

## The Gross Domestic Product (GDP) Revisions in 2009

In 2009 Statistics Estonia made both regular and irregular revisions in national accounts.

Regular revisions

1. Both 2007 and 2008 annual and quarterly national accounts were revised based on the annual Structural Business Survey of 2007. GDP changed in both current and in previous year prices.
2. National accounts of 2005 were revised based on supply and use tables (SUT). In addition, exports and imports of 2004 were revised in 2009 based on the balance of payments.

(see also "Overview of the Gross Domestic Product Revision Principles"  
<http://www.stat.ee/dokumendid/37446>)

In addition to the regular revisions, Statistics Estonia made two irregular revisions in national accounts in 2009.

1. Updated calculations of actual and imputed rent of dwellings (since 1995) and
2. Reclassified some units between non-financial corporations sector and general government sector (since 2002).

(see also "Overview of the Gross Domestic Product Revision Principles"  
<http://www.stat.ee/dokumendid/37446>)

### 1. Update of the estimates of actual and imputed rent

Statistics Estonia updated the estimates of dwelling services in the GDP calculations. Output of dwelling services incorporates services produced by rented dwellings (actual rent) and services produced by owner-occupied dwellings (imputed rent).

**Table 1. Corrections made in the estimates of rent in dwelling services**

	Old methodology	New methodology
Distribution of investments between rented and owner-occupied dwellings	According to the number of dwellings in both groups	According to the surface distribution
Price of the land applied in the estimates of imputed rent	Based on real estate companies' data	Based on the data of the Estonian Land Board
Rate of return applied in the estimates of the output of owner-occupied summerhouses.	0.625%	2.5%

In the calculations of actual rent at previous year prices the consumer price index (CPI) of rents was applied instead of previously applied CPI of housing.

Update of the methodology and estimates of actual and imputed rent influenced calculations of households final consumption expenditures and the value added of the sector, whereas the impact of the revision on the annual GDP of 1995–2008 ranged from -0.1% to +0.9% (see Table 4).

### 2. Reclassification of units

In relation to the examination of the qualification of institutional sectors according to the European System of Accounts 1995 (ESA 95), some units (e.g. state real estate company Riigi Kinnisvara AS, some hospitals, health care and sport centres) were reclassified from non-financial corporations sector to general government sector.

Ensuing the reclassification estimates of market and non-market production was specified, the value added of non-financial corporations sector diminished and the value added of general government sector increased. In addition, some units from non-profit institutions serving

households sector were reclassified to general government and non-financial corporations sectors. The impact of the last mentioned reclassification was minor.

**Table 2. Summary of the revisions of national accounts published on 8 September 2009**

Revised year(s)	Reason for revision	Regularity of revision	Comment
1995–2008	Update of the estimates of actual and imputed rent	irregular	
2002–2008	Reclassification of some units from non-financial corporations sector to general government sector	irregular	
2004	Revision of exports and imports based on balance of payments	irregular	
2005	Revision of national accounts based on supply and use tables	regular	2006 was revised based on 2005
2007	Revision of national accounts based on the annual Structural Business Survey	regular	2008 was revised based on 2007

### Impact of 2009 revisions on the GDP

Ensuing the revisions made in 2009 annual GDP at current prices increased by 0.2 to 2.3% between 1995–2008 (see Table 3) and quarterly GDP real growth changed in the same period between -0.7 to +2.1 percentage points.

**Table 3. GDP at current prices before and after revision (as of 8 September 2009)**

Year	Before revision, mln kr	After revision, mln kr	Difference, %
2008	248 149.0	251 492.8	1.3
2007	238 928.9	244 503.7	2.3
2006	205 038.1	206 995.9	1.0
2005	173 530.2	174 956.2	0.8
2004	151 012.2	151 541.6	0.4
2003	136 010.2	136 421.1	0.3
2002	121 372.2	121 672.7	0.2
2001	108 218.3	109 070.4	0.8
2000	95 491.0	96 380.5	0.9
1999	83 472.6	83 841.9	0.4
1998	78 426.8	78 738.2	0.4
1997	69 886.2	70 122.7	0.3
1996	56 727.3	56 890.8	0.3
1995	43 182.3	43 283.4	0.2

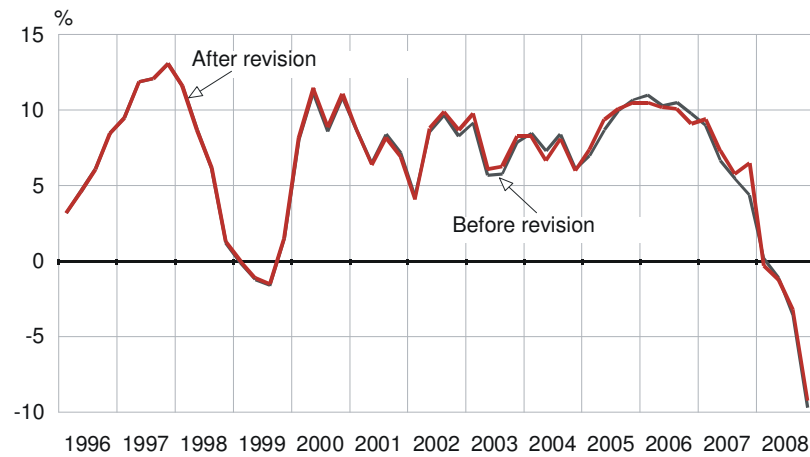
**Table 4. Impact of the revision of actual and imputed rents on the GDP at current prices**

Year	Impact on the GDP, %
2008	-0.1
2007	0.9
2006	0.7
2005	0.4
2004	0.4
2003	0.3
2002	0.2
2001	0.8
2000	0.9
1999	0.4
1998	0.4
1997	0.3
1996	0.3
1995	0.2

**Table 5. Correction of the real growth of the quarterly GDP (difference between the real growth of the quarterly GDP before and after revision)**

Correction, percentage points	Number of quarters
0	14
0.1–0.3	25
0.4–0.6	9
0.7–0.9	3
1.0 and above	1
<b>TOTAL</b>	<b>52</b>

**Figure 1. GDP real growth before and after revision, 1<sup>st</sup> quarter 1996 – 4<sup>th</sup> quarter 2008**



Tõnu Mertsina  
 Head of National Accounts Service  
 Tel +372 625 9353  
 e-mail: [tonu.mertsina@stat.ee](mailto:tonu.mertsina@stat.ee)  
 September 2009