis of information collected by Statistics Estonia with annual questionnaires (e.g. the Structural Business Statistics questionnaire (EKOMAR in Estonian), the PRODCOM questionnaire, the questionnaire of non-profit organisations, etc.). The results are published 21 months after the end of the year subject to revision.
- The final stage of the regular GDP revision involves the correction of GDP components according to the Supply and Use Tables (SUTs). SUTs are compiled and published 36 months after the end of the reference year, after which these results are taken as the basis for national accounts calculations.

Table 1 shows when and which period’s indicators are being revised by Statistics Estonia.

<table>
<thead>
<tr>
<th>Reporting period</th>
<th>Year T–4</th>
<th>Year T–3</th>
<th>Year T–2</th>
<th>Year T–1</th>
<th>Year T</th>
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</thead>
<tbody>
<tr>
<td>February (T)</td>
<td>Q 1–4</td>
<td>Q 1–4</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
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<tr>
<td>May (T)</td>
<td>Q 4</td>
<td>Q 1</td>
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<td>August (T)</td>
<td>Q 1–4</td>
<td>Q 1–4</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
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<td>November (T)</td>
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<td>February (T+1)</td>
<td>Q 1–4</td>
<td>Q 1</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 4</td>
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The colour codes in Table 1 indicate the following:

- First release
- Regular revision
- Regular revision (if necessary)

Upon the first release of statistics for the 1st and 3rd quarters, the statistics for the preceding quarter are adjusted; when the statistics for the 4th quarter are first published, the statistics for the 1st, 2nd and 3rd quarters of the same year are adjusted. If necessary, the estimates of the quarters of up to previous two years are also corrected (11 quarters in total).

When the statistics for the 2nd quarter are first released, the data for the previous quarter (the 1st quarter) and all the preceding quarters for which there are additional data are revised (up to 17 quarters in total).
2. Erakorralised SKP revisjonid

Irregular GDP revisions are carried out to specify or update the methodology of national accounts calculations, including harmonisation with the European Union (EU) and other international requirements.

Since the year 2000, Statistics Estonia has carried out many irregular revisions of the GDP time series.

- The first revision of the whole GDP time series took place in 2001 in connection with a more detailed breakdown of non-observed economy by economic activities and specification of financial sector indicators and net taxes on products. This revision mainly concerned the GDP calculated by the production approach.
- The base year of constant price calculations of GDP components was changed in 2002. The previously used base year, 1995, was replaced by a new base year, 2000. As a result of the revision, the constant price time series of GDP components, incl. growth rates, changed.
- In 2004, GDP time series were revised due to accession to the EU. Estonia, like other countries that acceded to the EU in 2004, had to meet the pre-accession criteria prescribed by the European Commission for the national accounts methodology, which ensured that the statistics of new Member States would be comparable with those of other Member States.
- In 2005, the methodology for the calculation of financial intermediation services indirectly measured (FISIM) was revised in the GDP accounts. Earlier, FISIM was calculated and published as a single separate indicator. By the updated methodology, FISIM was allocated to the user sectors of GDP components.
- In 2008, Statistics Estonia revised the national accounts constant price calculations. Earlier, the year 2000 was used as a fixed base year for these calculations. According to the new methodology, the base year is no longer fixed and prices of the previous year are used instead. In order to compute the real growth of the GDP components calculated at previous year prices, the components must be chain-linked. The obligation to make national accounts calculations at previous year prices and apply the chain-linking method proceeds from the Regulation (EC) No 1392/2007 of the European Parliament and of the Council of 13 November 2007 amending the Council Regulation (EC) No 2223/96 concerning the transmission of national accounts data. For a more detailed overview of the chain-linking method, please refer to “Calculation of the Gross Domestic Product using the Chain-Linking Method”.
- In 2009, Statistics Estonia specified the actual and imputed rent calculations starting from 1995 and reclassified a number of units between the corporations sector and general government sector starting from 2002 (for a more detailed overview, please refer to “Gross Domestic Product (GDP) Revisions in 2009”).
- In September 2011, Statistics Estonia published the national accounts calculations based on the double deflation method. Additionally, in 2011, a new version of the Estonian Classification of Economic Activities was applied (EMTAK 2008). In the new classification, the division of economic units into economic activities is different. Since the changes occurred primarily within economic activities, the effect on the GDP at current prices was minimal. This process, however, did bring about a change in the calculations of GDP components at previous year prices and in the chain-linked growth rates. After the aforementioned revision, the GDP reference year calculated by the chain-linking method was transferred from 2000 to 2005 (for a more detailed overview, please refer to “Revision of the Gross Domestic Product in 2011–2012”).
- In September 2014, the calculation method of the consumption of fixed capital on roads and bridges and the accounts of entertainment, literary and artistic originals were improved and the vehicle registration tax started to be recorded as a tax on products, irrespective of the payer of the tax. In addition, many major methodological changes were made in the time series:
  - The GDP time series were recalculated according to ESA 2010 rules.
  - The results of the 2011 Population and Housing Census were taken into account. As a result, the population number, estimates regarding dwellings and labour market estimates used in the national accounts changed.
  - In the calculation of the consumption of fixed capital, the linear method was replaced with the geometric method.
  - In the chain-linking method, the reference year 2005 was replaced by 2010.
  - The source data for the calculation of FISIM were specified and the calculations were improved.
  - The calculation of net taxes on products was improved.

For a more detailed overview, please refer to “Revision of the Gross Domestic Product (GDP) in 2014”.

- Another irregular revision was made in September 2015. On 20–21 January 2015, Eurostat undertook a standard excessive deficit procedure (EDP) dialogue visit to Statistics Estonia, as a result of which changes were introduced into government finance statistics. In order to ensure consistency between the GDP and government finance statistics, changes were made also into the GDP time series starting from 1998. In addition, sickness benefits and redundancy payments were separated from wages and salaries in the national accounts time series. Also, the methodology of the seasonal and working-day adjustment of national accounts estimates was updated. The time
3. Future revisions

According to the revision policy recommended by the European Commission, the next major revision of the national accounts time series will be conducted in 2019. Among other changes, the reference year used in the chain-linking method, 2010, will be replaced by the year 2015. The transition to the new reference year will not bring about changes into the GDP and the growth of its components; what will change are the chain-linked indices and the GDP calculated using the chain-linking method along with its component values.