

Revision of Gross Domestic Product in 2022

On 30 September 2022, Central Statistical Bureau of Latvia released revised national accounts time series from 1995 onwards.

Following revisions have been implemented:

1. revisions impacting all time series –revisions due to other changes in methods and data sources used for GDP calculations
2. annual routine revision (GDP estimates for the last four years may be revised).

Taking into account all these revisions, annual GDP at current prices changed only for two years: +0.1 % for 2019 and +2.8 % for 2020 (see table 1).

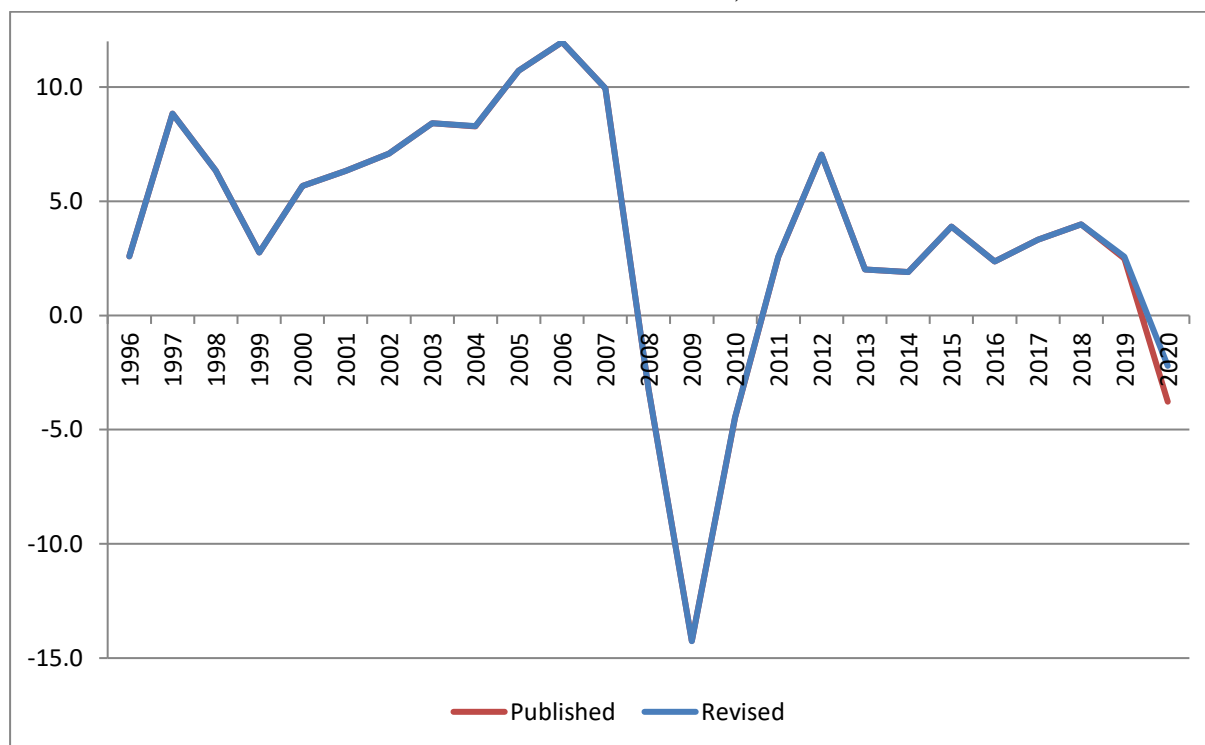
1. table. GDP at current prices before and after revision in 1995 –2020, in million EUR

Year	Before revision	After revision	Difference	Difference, %
1995	4 059.3	4 059.3	0	0
1996	4 682.2	4 682.2	0	0
1997	5 396.0	5 396.0	0	0
1998	6 014.7	6 014.7	0	0
1999	6 272.6	6 272.6	0	0
2000	6 868.5	6 868.5	0	0
2001	7 471.0	7 471.0	0	0
2002	8 406.4	8 406.4	0	0
2003	9 571.8	9 571.8	0	0
2004	11 096.7	11 096.7	0	0
2005	13 662.3	13 662.3	0	0
2006	17 200.0	17 200.0	0	0
2007	22 703.8	22 703.8	0	0
2008	24 527.9	24 527.9	0	0
2009	19 000.0	19 000.0	0	0
2010	18 088.0	18 088.0	0	0
2011	19 763.8	19 763.8	0	0
2012	21 924.5	21 924.5	0	0
2013	22 749.0	22 749.0	0	0
2014	23 625.8	23 625.8	0	0
2015	24 572.1	24 572.1	0	0
2016	25 371.3	25 371.3	0	0
2017	26 984.4	26 984.4	0	0
2018	29 153.6	29 153.6	0	0
2019	30 647.2	30 678.6	+31.4	+0.1
2020	29 456.8	30 294.0	+837.2	+2.8

Preliminary assessment of 2020 from quarterly data sources was revised using assessment of annual data sources. Annual GDP aggregates at current prices were compiled in SUT framework.

The annual GDP growth changed from +0.1 to +1.6 percentage points (see Picture 1 and Table 2).

1. GDP changes at constant prices, compared to the previous year, before and after revision in 1996 – 2020, %



2. table. GDP changes at constant prices, compared to the previous year, before and after revision in 1996 – 2020

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004
Before revision, %	+2.6	+8.8	+6.3	+2.8	+5.7	+6.3	+7.1	+8.4	+8.3
After revision, %	+2.6	+8.8	+6.3	+2.8	+5.7	+6.3	+7.1	+8.4	+8.3
Difference, per cent	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Before revision, %	+10.7	+12.0	+9.9	-3.2	-14.2	-4.5	+2.6	+7.0	+2.0
After revision, %	+10.7	+12.0	+9.9	-3.2	-14.3	-4.5	+2.6	+7.0	+2.0
Difference, per cent	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Year	2014	2015	2016	2017	2018	2019	2020		
Before revision, %	+1.9	+3.9	+2.4	+3.3	+4.0	+2.5	-3.8		
After revision, %	+1.9	+3.9	+2.4	+3.3	+4.0	+2.6	-2.2		

Difference, per cent	+0.0	+0.0	+0.0	+0.0	+0.0	+0.1	+1.6		
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1. Time series revisions of GDP aggregates related to other changes in calculation methods and data sources of GDP indicators

1.1. Reclassification of tax on immovable property from other current taxes (D.59) to other taxes on production (D.29) – impact on indicators by GDP income approach from 2011

Until the revision, tax on immovable property was a component of the indicator Other current taxes (D.59), which contradicted conditions of §4.23 subsection (a) of ESA 2010¹, which states that Other taxes on production (D.29) includes taxes on the ownership or use of land, buildings or other structures utilised by enterprises in production (including owner-occupiers of dwellings).

According to ESA 2010, owner-occupiers of dwellings generate output, so tax on immovable property paid by natural person is treated similarly to the taxes companies have to pay on fixed assets (buildings) involved in the production process. The same applies to flats rented by natural persons, which also generate output because the service is produced. Therefore, every dwelling is involved in production – provision of housing services, and accordingly tax payable on housing is classified as Other taxes on production (D.29). Although the tax on immovable property paid by natural persons on housing is applicable to the economic activity sector Real estate activity (NACE Rev. 2 section 68), the changes affected other activities (NACE Rev.2) by GDP income approach, because before the revision there was no consistency between different GDP calculations for taxes included in D.29.

3. table. The impact of reclassification of tax on immovable property on indicators by GDP income approach in 2011 – 2020, million EUR

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Employee remuneration (D.1)	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Taxes on production and imports (D.2)	17.6	20.6	22.2	22.9	24.2	32.1	35.2	37.4	39.6	38.8
Subsidies (D.3)	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Operating surplus and mixed income, gross (B.2g+B.3g)	-17.6	-20.6	-22.2	-22.9	-24.2	-32.1	-35.2	-37.4	-39.6	-38.8
GDP	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0

¹ Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts, annex A

1.2. Changes in the unit classification in General government sector among sectors of statistical classification of economic activities (NACE Rev. 2) – impact on indicators by GDP expenditure approach from 2001

Revising activities of units of the General government sector (S.13), one unit from economic activity sector Public administration and defence; compulsory social security (NACE Rev. 2, activity 84) was reclassified in the GDP time series to activity Education (NACE Rev. 2, activity 85). As a result of the reclassification, GDP at current prices has not changed, but Individual consumption expenditure (P.31) and Collective consumption expenditure (P.32) of General government sector (S.13), as well as Final consumption expenditure (P.3) of Household sector (S.14) have changed. Household final consumption expenditure increased, because household final consumption expenditure for education services is calculated using the commodity flow method. Market output of educational services provided by the reclassified unit are consumed in household final consumption expenditure.

Reclassification of the unit at previous year's prices led to changes in the value added assessment and, therefore, in the GDP time series.

4. table. Reclassification of the unit in General government sector (S.13) among sectors, impact on household final consumption expenditure (at current prices), in million EUR

Year	Total final consumption expenditure of general government sector (S.13 P.3)	Individual consumption expenditure of general government sector (S.13 P.31)	Collective consumption expenditure of general government sector (S.13 P.32)	Household final consumption expenditure (S.14 P.3)
2001	0.0	4.4	-4.4	2.5
2002	0.0	4.7	-4.7	2.6
2003	0.0	5.8	-5.8	3.2
2004	0.0	5.7	-5.7	3.2
2005	0.0	7.0	-7.0	3.9
2006	0.0	8.5	-8.5	4.7
2007	0.0	11.9	-11.9	6.6
2008	0.0	11.3	-11.3	6.3
2009	0.0	14.2	-14.2	7.6
2010	0.0	16.8	-16.8	6.2
2011	0.0	17.8	-17.8	7.8
2012	0.0	20.7	-20.7	9.5
2013	0.0	19.1	-19.1	12.5
2014	0.0	18.0	-18.0	14.8
2015	0.0	16.4	-16.4	17.9
2016	0.0	14.1	-14.1	22.5
2017	0.0	15.6	-15.6	26.4
2018	0.0	16.9	-16.9	30.3
2019	0.0	19.0	-19.0	35.1

2020	0.0	24.0	-24.0	36.7
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1.3. Impact of the new data source – Use of payment card transaction data in the assessment of indicators by GDP expenditure approach – on indicators by GDP expenditure approach starting from 2020

As of January this year, in compiling the balance of payments Latvijas Banka is using a new data source – payment transaction card data. The new data source is used to compile the balance of payments statistics for the purpose of estimation of travel and e-commerce starting from 2020 data. As of September 30 this year also indicators by GDP expenditure approach include these changes of balance of payments.

Use of the new data source in the assessment of indicators by GDP expenditure approach was not possible at the same time as the balance of payments, because in order to apply the new data to GDP indicators, additional data processing was required, applying the new data to methodology and classifications of GDP indicators. Use of the payment card data source in the assessment of indicators by GDP expenditure approach affected the assessment of Household final consumption expenditure, exports and imports. Indicator by GDP expenditure approach Changes in inventories is used as a balance sheet item.

5. table. The impact of payment card data on indicators by GDP expenditure approach, 2020, at current prices, million EUR*

Indicator	2020
Household final consumption expenditure	+ 80.7
Changes in inventories	-5.3
Exports	+ 352.3
Imports	+ 427.7
Gross domestic product	0.0

*In this table the impact of payment card data on GDP and its indicators is assessed based on non-revised balance of payments data, which may cause slight deviations in indicators in breakdown by impact of annual routine revision and impact of new data source.

2. Annual routine revision

Additionally, annual routine revisions were carried out. Preliminary assessment of 2020 from quarterly data sources was revised using assessment of annual data sources. 2020 was the first year of COVID-19 pandemic. Therefore, revision value of the GDP and its aggregates is higher than in previous years.

Taking into account that new GDP assessment of 2020 was obtained from annual data sources, also GDP assessment of 2021, that was obtained using short-term (quarterly) data sources, was revised.