BANKA SLOVENIJE

EVROSISTEM

Review of macroeconomic developments with projections

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Summary

After the strong recovery and accelerated GDP growth in the second half of 2021, in the first half of this year the economy continued to reap the benefits of the post-pandemic opening, the built-up savings, and the favourable financing conditions. With the gradual waning of these effects and amid persistent inflationary pressures and uncertainty, economic growth is slowing in the second half of 2022. This has already been reflected in the figures for the third quarter, where the most notable slowdown in year-on-year growth in GDP components was recorded by private consumption. Amid high production costs and a weaker outlook for demand, year-on-year growth in investment in machinery and equipment has also decelerated.

A further slowdown is indicated by the weaker macroeconomic outlook in the international environment, which is being accompanied by a gradual rise in central bank interest rates and by less favourable financing conditions. Growth in foreign demand remained solid in 2022, but is expected to moderate significantly in the beginning of 2023, given the sharp downgrading of the growth outlook in Slovenia's main trading partners. With the economy weakening and central banks withdrawing their accommodative measures, inflationary pressures in the international environment are expected to ease, which is being reflected in a fall in futures prices of oil and other primary commodities.

These short-term developments in the domestic economy and the international outlook are driving the macroeconomic projections for Slovenia. Our estimate is that GDP growth will remain relatively high in 2022 at 5%, mainly as a result of the carry-over of growth from 2021. The weaker macroeconomic outlook in the domestic and foreign environments on the other hand is being reflected in the within-year growth in 2022, where the trend of weaker current growth will persist into the first half of 2023. This implies a significant downgrade in the GDP growth projections for 2023, which now stands at 0.8%. With the expected stabilisation of the geopolitical situation, continued easing of supply chain pressures, and slowing growth in import prices, a gradual recovery in economic activity is expected from the second half of 2023, with a move towards potential output growth in 2024 and 2025, when GDP is projected to grow at 2.4% and 2.3% respectively.

The projected slowdown in growth in 2023 largely comes from a significant decline in growth in private consumption compared with 2022, and a fall in private investment. Amid substantially decelerated growth in private consumption and a decline in private investment, government investment and consumption will play a meaningful role in maintaining growth in 2023. Weaker domestic demand will also have an impact on import growth, which is expected to slow more rapidly than export growth. After two years of negative realizations, this will see net trade again making a net positive contribution to GDP growth in 2023 and will strengthen further in 2024, as a result of the recovery in global demand and an improvement in the terms of trade. Alongside the contribution by net trade, the contribution by private consumption will also strengthen in 2024, and will be joined in 2025 by the strengthened aggregate investment on the basis of funding from the new financial perspective and greater utilisation of NGEU funding.

The employment growth projection follows closely the dynamics in economic growth. The growth is estimated to reach 2.4% in 2022 and decline significantly in 2023. Imbalances between supply and demand persist on the labour market. Employers are thus expected to be less inclined to lay off workers, despite the economic slowdown, while the ongoing labour shortage will likewise hinder more rapid employment growth in 2024

and 2025: the rates are projected at 0.8% and 0.7% respectively. The imbalances on the labour market are also reflected in the projections of growth in compensation per employee, which accounts for the agreed public sector wage increase and a rise in the minimum wage in line with the inflation projections. Nominal growth in compensation per employee is projected to reach 4.3% in 2022, 6.4% in 2023, 4.9% in 2024 and 4.0% in 2025.

Despite the anticipated slowdown in the economy and the measures to curb rising energy prices, inflation will in 2022 and 2023 remain well above the monetary policy objective, primarily due to higher contributions from core inflation and food price inflation. This is attributable to inflation becoming more broadly based, as a result of the increased pass-through of high energy prices into other price categories, wage growth, persistent cost pressures along production chains, and demand-side factors. Having regard for these circumstances, a more significant easing of inflation is expected from the second half of 2023, in line with the slowdown in import prices and the effects of monetary policy measures. Inflation is projected to average 9.3% in 2022 and 6.8% in 2023, before slowing to 4.2% in 2024 and 2.3% in 2025.

Table 1: **Macroeconomic projections for Slovenia, 2022 to 2025**

								Projections							
	2016	2017	2018	2019	2020	2021		**2022**		**2023**		**2024**		**2025**	
							Δ	**Dec.**	Δ	**Dec.**	Δ	**Dec.**	Δ	**Dec.**	Δ
Prices	*annual average % changes*														
HICP	-0,2	1,6	1,9	1,7	-0,3	2,0	0,0	**9,3**	0,3	**6,8**	2,3	**4,2**	1,9	**2,3**	…
HICP excluding energy and food	0,7	0,7	1,0	1,9	0,8	0,9	0,0	**5,8**	1,1	**5,3**	2,5	**3,0**	0,3	**2,7**	…
HICP energy	-5,2	4,7	6,0	0,8	-10,8	11,3	0,0	**25,2**	-5,0	**8,5**	-1,0	**10,8**	11,6	**-1,0**	…
Economic activity	*y-o-y growth rates in %*														
GDP (real)	3,2	4,8	4,5	3,5	-4,3	8,2	0,1	**5,0**	-0,8	**0,8**	-1,6	**2,4**	-0,1	**2,3**	…
Private consumption	4,4	1,9	3,5	5,3	-6,9	9,5	-2,1	**8,3**	-0,4	**0,5**	-0,4	**1,7**	-0,2	**1,6**	…
Government consumption	2,4	0,4	2,9	1,8	4,1	5,8	1,9	**0,7**	0,5	**1,2**	-0,7	**2,6**	0,5	**2,1**	…
Gross fixed capital formation	-3,6	10,2	10,2	5,1	-7,9	13,7	1,4	**10,0**	1,6	**1,3**	-2,6	**0,0**	-0,4	**3,8**	…
Exports of goods and services (real)	6,2	11,1	6,2	4,5	-8,6	14,5	1,3	**8,2**	3,9	**3,2**	-2,0	**5,0**	-0,4	**4,6**	…
Imports of goods and services (real)	6,3	10,7	7,1	4,7	-9,6	17,6	0,2	**11,0**	3,9	**3,4**	-1,2	**4,1**	-0,5	**4,5**	…
Contributions to real GDP growth	*in percentage points*														
Domestic demand (excluding inventories)	2,2	2,9	4,2	4,1	-4,5	8,6	-0,6	**6,5**	0,1	**0,8**	-0,8	**1,4**	-0,1	**2,0**	…
Net exports	0,4	1,2	-0,2	0,2	0,1	-1,0	0,9	**-1,7**	0,2	**0,0**	-0,8	**1,0**	0,0	**0,4**	…
Changes in inventories	0,6	0,7	0,4	-0,8	0,1	0,5	-0,3	**0,2**	-1,1	**0,0**	0,0	**0,0**	0,0	**0,0**	…
Labour market	*y-o-y growth rates in % (unless stated otherwise)*														
Survey unemployment rate (in %)	8,0	6,6	5,1	4,5	5,0	4,7	0,0	**4,3**	0,1	**4,3**	0,4	**4,1**	0,4	**3,9**	…
Total employment	1,8	2,9	3,2	2,5	-0,7	1,3	-0,1	**2,4**	-0,4	**0,4**	-0,7	**0,8**	0,1	**0,7**	…
Compensation per employee	3,1	3,0	3,9	5,0	3,4	7,9	2,5	**4,3**	0,2	**6,4**	1,4	**4,9**	0,4	**4,0**	…
...Productivity	1,3	1,9	1,2	1,0	-3,7	6,8	0,2	**2,5**	-0,4	**0,4**	-1,0	**1,6**	-0,2	**1,7**	…
…Unit labour costs (ULC)	1,8	1,2	2,7	3,9	7,3	1,1	2,2	**1,7**	0,5	**6,0**	2,4	**3,2**	0,6	**2,3**	…
Balance of payments	*y-o-y growth rates in % (unless stated otherwise)*														
Current account: in bn EUR	1,9	2,7	2,7	2,9	3,6	2,0	0,2	**0,2**	0,2	**0,5**	0,2	**1,0**	0,3	**1,2**	…
in % GDP	4,8	6,2	6,0	5,9	7,6	3,8	0,5	**0,3**	0,4	**0,7**	0,2	**1,5**	0,5	**1,6**	…
Terms of trade*	0,8	-0,6	-0,1	0,5	0,7	-2,1	0,3	**-2,3**	-0,4	**0,6**	0,5	**-0,1**	0,0	**0,0**	…

Note: * Based on national accounts deflators. Δ: difference between the current projections and the projections from the June 2022 issue of Macroeconomic Projections for Slovenia.
Sources: Banka Slovenije projections, Eurostat, SORS

1 Current Economic Developments

The weaker economy in the second half of this year and the downgrading of the GDP growth projections in trading partners have worsened the outlook for Slovenia's export sector. The domestic economy is also slowing, with high inflation reducing purchasing power, while the increased uncertainty and elevated production costs are already curbing investment. By contrast, exports remained robust in the third quarter of 2022. Amidst high level of GDP, the labour market is reaching new milestones in employment and in falling unemployment, which is mitigating the adverse impact on domestic consumption from inflation. Despite the slowdown in growth in import prices, and the government measures to mitigate the energy crisis, inflation is still exceeding 10%.

1.1 International situation and external assumptions

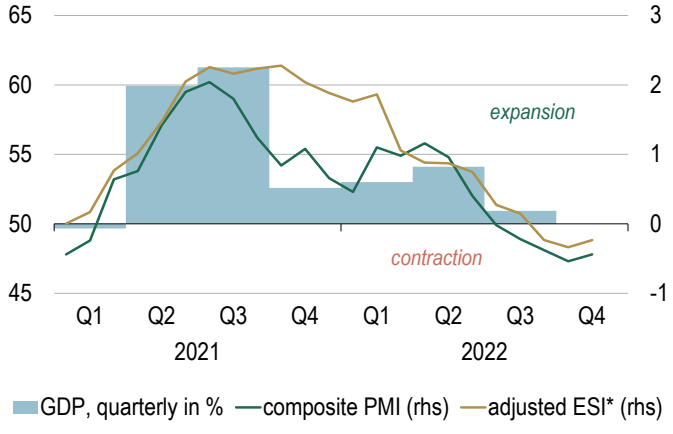
Following the favourable economic developments in the first half of 2022, GDP growth in the euro area slowed in the third quarter, and activity is expected to decline in the final quarter.

Year-on-year GDP growth in the euro area remained relatively high in the third quarter at 2.1%, but the quarterly rate slowed to 0.2% (from 0.8% in the second quarter) under the influence of high inflation and the uncertainty in the external environment (see Figure 1.1.1). The euro area labour market remains robust, with unemployment at a record low. For now, the only indicators to show a slight deterioration have been employment expectations at firms.

According to the PMI, demand for goods and services is continuing to cool (see Figure 1.1.1), while performance in numerous segments of manufacturing has been additionally hit by the energy crisis. Inflation also remains high: the rate stood at 10.0% in November. High inflation is expanding across the consumer basket. This is confirmed by the rate of core inflation excluding energy and food, which again hit 5.0% in November.

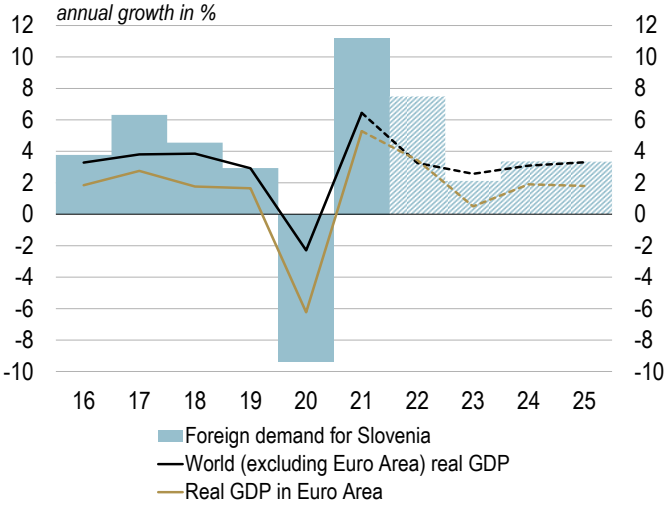
Figure 1.1.1: **Current economic situation and macroeconomic outlook in the international environment**

High-frequency indicators of economic activity and GDP growth in the euro area



Note: * ESI is standardised and adjusted in a way having the same mean and standard deviation as PMI indicator.
Source: Bloomberg, Eurostat, Banka Slovenije calculations.
Latest data: November 2022.

Projections of World (excluding Euro Area) real GDP growth, real GDP growth in Euro Area and foreign demand for Slovenia



Source: ECB.

The aforementioned challenges are worsening the short-term outlook, which is reflected in the projected contraction in the euro area economy in the final quarter of 2022 and in early 2023. ECB's baseline mid-term projection for economic growth in the euro area stands at 3.4% in 2022, 0.5% in 2023, 1.9% in 2024 and 1.8% in 2025 (see Figure 1.1.1). It includes the assumption of the gradual easing of geopolitical tensions.

The baseline projection is accompanied by an alternative scenario of economic developments in the euro area based on the assumption of further escalation of the conflict in Ukraine and additional EU sanctions against Russia, including a complete ban on all energy imports from Russia.[1] In the event of the realisation of this scenario, economic growth would be 2.6 percentage points lower cumulatively between 2023 and 2025, at -0.6%, 0.2% and 2.0%.

Amid weaker demand and high inflation, the global economy is cooling. The expectation is that global GDP growth will be relatively weak in 2023.

Global economic growth will remain weak in 2023, but is expected to gradually strengthen over the remainder of the projection horizon. Global GDP growth in 2023 will be held back in particular by the prolonged war in Ukraine, which is causing disruptions to international trade, and driving the upward pressure on inflation, particularly in energy and food, and is consequently reducing real purchasing power. In addition, the financing conditions are tightening in the situation of high uncertainty and the withdrawal of accommodative monetary policy by central banks. The international situation is expected to gradually stabilise over the remainder of the projection horizon, which is reflected in global economic growth (outside the euro area), which will surpass 3% again in 2024 (see Figure 1.1.1), although it will remain below its long-term average of 3.6%.

After solid economic performance in 2022, the assumptions for the international environment point to weaker foreign demand and an easing of imported inflationary pressures.

Given the solid economic performance in trading partners over the first three quarters of the year, growth in foreign demand in 2022 will be stronger than expected in the June projections, which is also confirmed by the persistent strength of exports. The conditions for the export sector will deteriorate significantly in 2023, as the outlook for global economic growth worsens amid ongoing geopolitical tensions and huge uncertainty, and the assumption for growth in foreign demand has been accordingly reduced. The situation is expected to stabilise more significantly in 2024 (see Table 1.1.1).

The assumptions for prices of oil and other primary commodities show inflationary pressures easing from the peak reached in 2022. Prices of oil and other primary commodities will fall more sharply in 2023 than expected in the June projections. The changes in these prices over the remainder of the projection horizon will be significantly smaller. After falling significantly in 2022, the euro will hold approximately at parity with the US dollar (see Table 1.1.1).

[1] The detailed assumptions are presented in the Eurosystem staff macroeconomic projections for the euro area, December 2022.

Table 1.1.1: **Assumptions for international environment**

	2017	2018	2019	2020	2021	Assumptions			
						2022	2023	2024	2025
World (excluding euro area) real GDP growth (in %)	3,8	3,9	2,9	-2,3	6,4	3,3	2,6	3,1	3,3
Real GDP growth in euro area (in %) – baseline projection	2,8	1,8	1,6	-6,2	5,3	3,4	0,5	1,9	1,8
Real GDP growth in euro area (in %) – alternative scenario						3,4	-0,6	0,2	2,0
Foreign demand for Slovenia (growth in %)	6,3	4,6	2,9	-9,4	11,2	7,5	2,1	3,4	3,3
Oil price (in USD/barrel)	54,6	71,0	64,9	41,5	71,1	104,6	86,4	79,7	76,0
Oil price (in EUR/barrel)	48,4	60,1	57,9	36,4	60,1	99,5	83,9	77,4	73,8
Oil price (in USD/barrel, growth in %)	24,0	30,1	-8,7	-36,0	71,3	47,1	-17,4	-7,7	-4,7
Exchange rate (EUR/USD)	1,1	1,2	1,1	1,1	1,2	1,1	1,0	1,0	1,0
Non-energy commodity prices (growth in %)	9,4	5,1	-6,4	3,4	42,1	6,4	-10,8	0,7	1,4

Sources: ECB, Banka Slovenije calculations

1.2 Domestic economic environment

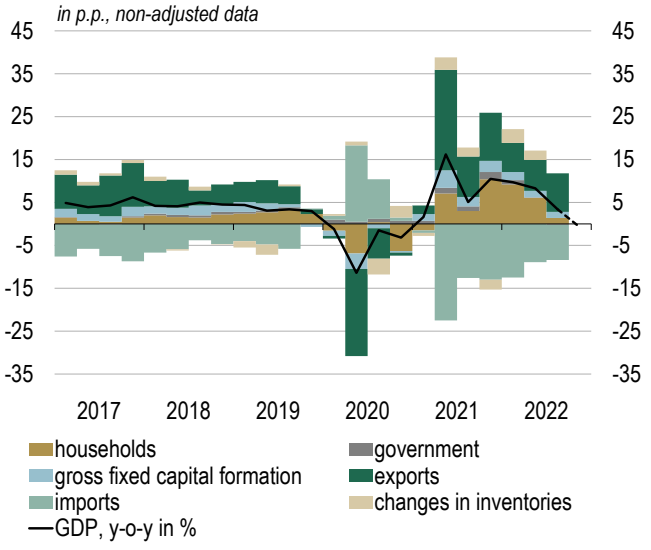
The domestic economy slowed in 2022 under the influence of rising uncertainty, soaring inflation and strong base effect.

Year-on-year GDP growth slowed from 9.0% in the first half of the year to a still-solid 3.4% in the third quarter. In the wake of the high levels seen in 2021, year-on-year growth in private consumption and investment has declined, with household consumption being held back by high inflation, and investment in machinery and equipment by uncertainty, the weaker outlook for demand and increased production costs. After the cancelation of the main support measures during the pandemic, final government consumption in the third quarter was down in year-on-year terms (see Figure 1.2.1).

On the output side, in line with household consumption the slowdown in the third quarter was most evident in private-sector services, where retail trade volume turnover excluding motor fuels was notable among the major sectors for its lower growth. The

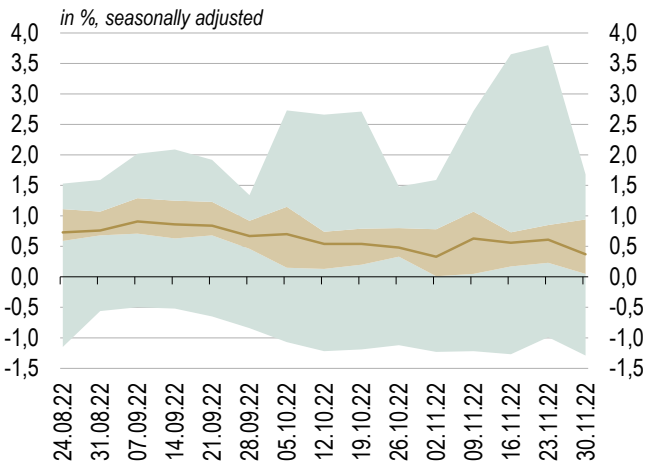
Figure 1.2.1: **Breakdown of domestic economic growth and model estimates for final quarter**

Structure of GDP growth, expenditure side



Source: SORS; data for Q4 2022 is Banka Slovenije's estimate.

Model estimates of quarterly GDP growth – Q4 2022



Note: Graph shows model estimates of quarterly GDP growth. The darker interval represents values between the 25th and the 75th percentiles of all estimates. Average model estimate of quarterly GDP growth is represented by the line. Date of estimate: 30 November 2022.
Source: Banka Slovenije calculations.

slowdown in growth in value-added in manufacturing was significantly smaller, as growth in merchandise exports remained strong despite the international tensions. There is not yet any sign of cooling in construction, where year-on-year growth in value-added in the third quarter picked up pace amid strong government investment.

The economic sentiment improved in November with a rise in confidence indicators in all sectors and among consumers, but remained down on the first half of the year and in year-on-year terms. The values of card payments and invoices registered with tax authorities, adjusted for HICP, suggest that the level of consumption has remained high towards the end of the year. The nowcasts also suggest positive quarterly GDP growth in the final quarter of 2022. Here it should be noted that only a small dataset is currently available for the final quarter (see Figure 1.2.1).

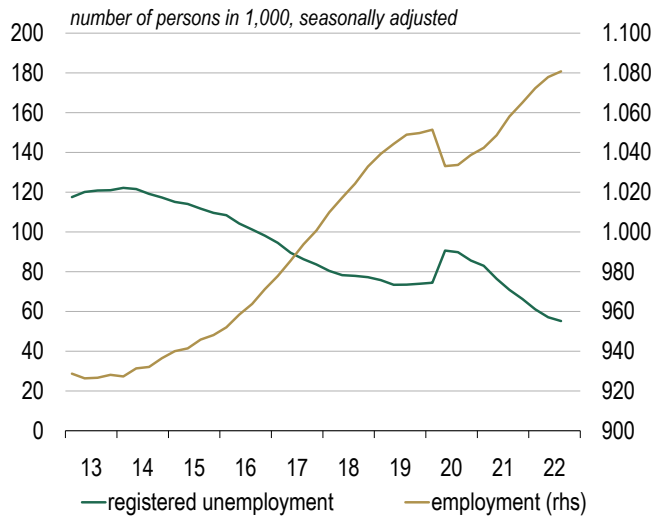
The current situation on the labour market reflects the high level of economic activity, structural imbalances are strengthening, as is wage growth, which nevertheless continues to be outpaced by productivity growth and inflation.

Employment reached a new high (1,082 thousand) in the third quarter (see Figure 1.2.2), but its year-on-year rate of growth has been gradually slowing since the beginning of the year. Employment expectations also remained above their long-term average in November, albeit down on the beginning of the year. The registered unemployment rate stood at 5.3% in September, the lowest figure to date, while the surveyed unemployment rate also reached a record low in the third quarter, at 4.0%. There are therefore large imbalances between supply and demand on the labour market, which are reflected in the record shortage of workers, the high vacancy rate, and the strong prevalence of foreign nationals in hiring.

Nominal year-on-year growth in compensation per employee is continuing to strengthen, which is attributable to expiry of the year-on-year effects of the abolition of the majority of pandemic-related bonuses in the public sector in July 2021, and to wage

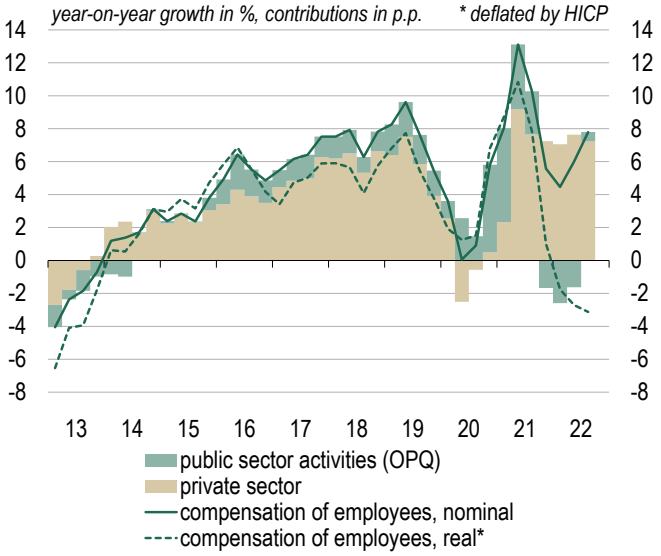
Figure 1.2.2: **Selected labour market indicators**

Employment and unemployed



Source: SORS - national accounts, ESS, Banka Slovenije calculations and seasonal adjustment (unemployed).

Compensation of employees



Source: SORS – national accounts, Eurostat, Banka Slovenije calculations.

rises in the private sector. The aggregate rate stood at 5.5% in the third quarter, as the gap between the rates in the private sector (7.0%) and the public sector (1.0%) narrowed. Both rates remain lower than productivity growth and inflation, as does growth in compensation of employees (see Figure 1.2.2).

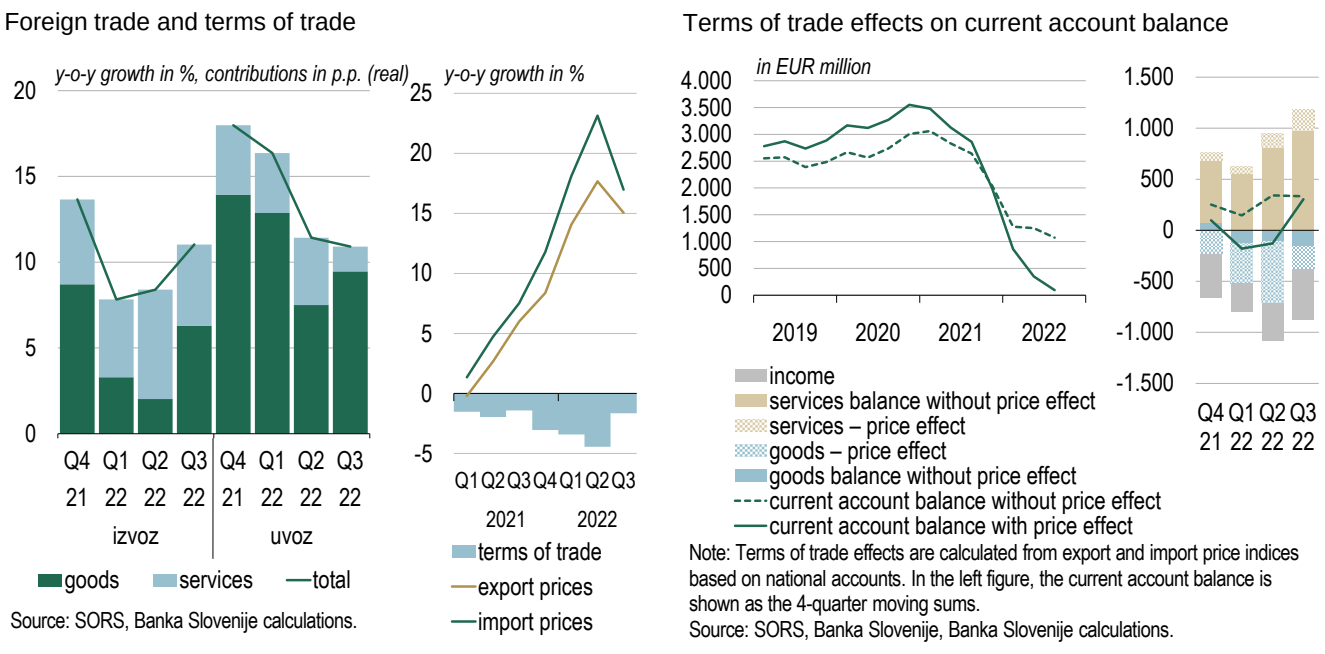
The cooling of domestic demand, strong exports, and the slowdown in growth in import prices curbed the deterioration in the current account.

The 12-month current account surplus fell below EUR 100 million in September, down almost EUR 2.8 billion in year-on-year terms, but the balance of payments developments in the third quarter point towards its stabilization. This is attributable to the waning of the year-on-year deterioration in the terms of trade amid slower growth in import prices, the cooling of real imports, and favourable export developments, which resulted in the current account returning to surplus in the third quarter after slipping into deficit over the first half of the year (see Figure 1.2.3). The resumption of economic growth in 2021 saw the 12-month balance hit by a wider deficit in factor income, driven largely by higher dividend payments to foreign holders of direct investment, while it was supported by strong services exports, most notably of travel services as the situation in the international tourism normalises. Travel exports have now surpassed their pre-pandemic level.

Inflation is being kept high by the non-energy segment of the consumer basket, food prices in particular, while energy price inflation has slowed in the wake of government measures and falling oil prices.

Year-on-year inflation as measured by the HICP remained very high in November, at 10.8% (see Figure 1.2.4). As the contribution of energy prices diminishes, there are

Figure 1.2.3: **Foreign trade and current account balance**

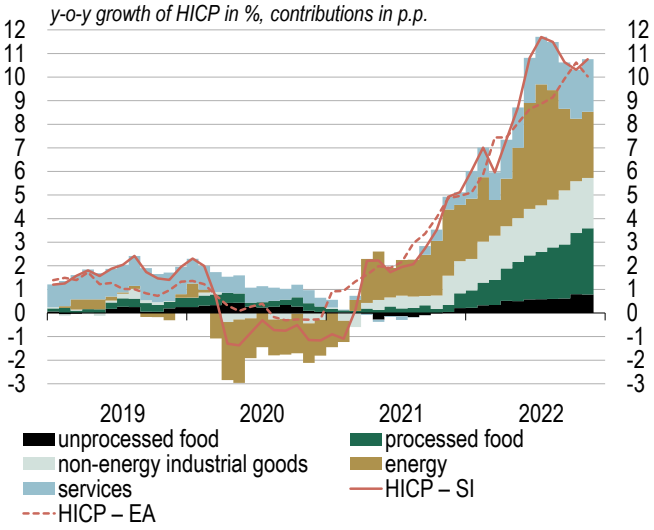


Source: SORS, Banka Slovenije calculations.

Note: Terms of trade effects are calculated from export and import price indices based on national accounts. In the left figure, the current account balance is shown as the 4-quarter moving sums.
Source: SORS, Banka Slovenije, Banka Slovenije calculations.

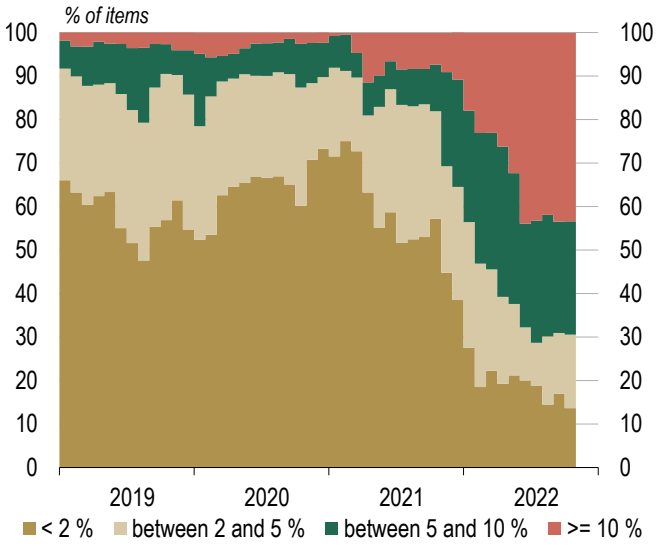
Figure 1.2.4: **Structure and breadth of high inflation**

Contributions to headline inflation



Source: ECB, Eurostat, Banka Slovenije calculations.
Latest data: November 2022

Broad-based inflation



Source: SORS, Eurostat, Banka Slovenije calculations.
Latest data: October 2022.

other components of the index that are keeping inflation high, food prices in particular. These have been rising since the end of 2021, and were up fully 16.0% in year-on-year terms in November. Food production costs are continuing to rise, and are gradually being passed along the processing chain into retail prices. Food prices are also being driven up by the impact of this summer's drought. Energy price inflation has currently stalled at slightly over 20% amid government measures that have reduced the contributions of certain subcategories[2], although prices of fuels rose in November in comparison to October.

Higher energy and commodity prices are increasingly passing through into other prices in the consumer basket, the high inflation thus becoming increasingly broad-based. Year-on-year inflation surpasses 10% in respect of almost half of the goods included in the HICP (see Figure 1.2.4). Core inflation excluding energy and food stood at 6.8% in November. As the supply chains bottlenecks are moderating, partly because of weakening demand, prices of non-energy industrial goods showed signs of easing in November for the second consecutive month, but were nevertheless still up 6.9% in year-on-year terms. Year-on-year services price inflation stood at 6.8% in the wake of recent monthly rise. This is attributable to the persistently high level of domestic consumption alongside the rise in input costs for firms.

The general government position over the first ten months of the year showed a significant year-on-year improvement, thanks to higher tax revenues and the withdrawal of measures to alleviate the impact of the pandemic.

The consolidated general government deficit over the first ten months of this year amounted to EUR 0.4 billion, EUR 1.6 million narrower in year-on-year terms. The narrowing was mainly attributable to a decline in the measures to alleviate the impact of

[2] The interpretation of year-on-year growth in energy prices needs to take into account that the prices were already rising in late 2021. Energy price inflation averaged 25.6% between November 2020 and November 2022, compared with 10.2% between November 2019 and November 2022. Relative to February 2020, just before the outbreak of the pandemic, energy prices in November 2022 were up 32.5%.

the pandemic. The rise of 10.6% in revenues was attributable to the buoyant labour market and the high level of household consumption. Growth in revenues is however slowing in line with the slowdown in the economy. The low but positive growth in general government expenditure over the first ten months of the year was attributable to strengthened investment, higher expenditure on goods and services, and a rise in certain transfers to individuals (pensions, sick pay). The deficit is expected to have widened slightly by the end of the year because of stronger government investment, while the measures to mitigate the energy crisis will also have an impact on the balance.

2 Projections

GDP growth will reach 5% in 2022, but will slow significantly in 2023 as a result of the worsening macroeconomic outlook in the international environment, the persistence of high inflation, and increased uncertainty. Employment growth will slow in line with the economic slowdown, and will be further held back by persistent structural imbalances and labour shortages. The weaker economic growth in the following years will be accompanied by consumer price inflation remaining above the monetary policy objective. As the contribution by energy prices wanes, headline inflation over the projection horizon will mainly be driven by food prices and services prices.

2.1 Economic growth

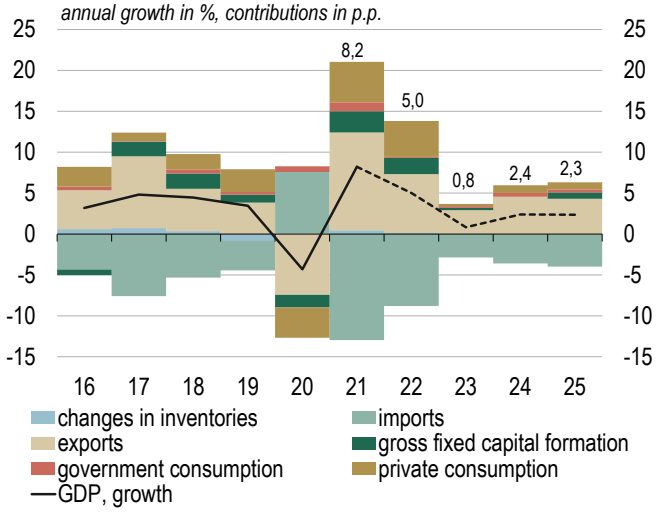
The economic growth projections are driven by a decelerating activity in the domestic environment and the worsening medium-term macroeconomic outlook in the external environment.

GDP growth is projected to reach 5% in 2022. The relatively high growth in this year is attributable to the carry-over of growth from 2021, resembling the post-pandemic economic recovery and the pronounced spike in growth in the second half of last year. Year-on-year economic growth remained high in the first half of 2022, but slowed significantly in the third quarter amid the increased uncertainty in the international environment and soaring inflation.

The low confidence in individual business sectors and among consumers point to a low growth in the final quarter of 2022 as well, and is expected to remain contained in the first half of 2023 amid a further deterioration in the macroeconomic outlook in the international environment and the less-favourable financing conditions. The economic

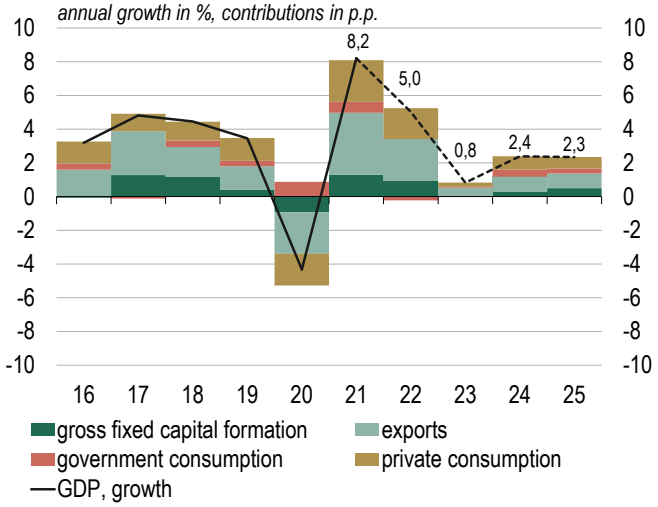
Figure 2.1.1: **Decomposition of GDP growth**

Projection of expenditure components' contributions to real GDP growth



Note: Due to rounding, sums of components may differ from aggregate values.
Source: SORS, Banka Slovenije projections.

Projection of expenditure components' contributions to real GDP growth (alternative method)



Note: Due to rounding, sums of components may differ from agregate values.
Source: SORS, Banka Slovenije projections.

growth is projected to gradually recover from the second half of 2023 as the international situation slowly stabilises and inflation eases. In line with the short-term and medium-term outlooks described, growth will slow to 0.8% in 2023, before a pick up in growth over the remainder of the projection horizon at 2.4% in 2024 and 2.3% in 2025, as the Slovenian economy converges to its potential growth (see Figure 2.1.1).

The slowdown in GDP growth will be driven by a low growth in private consumption and a fall in private investment.

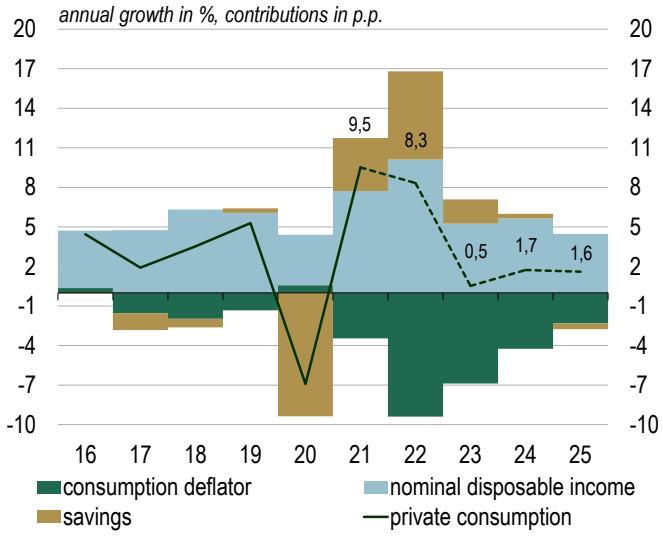
After record growth in 2021, private consumption was maintained at high levels in 2022 on the back of high employment, large stock of built-up savings, and the post-pandemic reopening effects (see Figure 2.1.2). The high level of consumption has been accompanied throughout the year by a decline in consumer confidence, with the index in the third quarter reaching its lowest level since April 2020 at the outbreak of the pandemic. Amid the persistent inflation pressures on real household income and the waning impact of the reopening of the economy, growth in consumption is expected to slow more evidently in late 2022 and early 2023.

A slowdown in the current dynamics is already being indicated by the high-frequency indicators of card payments and data on invoices from the Financial Administration of the Republic of Slovenia. The existing level of consumption will nevertheless be maintained in 2023 by the high employment, government measures to mitigate high energy prices, and a further decline in the saving rate. The projection for private consumption thus shows high growth of 8.3% in 2022, primarily as a result of a carry-over effect from 2021, a slowdown to 0.5% in 2023, and a recovery to more than 1.5% in 2024 and 2025 (see Figure 2.1.2).

Similarly to private consumption, private investment is expected to see a more evident slowdown in the second half of 2022 and a small decline in the following year (see

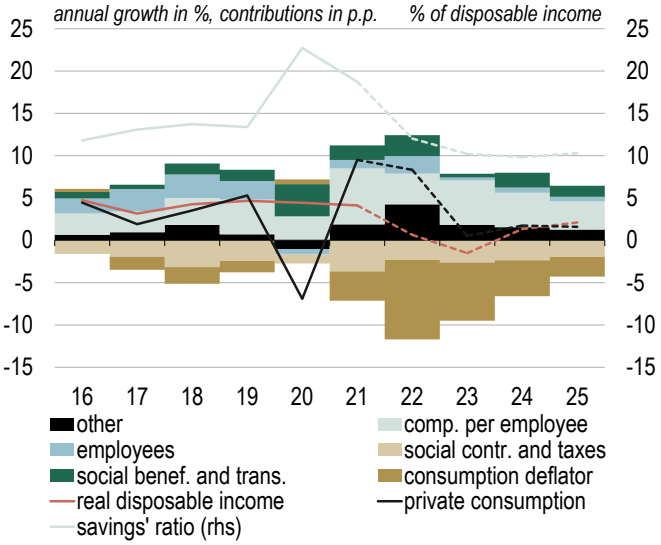
Figure 2.1.2: **Breakdown of growth in private consumption and disposable income**

Projection of components' contribution to private consumption growth



Source: SORS, Banka Slovenije calculations and projections.

Projection of growth in private consumption, disposable income and households' savings ratio



Source: SORS, Banka Slovenije calculations and projections.

Figure 2.1.3). This will be driven by a decline in business investment, given the downgrading of the macroeconomic outlook in the international environment, less-favourable financing conditions, high prices of investment goods, and a decline in real revenues and profits.

Growth in housing investment will remain positive but significantly weaker in 2023, which alongside the less-favourable financing conditions will also be attributable to the lower level of savings and the increased uncertainty with regard to employment prospects.

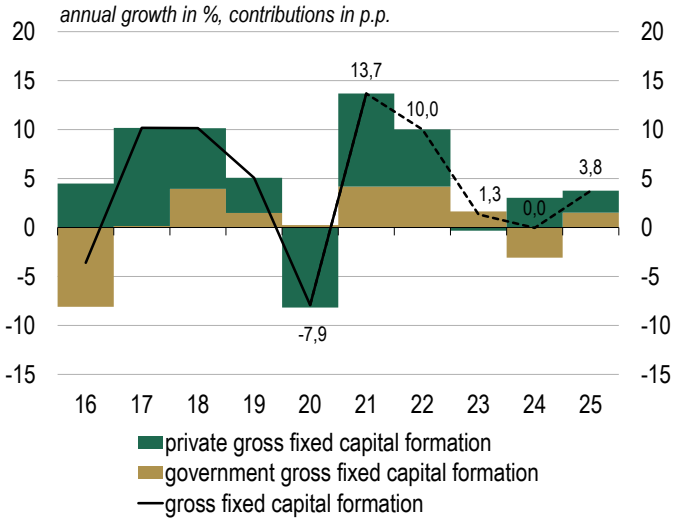
Amid the gradual stabilisation of the international situation, falling inflation and the easing of pressures in supply chains, growth in investment is expected to recover in 2024 and 2025, but will remain below its long-term average on account of the less-favourable financing conditions (see Figure 2.1.3).

Amid the low growth in private consumption and the decline in private investment, government investment will in a meaningful support positive economic growth in 2023, while government consumption will also play an increasing role in the following years. Government investment will remain high in 2022 and 2023, with funding from domestic and European sources (see Figure 2.1.3). It will account for almost half of the aggregate growth in gross investment in 2022, while in 2023 the positive growth in aggregate investment will be driven entirely by government investment. Government investment is expected to fall in 2024 following the end of the old European financial perspective and funding from the React EU scheme. This will be followed by a recovery in 2025, driven by strengthened funding from the NGEU and the gradual rise in funding from new financial perspective.[3]

After slowing in 2022, growth in government consumption will rise again. Expenditure to alleviate the impact of the pandemic meant that it was high in 2020 and 2021, but is now falling. Growth in government consumption will further strengthen in 2024 and

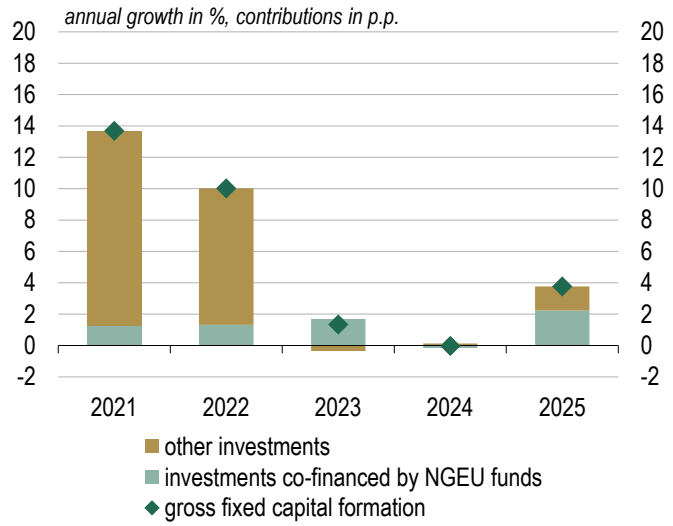
Figure 2.1.3: **Breakdown of growth in gross fixed capital formation, and estimated impact of the NGEU instrument**

Projection of components' contributions to gross fixed capital formation growth



Note: Due to rounding, sums of components may differ from aggregate values.
Source: SORS, Banka Slovenije projections.

Contribution of investments co-financed by NGEU funds and other investments to total projected investment growth



Note: Due to rounding, sums of components may differ from aggregate values.
Source: SORS, MF, SVRK, Banka Slovenije estimations and projections.

[3] The initial funding from the Operational Programme for the Implementation of European Cohesion Policy 2021-2027 will be available in early 2023. A total of EUR 3.2 billion is available to Slovenia. The funding may be drawn until 2029 inclusive, and usually increases gradually.

2025 as the projected implementation of the law on long-term care begins, while the average annual employment growth of approximately 1% over the entire projection horizon will also make a contribution. Nominal growth in government consumption will peak in 2023. This will be driven by growth of around 9% in compensation per employee, which reflects the wage increases agreed between the government and the unions, and will follow a nominal decline in 2022. The projections for real growth in government consumption is 0.7% for 2022, 1.2% in 2023, 2.6% in 2024 and 2.1% in 2025.

Box 2.1.1: **Projections of general government budget balance and debt**

The general government deficit is narrowing in 2022, but will widen again in 2023 as a result of measures to mitigate high energy prices. Debt-to-GDP ratio will gradually decline, but will not yet reach its pre-pandemic level.

The general government deficit will be less than 3% of GDP over the projection horizon, with the exception of 2023. The deficit is being narrowed in 2022 by the favourable cyclical conditions and the declining effect of discretionary measures to alleviate the impact of the pandemic, which together with the measures to tackle the energy crisis and inflation are not hitting the heights of 2021. The latter will be a driver of the renewed widening of the deficit in 2023, amid the significant slowdown in economic growth. In the wake of their decline in 2024 and 2025, the general government deficit will narrow again. The ratio of debt to GDP will further decline as nominal GDP increases, while the favourable effect of interest on debt will gradually come to an end as monetary policy normalises (see Figure 2.1.1.1).

Discretionary measures in response to the pandemic and to high energy prices are having a major impact on developments in the public finances. While the measures to alleviate the impact of the pandemic are decreasing in size, the discretionary measures to mitigate high energy prices are strengthening.[4] They are currently projected to be particularly high in 2023 (see Figure 2.1.1.1).

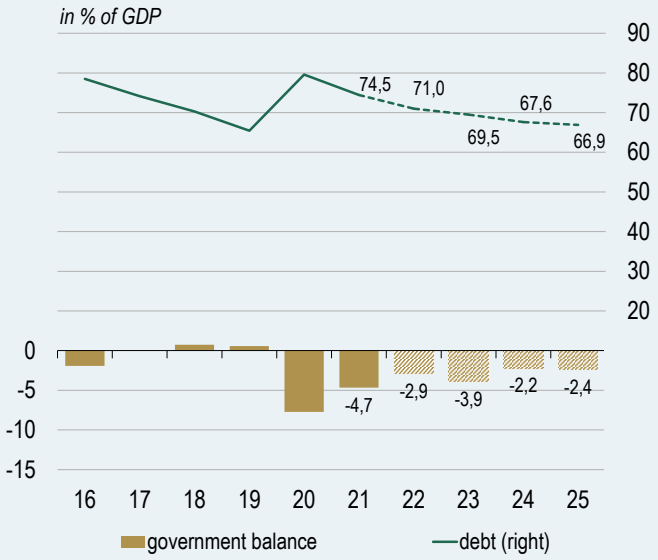
Compared with the June projections, the main deterioration is in the projection for the general government position in 2023, when the measures to mitigate high energy prices are expected to widen the deficit by around 2 GDP percentage points. The factors acting to improve the general government position include the revision to the data for 2021, and amendments to the Personal Income Tax Act, which remove further increases in certain tax allowances previously in place.

The projections for the general government budget balance and debt are exposed to numerous risks, mainly in connection with the size of the measures to mitigate high energy prices, investment, and wage pressures. The general government debt could be reduced by the utilisation of pre-financing.

[4] Given the rising cost of living (energy prices in particular), a number of measures have been put in place to support households (e.g. the solidarity bonus, the early pension increase) and businesses, which are projected to be particularly large in scale in 2023 (e.g. subsidies for gas and other energy prices). The measures on the revenue side include a cut in excise duties on electricity and fuels, and a temporary cut in VAT.

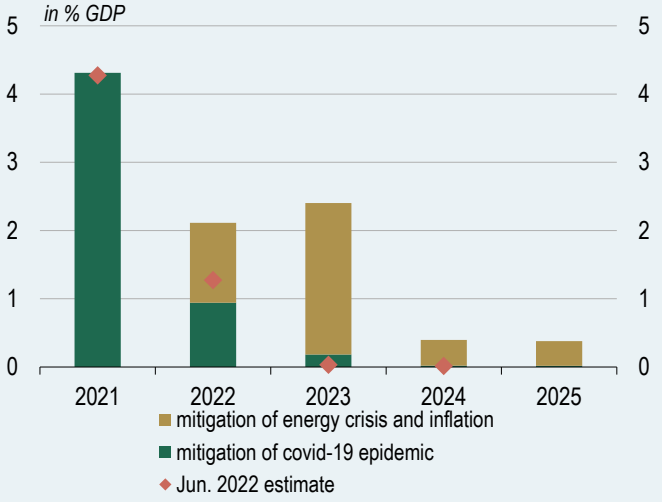
Figure 2.1.1.1: **General government position and debt, and measures to alleviate the impact of the pandemic and to mitigate high energy prices**

General government balance and debt



Source: SORS, Banka Slovenije projections.

The impact of the measures to mitigate the effects of the Covid-19 epidemic and the energy crisis and inflation on the general government balance.



Source: Banka Slovenije estimations, Ministry of Finance, Financial

The average contribution made to GDP growth by net trade will again turn positive over the remainder of the projection horizon.

In line with the worsened macroeconomic outlook in the international environment, international trade in merchandise and services will also slow in late 2022 and early 2023 (see Figure 2.1.4). On the basis of the lower growth in foreign demand and the simultaneous decline in growth in domestic components of demand, import growth is expected to suffer a larger decline than export growth. Amid these dynamics the contribution to GDP growth by net trade will be largely neutral in 2023, but will strengthen over the remainder of the projection horizon as growth in global economic demand recovers, amounting to more than 1 percentage point in 2024. Alongside the positive contribution by net trade, the slowdown in growth in import prices will also bring an improvement in the terms of trade, which together will act to strengthen the current account surplus, which will reach 1.6% of GDP in 2025.

Compared with the June projections, on this occasion Banka Slovenije is projecting lower economic growth in 2022 and 2023.

The GDP growth projection for 2022 is 0.8 percentage points lower than in the June projections (see Figure 2.1.5). The revised growth projections for 2022 is primarily attributable to the downward revisions in the quarterly GDP growth figures for the first and second quarters.[5] The revision additionally takes into account the negative realization of the quarterly GDP growth in the third quarter. The GDP growth projection for 2023 is down 1.6 percentage points on the June projections, the revision having been driven both by the nowcasts and by the revisions in technical assumptions described in Section 1.1.

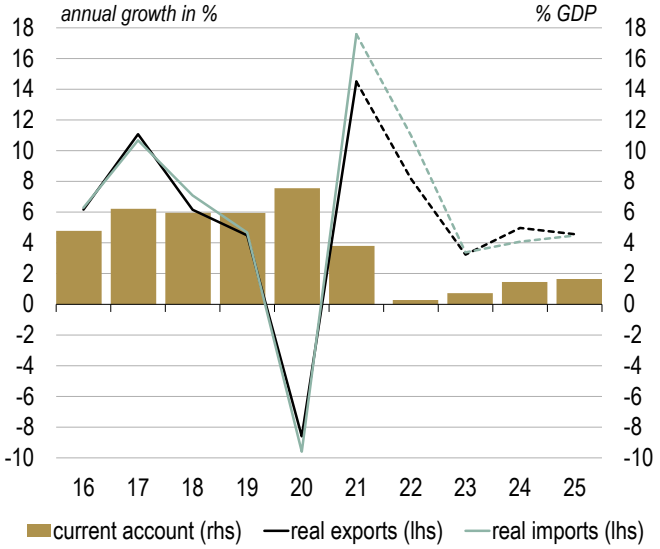
The nowcast for GDP growth is available for the final quarter of 2022 and the first quarter of 2023, and is based on model evaluation of high-frequency indicators of economic growth and an additional judgement that takes account of firms' announcements of partial shutdowns of production and a reduction of energy consumption over the aforementioned period. The revision over the remainder of 2023 comes from the impact of the assumptions, in particular the downgrading of expectations with regard to growth in global demand and faster hikes in central banks' key interest rates.

The baseline projection for economic growth is accompanied by various risks, which are becoming increasingly balanced in terms of their potential impact.

The downside risks primarily relate to a further increase in geopolitical tensions, which could lead to additional increases in uncertainty and rises in import prices, and then to a significant decline in output, primarily on account of shortages in energy and other commodities. Alongside the persistent uncertainty in the international environment and

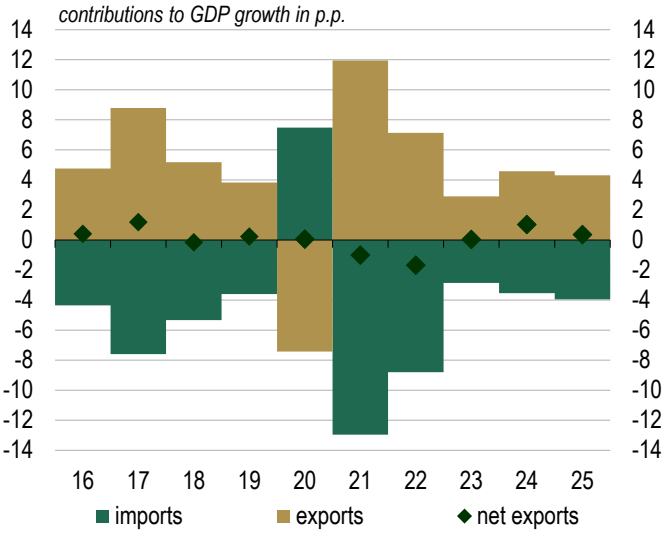
Figure 2.1.4: **Imports, exports and current account balance**

Current account, real exports and imports projections



Source: SORS, Banka Slovenije projections.

Projection of net exports' contributions to GDP growth

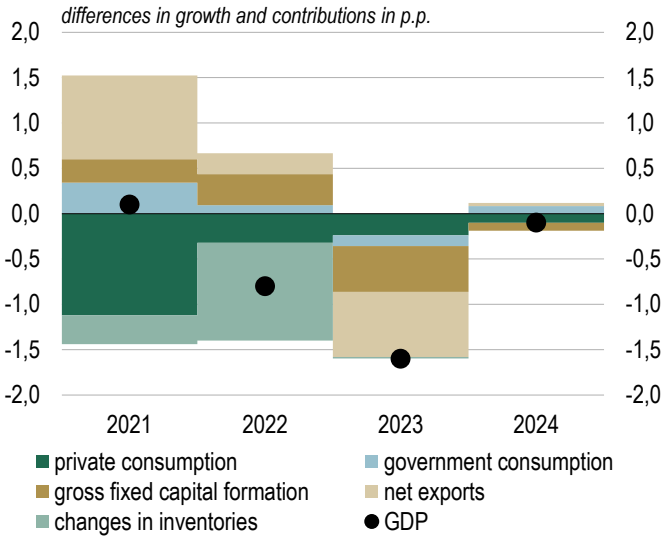


Note: Due to rounding, sums of components may differ from aggregate values.
Source: SORS, Banka Slovenije projections.

[5] The impact on the GDP growth projection from the data revisions is evaluated in Box 2.1.2.

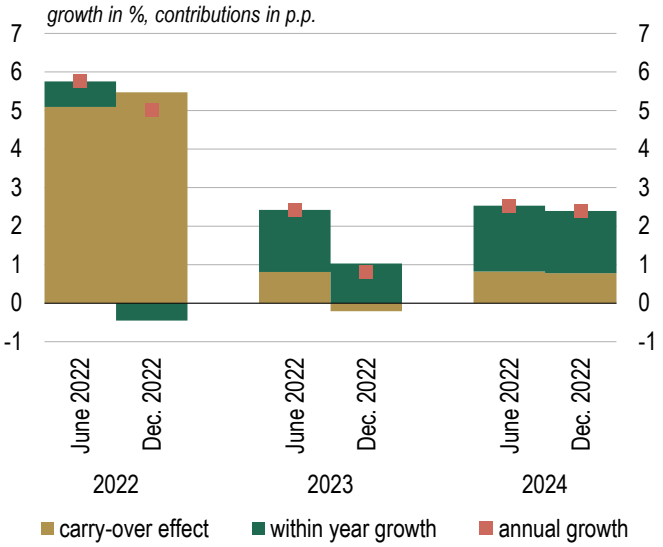
Figure 2.1.5: **Revisions to GDP growth projection**

Revision to GDP growth projections by components



Note: Due to rounding, sums of components may differ from aggregate values.
Source: SORS, Banka Slovenije projections.

Decomposition of annual GDP growth on within year growth and carry-over effect



Source: SORS, Banka Slovenije calculations.

the accompanying deterioration in financing conditions, the baseline projection for GDP growth is also accompanied by negative financial risks, whose realisation could raise debt servicing costs, increase the number of defaults, and hinder access to financing.

In addition to the relatively large downward revisions to the economic growth projections, there are also upside factors that might lead to economic growth above the baseline projection. These include further falls in energy and food prices, and the faster resolution of disruptions to production chains. All of these factors could lead to a faster recovery in private investment via an improvement in the terms of trade, and cheaper and easier access to capital goods.

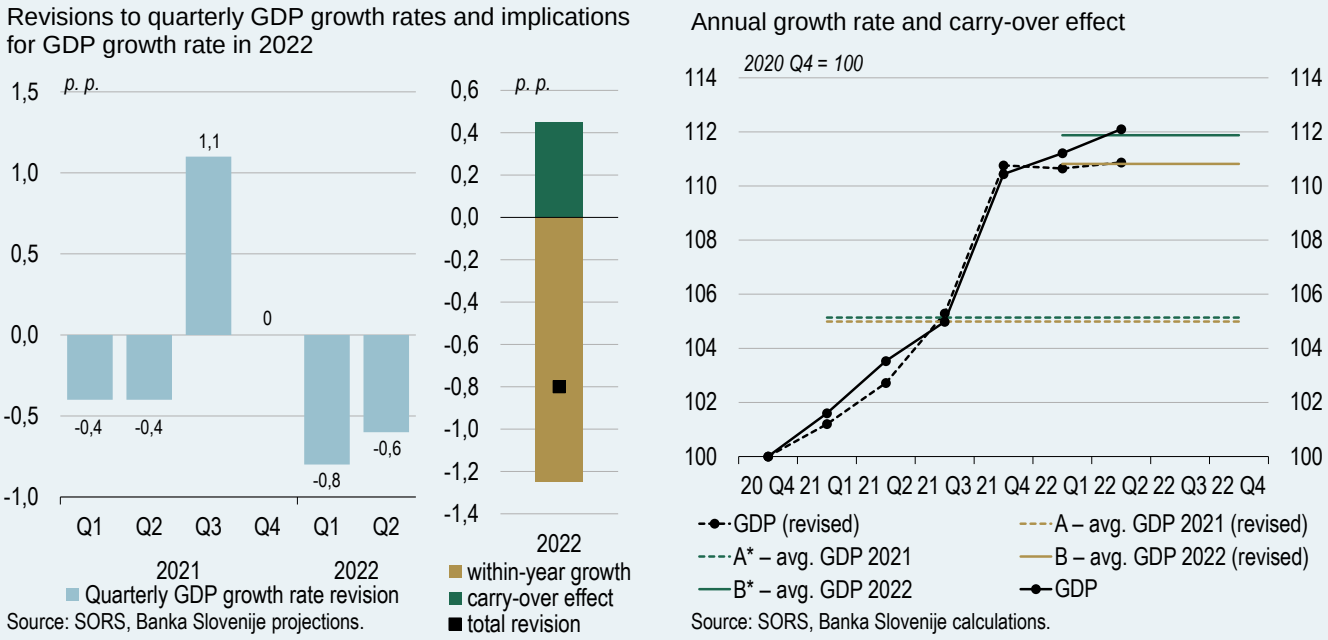
Box 2.1.2: **Impact of data revisions on GDP growth projection**

The GDP growth projection in a particular year can be decomposed into carry-over from the previous year and growth during the current year. This decomposition allows for the in-depth, up-to-date monitoring of the economic cycle, but at the same time it is also based during the current year on past quarterly developments in GDP, which are often subject to revisions whenever new data is released. In addition to regular coordination in the original data, the revisions to past quarterly GDP growth data are also the result of seasonal adjustments, on which each additional data point has an impact.

Figure 2.1.2.1 illustrates the revisions to the seasonally adjusted quarterly GDP growth figures between the first quarter of 2021 and the second quarter of 2022 in the wake of the release of the data for the third quarter of 2022. In the absence of regular coordination in the original data, the revisions are entirely attributable to the impact of new data on the seasonally adjusted series. The revision in quarterly GDP growth rates during the current year has resulted in a downward revision of 0.8 percentage points to GDP growth in 2022 relative to the original data. The revisions to the data for 2021 increased the carry-over effect by 0.5 percentage points, while the revisions to the data for the first half of 2022 reduced growth during the year by 1.3 percentage points.

Calculating the impact of the data revisions on economic growth can be illustrated intuitively by means of the average level of GDP in 2021 and 2022 in the cases of the original and revised series of quarterly GDP growth rates (see Figure 2.1.2.1). In the case of the revised series of quarterly GDP growth rates, the average level of GDP in 2022 is lower than under the original data before the release of the data for the third quarter, while the average level in 2021 is comparable under both datasets. The difference in growth in average GDP between the two cases reflects the overall impact of the data revision on the GDP growth projection for 2022.

Figure 2.1.2.1:**Impact of data revisions on GDP growth projection for 2022**



2.2 Labour market

Moderated economic growth and labour shortages will limit employment growth over the projection horizon.

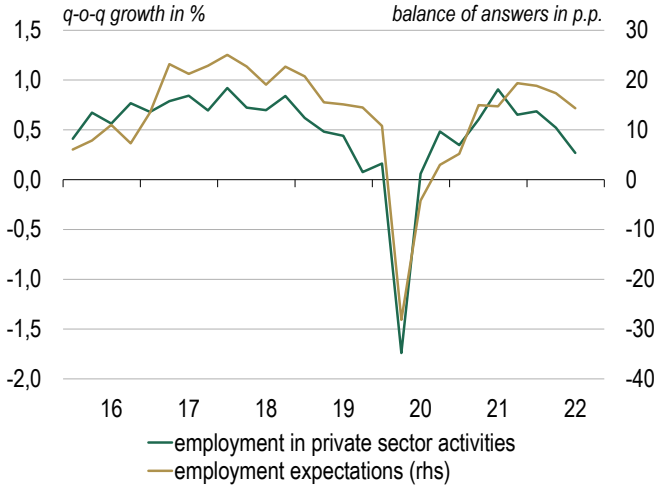
Our assessment is that year-on-year employment growth will slow by the end of the year in line with the developments in economic activity. This is also supported by the survey data for employment expectations, which have declined in recent months, although they remain positive (see Figure 2.2.1). Despite a decline in demand for labour, detailed analysis of the imbalances between supply and demand on the labour market indicates that the labour market remains very tight. On this basis we expect that firms will prioritise staff retention despite deteriorated macroeconomic outlook. Analysis of the tightness of the labour market is the focus of Box 2.1.3 of this publication.

Employment growth is projected to remain above its long-term average at 2.4% in 2022, just over 1 percentage point higher than in 2021 (see Figure 2.2.1). It will slow to 0.4% in 2023 as economic growth declines, and will be solely attributable to the carry-over effect. Employment growth will strengthen slightly towards the end of the projection horizon as the economy recovers, but will remain limited amid structural imbalances on the labour market, at less than 1%.

Employment growth has been revised downwards relative to the June projections, in line with the downward revisions to economic growth and the employment realisation in the third quarter of 2022, which was lower than previously projected and in turn implies smaller carry-over effect in 2023.

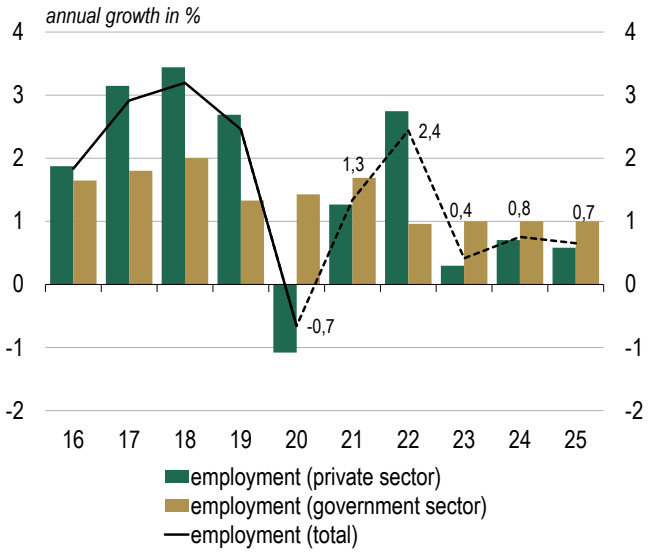
Figure 2.2.1: **Employment projection**

Short-term employment growth prospects in private sector activities



Note: The aggregate indicator of expected employment is calculated using shares in value added. Data is seasonally adjusted.
Source: SORS, Banka Slovenije calculations. Latest data: Q3 2022.

Employment projections



Source: SORS, Banka Slovenije projections.

The unemployment rate will fall below 4% at the end of the projection horizon.

Unemployment will reflect the developments in employment over the projection horizon. The unemployment rate is projected to reach 4.3% in 2022, down almost 0.5 percentage points on the year earlier. The unemployment rate will remain unchanged in 2023, as employment growth will largely be based on carry-over from 2022, before further decreasing in 2024 and 2025 in line with employment growth and stabilizing below 4% at the end of projection horizon (see Figure 2.2.2).

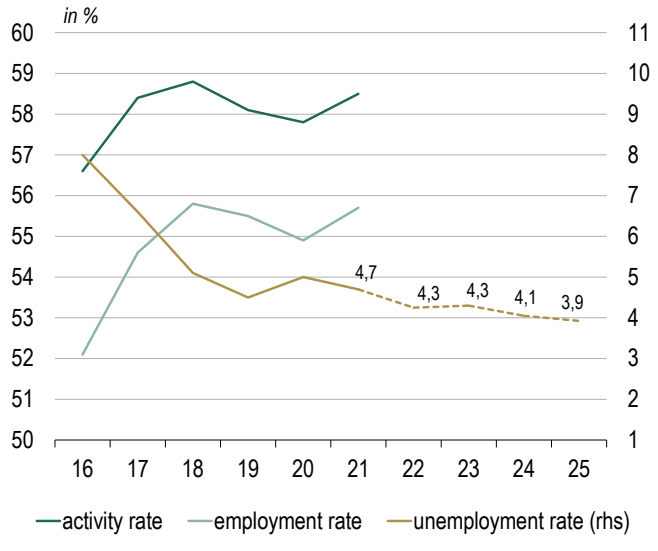
The unemployment rate projection for 2022 has been revised slightly upwards from the June projections, as a result of realisation during the year and the deterioration in the macroeconomic environment. The upward revisions in the following years are attributable to revisions in economic growth and also to the fact that there are increasing numbers of structurally unemployed in the structure of unemployment.

Wage growth will average approximately 5% over the projection horizon.

Year-on-year wage growth is projected to reach 4.3% in 2022 and 6.4% in 2023, before slowing to 4.0% by 2025 (see Figure 2.2.2).[6] As a result of the year-on-year effects of the ending of pandemic-related bonus payments, wage growth in the government sector will be negative in 2022, but will outpace growth in the private sector in 2023. The projection for wage growth in the government sector takes account of the agreement reached in October 2022 to raise wages by 4.5%, while a further rise by one wage grade is envisaged for the majority of civil servants in April 2023 (comparable to a 4% wage rise).

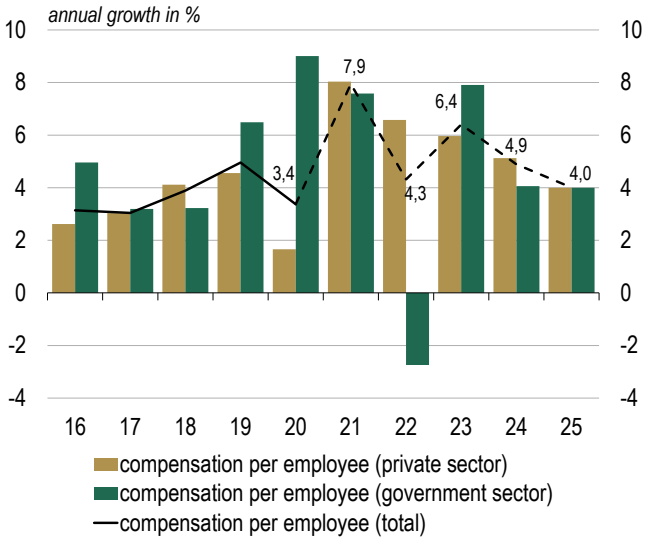
Figure 2.2.2: **Unemployment rate and wage growth projections**

Measures of the activity



Source: SORS (Labour force survey), Banka Slovenije projections.

Nominal growth of compensation per employee



Source: SORS, Banka Slovenije projections.

[6] The wage growth projection relates to average compensation per employee based on the national accounts definition.

Box 2.1.3: **Analysis of tightness in the Slovenian labour market and the potential additional labour force**

The analytical box provides detailed analysis of tightness in the Slovenian labour market and the potential additional labour force.[7] Labour market tightness is defined as a surplus of demand for labour over supply, while the potential additional labour force[8] consists of unemployment, underemployment, and a certain proportion of the inactive population.

The matching efficiency and tightness of the labour market are evident in the shifts and movements along the Beveridge curve (ECB, 2019).[9] This shows a negative relationship between unemployment rate and labour shortages (European Commission, 2022[10]), and between unemployment rate and vacancy rate (IMF, 2022[11] and ECB, 2019). Labour market tightness typically sees movements along the Beveridge curve that result from fluctuations in the business cycle. During a recession for example, firms post fewer vacancies and disclose smaller difficulties in hiring, which is associated with a higher unemployment rate. Labour market tightness thus declines in the case of a recession, which is reflected in a downward movement along the curve. Conversely, a low unemployment rate and high demand for labour drive an upward movement along the curve, and thus high labour market tightness. By contrast, shifts in the Beveridge curve are associated with labour market efficiency, which reflects the efficiency of the process of matching unemployed workers to vacancies. The further the Beveridge curve is from the origin, the lower the labour market efficiency is (ECB, 2019), which indicates that vacancies are harder to fill with available workers on the labour market (OECD, 2022).[12]

Figure 2.1.3.1 illustrates the Beveridge curve for Slovenia from the perspective of labour shortage, whereby the developments are similar when the vacancy rate is used as the vertical axis. The graph makes it evident that demand for labour in Slovenia recovered relatively quickly after the pandemic, similarly to other countries (European Commission, 2022 and OECD, 2022). Because the supply of workers was unable to keep up with rising demand, the pace of decline in the unemployment rate was slower than the pace of the increase in demand for labour. Consequently, there was a pronounced upward movement along the curve, and its gradient became steeper. This led to an increase in labour market tightness, which is currently at record high levels. One of the reasons for the aforementioned developments might be fiscal incentives, which during the pandemic helped to preserve firms, jobs[13] and purchasing power, and after the end of the pandemic made it easier to reboot the economy (OECD, 2022).

Current analysis shows that despite high labour market tightness, there can nevertheless be a high level of potential additional labour force on the labour market (IMF, 2022 and European Commission, 2022). The latter analysis is significant, as on one hand it could mitigate the structural imbalances on the labour market, and allow for further growth in employment despite the current tightness.

[7] Empirical analysis was completed before the release of the data from the Labour Force Survey for the third quarter of 2022. The analysis will be released in expanded form in one of Banka Slovenije's upcoming publications.

[8] The definitions follow those used by the SORS (2019).

[9] ECB (2019). The euro area labour market through the lens of the Beveridge curve. ECB Economic Bulletin, Paper No. 4/2019. Available online at The euro area labour market through the lens of the Beveridge curve

[10] European Commission (2022). Slack vs. tightness in euro area labour markets: growing mismatch after COVID-19? Published in Quarterly Report on the Euro Area (QREA), Vol. 21, No. 2. Available online at Quarterly Report on the Euro Area (QREA), Vol. 21, No. 2 (2022)

[11] IMF (2022). Labor Market Tightness in Advanced Economies. IMF Staff Discussion Notes, Paper No. 2022/001. Available online at IMF Labour Market Tightness

[12] OECD (2022). OECD Employment Outlook 2022. Available online at OECD Employment Outlook 2022

[13] Detailed analysis can be found in Box 6 of the June 2020 issue of the Macroeconomic Projections for Slovenia.

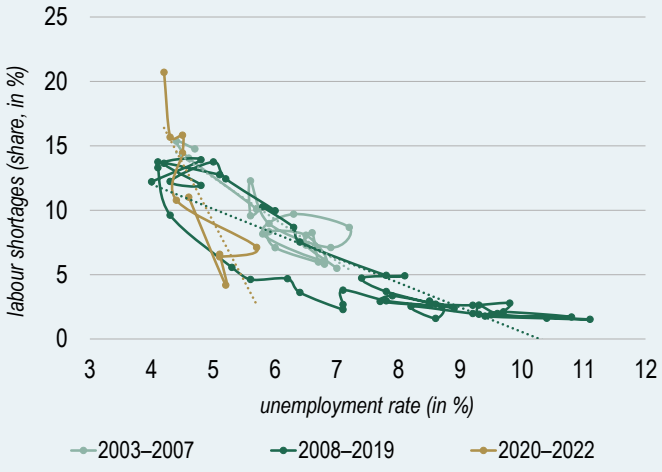
Almost 90% of the workforce in employment were in full-time employment in the second quarter of 2022. From the perspective of the potential additional labour force, an important part consists of those working shorter hours but would like to work more hours and would be willing to take more work immediately. They are designated underemployed persons, who in the wake of the anticipated slowdown in the economy and the changing developments in hiring might become vulnerable from the point of view of being laid off. The potential additional labour force includes two other groups of inactive persons: those who are not seeking work but who want to work, and those who are seeking work but are not immediately available. These two groups accounted for approximately 4% of all inactive persons in the second quarter of 2022.

There were 75,400 persons on the Slovenian labour market classed as potential additional labour force in the second quarter of 2022 (see Figure 2.1.3.1), which is just 4.8% of the population aged 15 to 74. Furthermore, the unemployed accounted for just over half of this share, but the structure of unemployment means that there are increasing portion of permanently unemployable persons among them. In historical terms, the potential additional labour force is currently similar to the lowest levels from the pre-crisis periods of 2008 and 2019, while the share of underemployed is below its long-term average. Based on the above it can be concluded that there is insufficient potential additional labour force on the Slovenian labour market to be able to adequately address the surplus demand for labour.

In light of the great tightness of the domestic labour market, our assessment is that in the event of a pronounced economic slowdown firms will prioritise schemes to preserve jobs, and consequently will lay off fewer workers. Given that demand for low-skilled occupations, which even now are in high demand and are difficult to fill from the available labour force on the domestic labour market, is likely to persist in the future, employment growth will be limited and will largely be dependent on the ability to fill jobs by hiring foreign nationals. The tight labour market could also be one of the risks driving higher wage growth, which is currently still limited by the aforementioned breakdown of hiring.

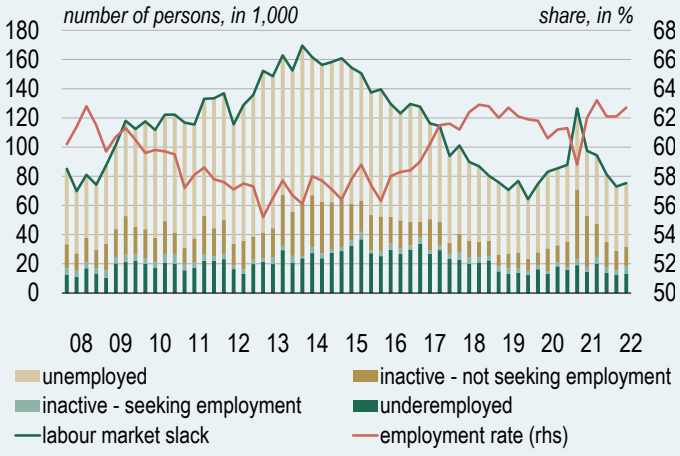
Figure 2.1.3.1: **Tightness in the Slovenian labour market and the potential additional labour force**

Beveridge curve



Notes: Labour shortages show the sum of the shares of firms in services, construction and manufacturing reporting shortages of workers. The sum is weighted by the share in value added. The dotted lines show the linear trend lines of the curve over each period.
Source: Eurostat, SORS, Banka Slovenije calculations.

Labour market slack and its components



Notes: The series cover persons in the age range 15-74 years. Inactive persons seeking employment would not like to take up work immediately, inactive persons not seeking employment would like to have work. Underemployed are those who are in employment, work less than full-time but would like to work more hours.
Source: Eurostat, Banka Slovenije calculations.

Wage growth in the private sector over the projection horizon will depend on multiple factors. It will be pushed upwards by high inflation, as this has a direct impact on the minimum wage, which given the inflation projection for 2023 will undergo a significant rise.[14] The aforementioned tight labour market will also act to push wage growth upwards, and the tightness will further increase towards the end of projection horizon as unemployment falls.

The potential risks that might act to reduce wage growth are the uncertain macroeconomic environment, the economic slowdown, and the breakdown of hiring. With the exception of the curtailed hiring and firing during the pandemic, since mid-2018 hiring has been mainly driven by foreign nationals and low-skilled occupations.

Compared with the June projections, the wage growth projections for all years have been revised upwards. This is attributable to the agreement reached between the government and public sector trade unions, higher inflation, realisation in the previous quarters, and the intensification of structural imbalances on the labour market.

2.3 Inflation

Inflation will average 9.3% in 2022 as it is becoming increasingly broad-based.

Consumer price inflation has been strengthening ever since the end of 2021. The rise was initially attributable to disruptions to supply chains and increased domestic demand in the wake of the lifting of the containment measures. However, following the outbreak of the war in Ukraine and the deterioration in the international environment, supply factors strengthened. Alongside high energy and commodity prices and the uncertainty in their supply, additional cost pressures are coming from difficulties in food production chains and, to a limited extent, from a shortage of skilled workers on the labour market.

Inflation is thus becoming increasingly broad-based. From June onwards, year-on-year inflation has been exceeding 10%. It stood at 10.8% in November with energy price inflation being mitigated by government measures since September. In line with the current economic outlook we assess that inflation hit its peak in July of this year at 11.7%, and it is projected to average 9.3% in 2022 (see Figure 2.3.1).

Inflation will gradually decline later in the projection horizon amid the cooling economy and the anticipated slowdown in import prices.

Inflation will remain high in early 2023, before gradually easing amid the expected weakening of demand and the stabilisation in supply chains and on global energy markets, driven in particular by declines in the contributions by non-energy industrial goods and food prices. Energy prices will also be a major factor in developments of the headline inflation. Their rate will be highly volatile in 2023 because of a high base effect and the impact of measures to curb energy prices in individual months of 2022.

[14] Under the Minimum Wage Act, the minimum wage is adjusted at least once a year with regard to consumer price inflation, wage developments, the state of the economy and employment developments, where the data used for the adjustment is the year-on-year growth in consumer prices in December of the previous year. The adjustment is based on the CPI, which differs slightly from the HICP, which is otherwise used for projections at Banka Slovenije. A new calculation of the minimum cost of living might also have an impact on the rise in the minimum wage in 2023. The minimum wage for 2023 will be set in January of that year.

Our projection for the headline inflation is to average 6.8% in 2023, before slowing down to 4.2% in 2024. A more-pronounced downturn will be limited by the renewed increase in the contribution by energy prices following the expiry of the cap on electricity and gas prices[15] and the expiry of the exemption from certain levies. As wage demands increase and wage growth embeds in firms' costs, services prices will also drive inflation in 2024 alongside energy prices. These will also prevail in 2025 when year-on-year inflation will average 2.3% (see Figure 2.3.1).

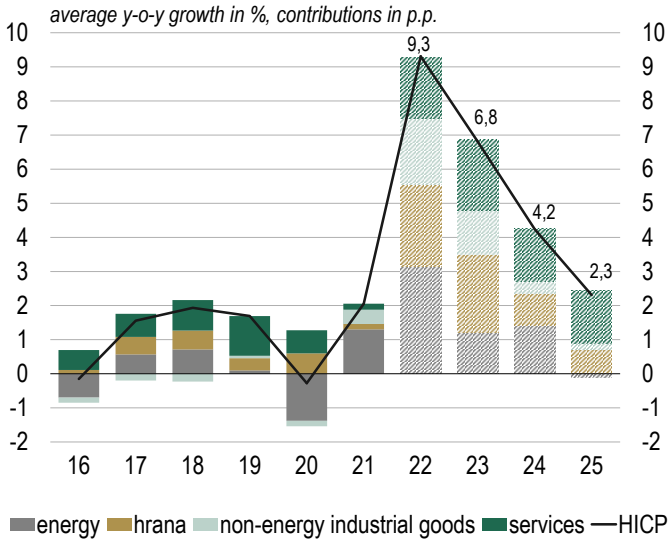
Energy price inflation will stand at more than 25% in 2022, before slowing significantly in 2023 as a result of government measures. It will somewhat strengthen again in 2024 in the wake of the projected return to market prices.

Having exceeded 35% over the summer, year-on-year energy price inflation was gradually declining over the remainder of the year, and stood at 20.9% in November. The slowdown was mainly attributable to government measures to reduce heating costs for households, and to cheaper fuels resulting from the fall in oil prices on global markets. In September 2022, the government set a cap on the selling price of electricity and gas for a period of 12 months,[16] and cut the VAT rate on energy for heating from 22% to 9.5% for a period of nine months. Additionally, energy prices will be reduced up to September 2023 by exemptions from paying certain levies.

We presume that electricity and gas prices will then begin to converge to the market prices, in line with the expected developments in wholesale electricity and gas prices based on futures contracts. In the absence of the government measures, our estimate

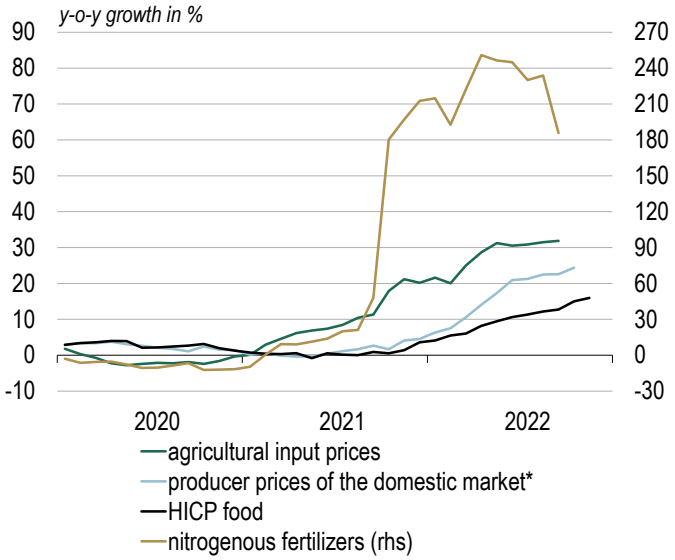
Figure 2.3.1:**Inflation projection and upward pressure on food prices**

Projection of contributions to inflation by components



Source: SORS, Eurostat, Banka Slovenije projections.

Pipeline pressures on food prices



Note: * Food products, beverages and tobacco products.
Source: SORS. Latest data: September/October/November 2022.

[15] Our assessment is that without the measures in connection with electricity and gas prices, headline inflation would be 0.7 percentage points higher in 2022, and 2 percentage points higher in 2023.

[16] According to the Decree setting prices of natural gas from the gas system, in addition to households and communal households the maximum retail price also applies to essential social services, nursery schools, primary schools and health centres connected to the distribution system, to small businesses, and to producers of heat whose primary energy input comes from gas.

is that final electricity prices would be on average 37% higher over the course of 2023 while gas prices would be 47% higher.

Year-on-year energy price inflation will be rather volatile in 2023 on account of the government measures that were in place during certain months of 2022. In the early part of the year, it will still be above the 15% mark, before slowing sharply over the summer because of a high base effect and the absence of measures in June, July and August 2022. It will rise again from September 2023 onwards because of a low base effect and the expiry of measures that were in force from September 2022. Year-on-year energy price inflation will average 8.5% in 2023.

Our assumption is that in 12 months after the expiry of the government measures electricity and gas prices for end consumers will gradually converge to market prices, and that as of September 2024 they will move in line with market prices, with energy price inflation averaging 10.8% over the course of the year. In the wake of the foreseen stabilisation on the energy markets, a 1% fall in energy prices is projected for 2025. A more pronounced fall in energy prices will be partly counterbalanced by a rise in levies in connection with the transition to a low-carbon society.

The rise in food price inflation reflects growing inflationary pressures in all stages of the food production chains.

High growth in energy prices and prices of agricultural commodities has made food prices rise substantially in the recent months. In November, they were up by a record 16.0% in year-on-year terms, or by 19.1% excluding alcohol and tobacco products. Since the shock on primary agricultural commodities markets after the outbreak of the war in Ukraine, wholesale commodity prices have eased slightly, however, they remain at elevated levels.

Rising prices of input commodities and higher costs of energy, fertilisers and other agricultural inputs (see Figure 2.3.1) are to a certain extent being passed onto food-processing companies and finally into retail product prices. The projection for food price inflation also encompasses an assessment of the impact of the drought in 2022, alongside energy prices, rising labour costs and the upward shift in the assumption for food commodity prices.

Food price inflation is projected to average 10.5% in 2022, and 10.0% in 2023. Upcoming rises in excise duties on tobacco products in January, April and November 2023 will raise retail prices of cigarettes by almost 4% on average each time, and will account for more than 1 percentage point of annual food price inflation. Food price inflation will ease over the remainder of the projection horizon as the price pressures moderate, slipping to 4.1% in 2024 and 3.1% in 2025.

Table 2.3.1: **Inflation projections**

						2022		2023		2024		2025	
	2017	2018	2019	2020	2021	Dec.	Δ	Dec.	Δ	Dec.	Δ	Dec.	Δ
	average y-o-y growth in %												
Consumer prices (HICP)	1,6	1,9	1,7	-0,3	2,0	**9,3**	0,3	**6,8**	2,3	**4,2**	1,9	**2,3**	...
food	2,2	2,4	1,6	2,8	0,7	**10,5**	1,2	**10,0**	4,6	**4,1**	0,9	**3,1**	...
energy	4,7	6,0	0,8	-10,8	11,3	**25,2**	-5,0	**8,5**	-1,0	**10,8**	11,6	**-1,0**	...
non-energy industrial goods	-0,7	-0,8	0,3	-0,5	1,3	**6,2**	1,2	**4,2**	2,6	**1,1**	0,4	**0,6**	...
services	1,8	2,4	3,1	1,8	0,6	**5,4**	1,0	**6,4**	2,4	**4,7**	0,2	**4,7**	...
Core inflation indicators (HICP)													
excluding energy	1,1	1,4	1,8	1,3	0,8	**7,0**	1,1	**6,5**	3,0	**3,3**	0,5	**2,8**	...
excluding energy and unprocessed food	0,9	1,1	1,8	1,0	1,0	**6,7**	1,3	**6,3**	3,1	**3,2**	0,4	**2,7**	...
excluding energy and food	0,7	1,0	1,9	0,8	0,9	**5,8**	1,1	**5,3**	2,5	**3,0**	0,3	**2,7**	...

Note: Δ: difference between the current projections and the projections from the June 2022 issue of Macroeconomic Projections for Slovenia.
Sources: SORS, Eurostat, Banka Slovenije projections

The core inflation projection reflects increasingly broad-based price rises.

After the lifting of the containment measures economies opened up but the supply chains were not yet ready for a higher demand, in particular the one for durables. Hence, supply chain bottlenecks were created, which led to rises in prices of non-energy industrial goods. These have been picking up pace since the end of 2021, and are being followed by services prices, albeit with a lag of several months. Therefore, core inflation, that is inflation excluding energy and food, is projected to average 5.8% in 2022 (see Figure 2.3.2), driven equally by prices of non-energy industrial goods and by services prices.

Our assessment is that core inflation will peak at 7% in early 2023, before beginning to ease as the disruptions to supply chains are resolved, demand weakens, and the commodity markets stabilise. The contribution made by prices of non-energy industrial goods will decline while services price inflation will remain elevated based on strengthened wage growth, and will continue to drive core inflation in the last part of the projection horizon. Core inflation is projected to average 5.3% in 2023, 3.0% in 2024 and 2.7% in 2025 (see Figure 2.3.2).

Revisions to headline inflation mainly reflect higher contributions by non-energy components in 2023 and energy prices in 2024.

The inflation projections differ from the June's projection round due to several factors. The revisions to the energy price inflation projections are attributable to numerous government measures to support households with regard to high energy prices, which were announced in July and August 2022, and a downward shift in the assumption for oil prices. These two factors are reducing headline inflation in 2022 and 2023, while the projection for 2024 has been revised upwards by 1.5 percentage points not only due to assumed movement of the retail energy prices towards wholesale market prices but also due to the expiry of the government measures. The contribution of food prices in 2023 has been revised upwards by 1 percentage point on account of the intensified

pass-through of energy prices into production costs as well as estimated impact of the drought in 2022.

Given the euro's depreciation against the US dollar and the corresponding rise in import prices, the inflation projection for non-energy industrial goods has also been revised upwards compared to the June's projections, while the projections for services price inflation has been revised upwards on account of a higher wage growth. Thus, the December's projections for headline inflation were up 0.3 percentage points on the June projections in 2022, 2.3 percentage points in 2023 and 1.9 percentage points in 2024 (see Figure 2.3.2).

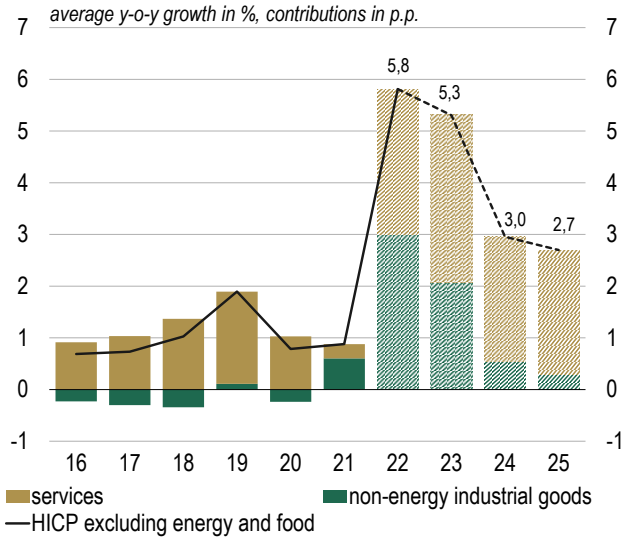
The inflation projections are accompanied by numerous risks, which are mostly on the upside.

The prolonged war in Ukraine is increasing geopolitical tensions and thus keeping up pressure on primary commodity prices. The situation is being exacerbated by the euro's depreciation against the US dollar, which is increasing uncertainty with regard to future import prices and producer prices. An additional risk originates from the rise in energy costs for firms in 2023 since many of them have purchased their energy for 2022 before the price rises hit. Furthermore, the instability in the international environment might result in higher prices for electricity and gas futures contracts than figures incorporated in the baseline projection.

A further risk of a prolonged period of higher inflation comes from the current high level of prices building into longer-term inflation expectations, which could be reflected in stronger wage pressures. The upside risks are partly offset by factors that might reduce inflation and relate to the weaker economic outlook and the easing of supply chains disruptions.

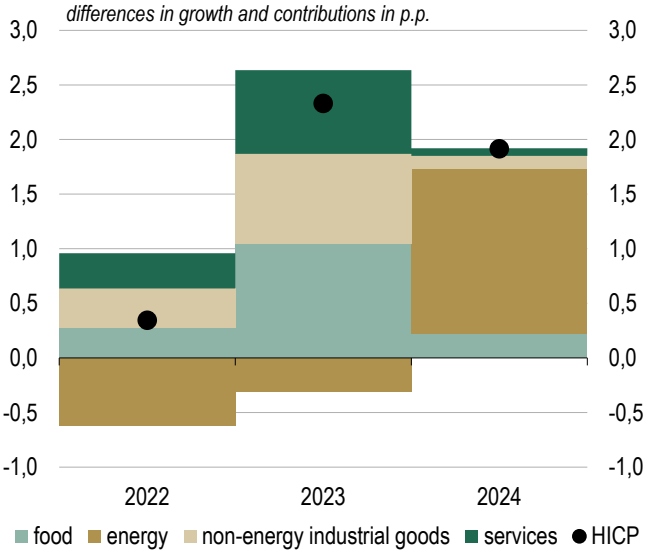
Figure 2.3.2: **Core inflation projections and revision of inflation projections**

Projection of contributions to core inflation by components



Source: SORS, Eurostat, Banka Slovenije projections.

Revision of inflation projections



Source: SORS, Eurostat, Banka Slovenije projections.

From a technical standpoint, a change in the weights used to compute inflation also poses a risk to the projections.[17] In line with the methodology of annual changes in weighting that is based on the national accounts figures for household expenditure on final consumption, the weights for 2022 are derived from final data for 2020 and estimated data for 2021, and thus reflect consumption patterns that were affected by the pandemic and the related measures. In 2023, the weights will reflect consumption in 2021 and 2022, therefore there could be some relatively large changes compared to the current weighting scheme.

[17] The impact on consumer price inflation from the change in weights was examined in detail in the April 2021 issue of Economic and Financial Developments, while the impact on the inflation projections was examined in Box 3 of the June 2021 issue of the Macroeconomic Projections for Slovenia.

Box 2.1.4: **Decomposition of inflation dynamics into supply-side and demand-side factors**

Analysis of inflation factors plays a key role in understanding expected inflation trends and in designing economic policy. In general demand-side factors are considered to be those that drive prices and quantities in the same direction, while supply-side factors are those associated with opposing dynamics in prices and quantities. In macroeconomic analysis the identification of supply-side and demand-side factors usually relies on econometric tools, such as structural vector autoregression models, which are subject to uncertainties with regard to the estimation of parameters and also the choice of identification method.[18] A potential alternative to tools of this type is the approach proposed in Shapiro (2022),[19] which observes developments in prices and quantities on the basis of granular data on inflation and activity in corresponding sectors.

In line with this approach, our analysis makes use of seasonally adjusted monthly indices of the subcomponents of the HICP at the third level of the ECOICOP classification. A total of 80 subcomponents of the HICP[20] are observed in the analysis, which are combined with seasonally adjusted real indices of services revenues and retail turnover in individual NACE sectors.[21]

In accordance with the classification of supply-side and demand-side shocks cited above, it could suffice to observe the developments in prices and turnover in various HICP subcategories, and thus to assess for each month which categories are primarily dependent on demand, and which on supply. The difficulty is that such simple analysis can be misleading, as prices and turnover both follow trends, which are primarily dependent on long-term economic trends. The solution is to use a bivariate VAR model, which contains data on prices and turnover. This separates unexplained changes in prices and turnover from explained changes.

An iterative assessment of the model was made in the illustrated case by means of 10-year estimation samples and 12 lags. The bivariate VAR model is described by the following equation:

$$\begin{aligned} p_{i,t} &= X_{i,t-1}\beta_i + \varepsilon^{p}_{i,t} \\ q_{i,t} &= X_{i,t-1}\beta_i + \varepsilon^{q}_{i,t} \end{aligned} \qquad (1)$$

where $p_{i,t}$ is the logarithm of the price index of subcategory i in month t, $q_{i,t}$ is the logarithm of the quantity index of subcategory i in month t, $X_{i,t-1}$ is the matrix of variables available in month $t-1$, $\varepsilon^{p}_{i,t}$ is the error in the model estimate of the price index for category i in month t, and $\varepsilon^{q}_{i,t}$ is the error in the model estimate of quantity for category i in month t, where month $t \in [T-119, T]$. The first sample encompasses data between January 2004 and January 2014. If the errors in the model for January 2014 have the same sign, category i in that month is designated as primarily demand-driven, otherwise the category is designated as primarily supply-driven.[22] When classifying each component in a particular month from the perspective of supply or demand, all

[18] The most commonly used methods for identifying shocks are Cholesky variance-covariance decomposition, identification based on sign restrictions, and high-frequency identification techniques.

[19] See Shapiro, Adam Hale. 2022. Decomposing Supply and Demand Driven Inflation, Federal Reserve Bank of San Francisco Working Paper 2022-18. Available online at https://doi.org/10.24148/wp2022-18.

[20] The data for turnover in services is available at the second level, while the SORS classification of wholesale and retail trade into ten subcategories is available for retail turnover. A total of 18 different categories were used to present turnover. In the variable mapping process it is therefore necessary to associate several HICP subcategories with the same index of turnover.

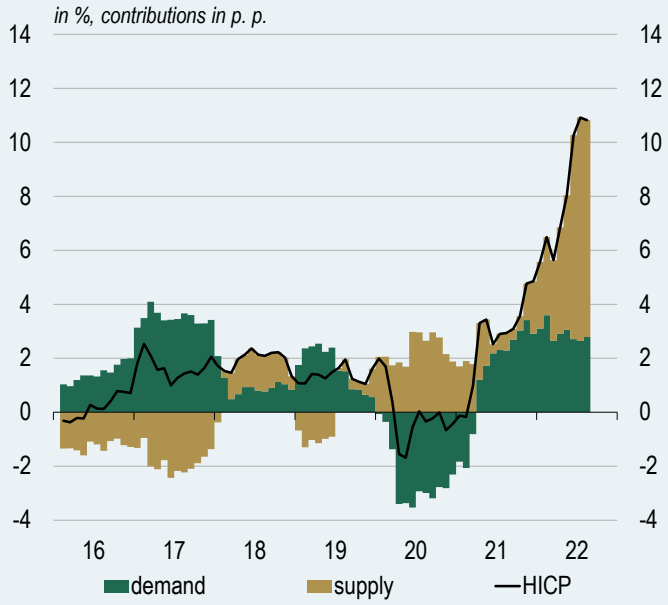
[21] Part of the HICP has been excluded from the analysis for reason of data limitations.

[22] In the majority of cases supply-side and demand-side factors act simultaneously, even if a particular subcategory is designated as currently primarily supply-driven or demand-driven.

subcategories in the HICP can be combined with regard to the classification across supply-side or demand-side factors.

Figure 2.1.4.1 separately illustrates the impacts of supply and demand shocks on price dynamics in Slovenia between 2016 and 2022. In the period of 2016 to 2019 inflation remained below the price target mostly because of supply-side factors, while demand-side factors consistently made a positive contribution to inflation during this period, partly as a result of the accommodative monetary policy stance. The outbreak of the pandemic crisis and the resulting shutdown of the economy reversed the structure of the factors in inflation dynamics. Primarily as a result of the rationalisation of aggregate consumption and partly as a result of the decline in income, demand-side factors made a negative contribution to inflation dynamics in 2020. A more-pronounced fall in prices was prevented by disruptions to supply chains and the resulting price pressures on the supply side. During the gradual recovery of the economy in the second half of 2021 demand-side factors turned positive again, and together with the persistence and deepening of supply-side shocks in 2022 led to a sharp rise in inflation.

Figure 2.1.4.1: **Decomposition of inflation factors in Slovenia**



Source: Banka Slovenije calculations.

3 Alternative Scenarios of Economic Developments

Energy supply remains highly uncertain, and over the projection period there could be significant production disruptions, further energy price rises, bottlenecks in supply chains and increased financial stress.

The baseline projection is accompanied by an alternative scenario of economic developments, which assumes the continuation of intense conflict in Ukraine and additional EU sanctions against Russia, including an embargo on all energy imports from Russia. Given the existing breakdown of energy supplies, and a failure to diversify, this would mean that stocks of gas comparable to past consumption would not be guaranteed in the winters of 2023/24 and 2024/25.

Shortages of gas supplies would cause disruptions in output due to limited energy availability and higher energy prices. Disruptions in production and higher cost pressures would be reflected in international supply chains and in reduced foreign demand, which would reduce the export activity of the Slovenian economy. The lower economic activity and increased uncertainty would in turn be reflected in increased financial risks, and consequently in a deterioration in the financing conditions.

Figure 3.1 illustrates the key assumptions of the alternative scenario. The disruptions to output are mapped into the macroeconomic environment via a decline in the production capacity of the economy.[23] The impact on output caused by the reduction in gas supplies is most pronounced under this scenario in the last quarter of 2023 and the first quarter of 2024, when the supply cuts coincide with winter, when demand for gas is highest. During this period, production capacity is assumed to decline by 1.3% compared to the baseline projection.

[23] In the modelling of the scenario, the decline in production capacity is mapped into a decline in potential output relative to the baseline projection via an approach based on evaluating the impact of the reduction in energy supplies on potential output, which is described in detail on page 24 of the June 2022 issue of the Macroeconomic Projections for Slovenia.

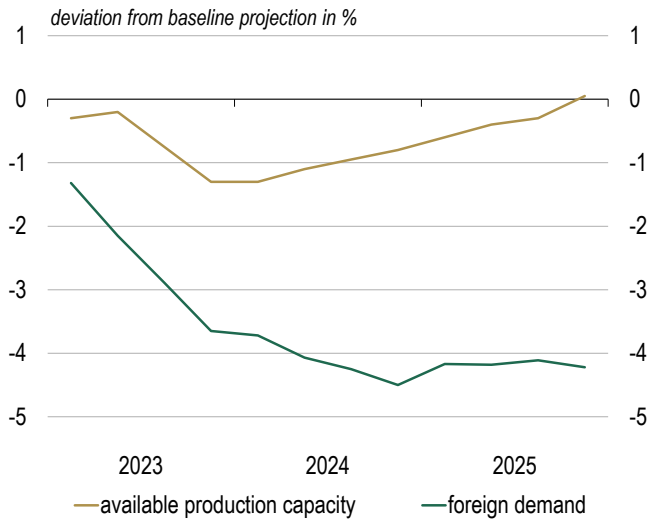
The decline in output is accompanied by a one-third increase in average energy prices over the projection horizon. Economic activity is further reduced by a decline in exports amid lower foreign demand. This would be on average 3.6% lower than the baseline projection in 2023, 2024 and 2025. The scenario also envisages less-favourable financing conditions, where the assumption is that, in an environment of increased uncertainty, interest rates on loans to non-financial corporations would be 65 basis points higher on average than under the baseline projection.

In the event of the realisation of the alternative scenario, GDP growth would be 1 percentage point lower in 2023, while inflation would be 1.2 percentage points higher than under the baseline projection.[24]

Under the alternative scenario there would be a decline of 0.2% in GDP in 2023, which would be followed the next year by an economic recovery that is 1 percentage point slower than under the baseline projection (see Figure 3.2). Due to GDP growth developments under the alternative scenario, the level of GDP is on average 1.7% lower over the projection period compared to the baseline projection. The lower GDP growth in 2023 and 2024 compared with the baseline projection is primarily attributable to lower foreign demand and the limitations in production, while the recovery in growth in 2025 is held back in particular by the tighter financing conditions, which are reflected in economic activity with a lag.

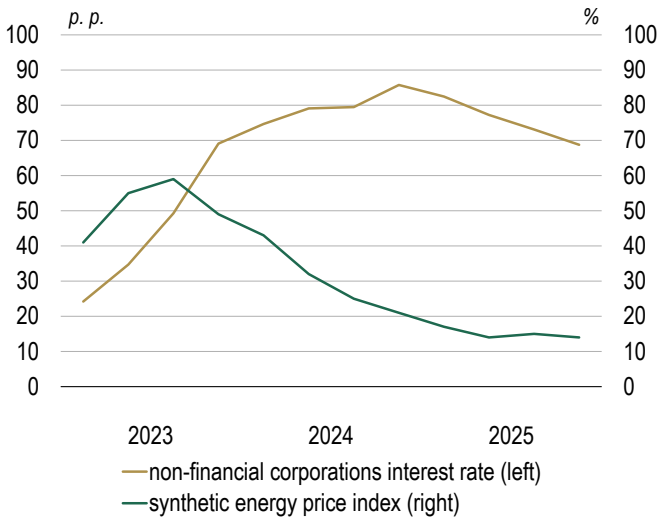
Figure 3.1: **Assumptions of the alternative scenario of projections**

Foreign demand and available production capacity



Source: ECB, Banka Slovenije projections.

Energy prices and interest rate for non-financial corporations

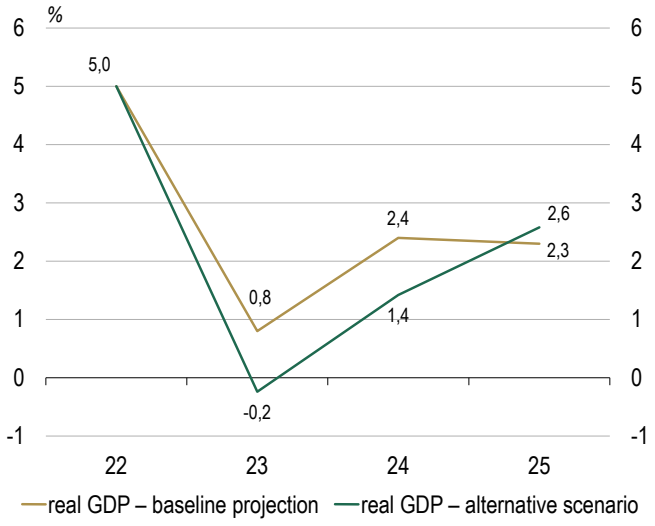


Source: ECB, Banka Slovenije projections.

[24] The effects are estimated using Banka Slovenije's macroeconomic model, which will be presented in an upcoming Banka Slovenije Working Paper.

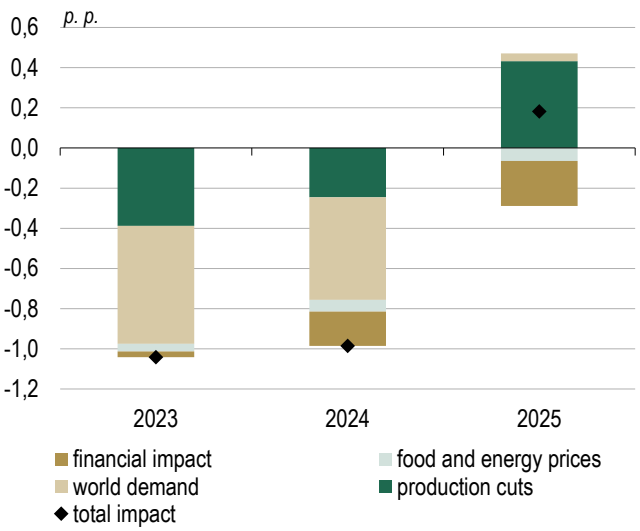
Figure 3.2: **Impact on economic growth from the assumptions of the alternative scenario**

Real GDP growth rates in the baseline projection and the alternative scenario



Source: Banka Slovenije projections.

Decomposition of the impact of alternative scenario assumptions on the baseline GDP growth

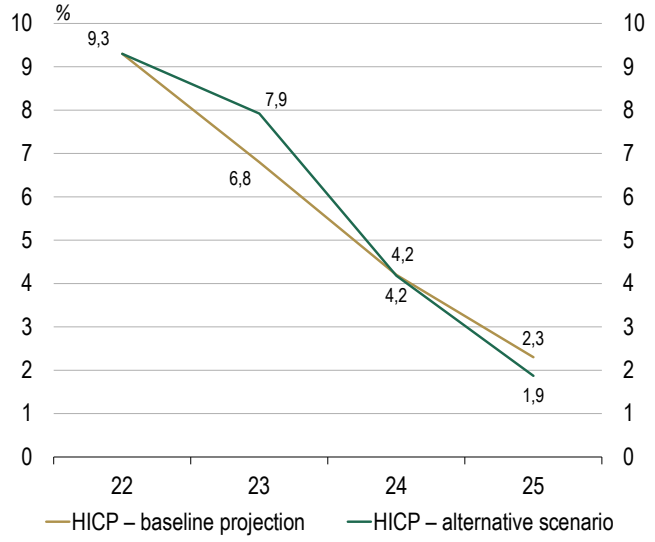


Source: Banka Slovenije projections.

The rise in inflation relative to the baseline projection is primarily attributable to higher energy prices, whose contribution to rising inflation will gradually wane in line with the assumption of the gradual substitution for Russian energy in 2024 and 2025 (see Figure 3.3). A more pronounced easing of inflation in the aforementioned years is nevertheless prevented by the effects of the limitations in production. Given the decline in production capacity and the merely partial adjustment in aggregate demand, this will have an impact on inflation via a positive output gap. At the same time the limitations in production also affect inflation via cost pressures on account of a decline in productivity, which is not reflected in the decline in wages due to nominal rigidity.

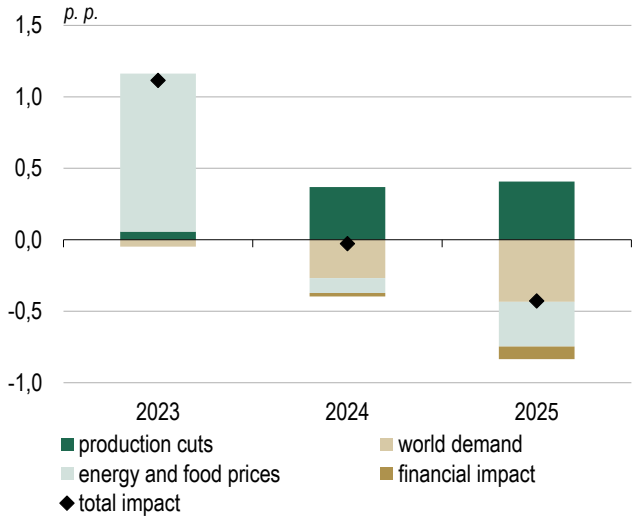
Figure 3.3: **Impact on consumer price inflation from the assumptions of the alternative scenario**

HICP growth in the baseline projection and the alternative scenario



Source: Banka Slovenije projections.

Impact of the alternative scenario assumptions on the baseline HICP growth



Source: Banka Slovenije projections.

4 Comparison Between Institutions

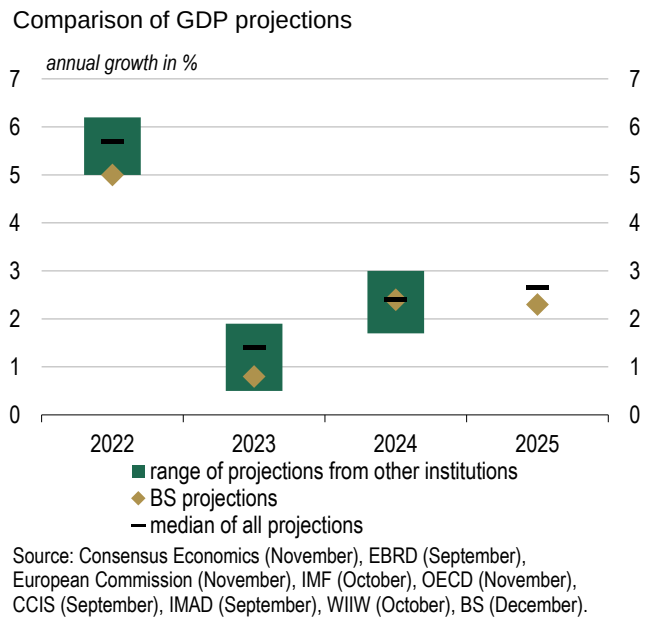
Compared with selected institutions, Banka Slovenije is projecting slightly lower GDP growth between 2022 and 2025, and slightly higher consumer price inflation.

The latest economic growth projections indicate a slowing economy in Slovenia in 2022 and 2023, mainly as a result of the prolonged Russian military aggression against Ukraine, the related uncertainty, and the persistence of high prices of energy and other commodities. All the institutions are expecting the international business environment to gradually stabilise over the remainder of the projection horizon. The highest economic growth projections in 2022 comes from the European Commission (6.2%), followed by Consensus (5.8%), the IMF and WIIW (both 5.7%), while the lowest projections were by Banka Slovenije, the OECD and the IMAD (5.0%). The Banka Slovenije projection is 0.7 percentage points lower than the median of all projections for the current year (see Figure 4.1).

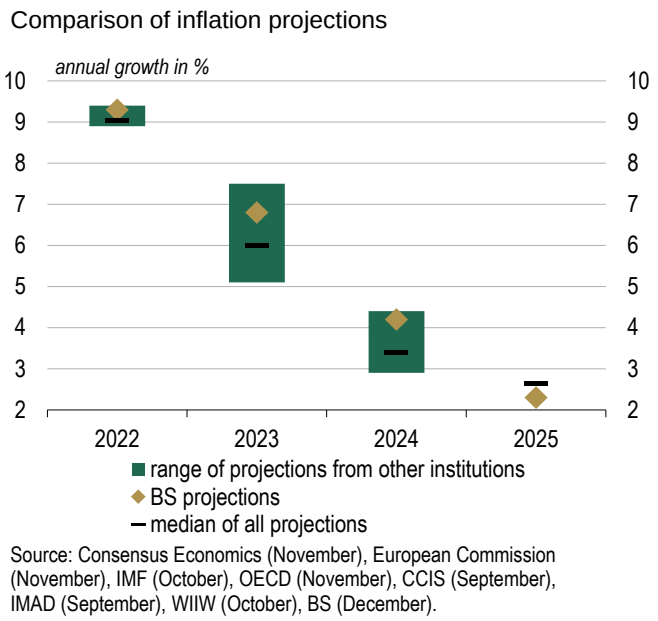
The highest economic growth projection for 2023 comes from WIIW, at 1.9%, followed by the EBRD (1.8%), and Consensus and the IMF (both 1.7%). Together with the European Commission projection, Banka Slovenije's projection of 0.8% is at the bottom end of the projection range of the other institutions, and is 0.6 percentage points lower than the median of all projections for the year in question. Projections for 2024 are available from six institutions, and Banka Slovenije's projection of 2.4% is at the median level. Only two institutions have available economic growth projections for 2025: 3.0% from the IMF, and 2.3% from Banka Slovenije.

The Russian military aggression against Ukraine is also clearly reflected in the higher projections of consumer price inflation in 2022 and 2023. All institutions are projecting inflation to gradually moderate over the remainder of the projection horizon, although the median projection for consumer price inflation in 2025 remains slightly above the

Figure 4.1: **Comparison of GDP and inflation projections between institutions**



Source: Consensus Economics (November), EBRD (September), European Commission (November), IMF (October), OECD (November), CCIS (September), IMAD (September), WIIW (October), BS (December).



Source: Consensus Economics (November), European Commission (November), IMF (October), OECD (November), CCIS (September), IMAD (September), WIIW (October), BS (December).

monetary policy medium-term target. The highest inflation projections for 2022 come from WIIW and Banka Slovenije (9.4% and 9.3% respectively), while the lowest projections are by Consensus, the CCI, the IMF and the IMAD (8.9%). Banka Slovenije's projection is thus 0.2 percentage points higher than the median of all projections for the current year (see Figure 4.1).

The highest consumer price inflation projection for 2023 comes from the OECD, namely 7.5%. Next is the Banka Slovenije projection, which at 6.8% is 0.8 percentage points higher than the median. The lowest inflation, 5.1% is predicted by the IMF. For 2024, inflation projections are available from six institutions: the highest again comes from the OECD (4.4%), while the lowest come from Consensus and the IMAD (both 2.9%). The Banka Slovenije projection is 0.8 percentage points higher than the median, at 4.2%. Again only two institutions have projections for 2025 available: 3.0% from the IMF, and 2.3% from Banka Slovenije.

A comparison of projection accuracy between the institutions shows that Banka Slovenije was among the most accurate in projecting growth in economic activity and consumer price inflation.[25]

The accuracy of the real GDP growth and consumer price inflation projections over the 2001 to 2021 period is measured by comparing the statistical estimate or the observed value with the projection for the variables.[26] To assess projection accuracy, the following indicators are computed: the mean error (ME), the mean absolute error (MAE), the standard deviation (STDEV), the root mean square error (RMSE) and the standardised root mean square error (SRMSE).[27]

Only four of the institutions in question (Banka Slovenije, the European Commission, the IMF and the IMAD) released projections for the entire observation period, while the majority of the institutions have projections available from 2004 (WIIW since 2008, the OECD since 2009, and the EBRD since 2011). Given the great uncertainty during the early part of the previous economic crisis, the entire observation period excluding 2008 and 2009 and the period of 2009 to 2021 have been additionally included in the analysis. Furthermore, in light of the impact of the outbreak of the pandemic in 2020 and the resulting strong economic recovery in 2021, a comparison of projection accuracy between institutions in all of the periods in question up to 2020 and including 2020 and 2021 has been included at the end of the current analysis.

In terms of the MAE and RMSE, the most accurate economic growth projections for the 2001 to 2021 period were from the European Commission, the IMAD and Banka Slovenije, while the most accurate inflation projections were provided by Banka Slovenije, the IMAD and the CCI. In the economic growth projections, MAE ranged from 0.8 to 2.7 over the entire period, while RMSE ranged from 1.0 to 4.0.[28] The institutions were

[25] Nine institutions that draw up macroeconomic projections for Slovenia are included in the comparative analysis of current projections of real GDP growth and consumer price inflation (eight institutions in the case of the latter), namely Consensus Economics, the European Bank for Reconstruction and Development (EBRD), the European Commission, the analysis unit at the Chamber of Commerce and Industry of Slovenia (CCI), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the Institute of Macroeconomic Analysis and Development (IMAD), the Vienna Institute for International Economic Studies (WIIW) and Banka Slovenije. The consumer price inflation projections by the European Commission, the OECD, WIIW and Banka Slovenije relate to inflation as measured by the HICP, while the projections by Consensus, the IMF, the CCI and the IMAD relate to inflation as measured by the CPI.

[26] In the examination of projection accuracy between institutions in the 2001 to 2021 period and in the various sub-periods, the second observed values and projections of variables are compared, whereby the projections selected are those that correspond most closely in terms of time to Banka Slovenije's projections.

[27] For a detailed description of the statistical methods (in Slovene), see Cimperman and Savšek (2014): Accuracy of projections of macroeconomic aggregates for Slovenia.

[28] The spring and autumn projections of the institutions for 2022 and 2023 are taken into account in the values given.

slightly more accurate in their inflation projections: the observed indicators had narrower ranges across the institutions, namely 0.2 to 1.1 for MAE and 0.3 to 1.5 for RMSE.

According to the MAE and the RMSE, the most accurate economic growth projections over the entire period excluding 2008 and 2009 were those of the European Commission, Banka Slovenije and the IMAD, while the best inflation projections were again by Banka Slovenije, the IMAD and the CCI. Compared with the entire period, the economic growth projections during the period in question were slightly more accurate, as the exclusion of 2008 and 2009 eliminated the impact of the increased volatility during the previous economic crisis. In the economic growth projections, MAE ranged from 0.8 to 2.3 over the period in question, while RMSE ranged from 1.0 to 2.8. The inflation projection accuracy remained virtually unchanged.

According to the MAE and RMSE, the European Commission and the CCI produced the most accurate economic growth projections over the 2009 to 2021 period, followed by the OECD, Banka Slovenije and the IMAD, while Banka Slovenije, the European Commission and the IMAD produced the most accurate inflation projections. The accuracy of the economic growth projections was better than over the entire observation period (2001 to 2021): the intervals in MAE and RMSE narrowed to range from 0.8 to 2.8 for MAE and 1.1 to 3.5 for RMSE. It was a similar case in the assessment of inflation projection accuracy: the intervals in the indicators were narrower than in the entire observation period, at 0.1 to 0.9 for MAE and 0.1 to 1.2 for RMSE.

The errors in the real GDP growth projections increased significantly in 2020 and 2021, while the accuracy of the inflation projections remained relatively unchanged.

When 2020 and 2021 are included, the errors in the economic growth projections are more pronounced as a result of the increased volatility following the outbreak of the pandemic and the resulting strength of the economic recovery in 2021. While the lower bound of the interval for MAE and RMSE was broadly unchanged in the case of the economic growth projections (between 0.2 and 0.5 percentage points, taking account of both indicators and all of the aforementioned periods of comparison of projections between institutions), the upper bound of the aforementioned indicators including 2020 and 2021 was significantly higher (between 0.2 and 0.8 percentage points, taking account of both indicators and all of the aforementioned periods of comparison of projections between institutions). By contrast, the accuracy of the consumer price inflation projections remained similar to that before 2020: the interval for MAE and RMSE was practically unchanged.

5 Statistical Appendix

Table 5.1: **Key macroeconomic indicators at the monthly level for Slovenia**

	2020	2021	12 m. 'till Sep.22	3 m. 'till Sep.21	3 m. 'till Sep.22	2022 Jul.	2022 Aug.	2022 Sep.	2022 Oct.	2022 Nov.
Economic Activity										
					balance of answers in percentage points					
Sentiment indicator	-11,8	2,5	2,0	5,8	-2,3	-1,3	-0,5	-5,1	-5,3	-1,8
- confidence indicator in manufacturing	-8,7	8,2	3,0	10,0	-3,3	-1,0	-1,0	-8,0	-9,0	-5,0
					year-on-year growth rates in %					
Industry: - total	-6,4	10,0	4,5	6,3	2,6	4,1	4,3	-0,1	...	...
- manufacturing	-6,2	11,5	6,3	8,2	5,6	6,8	8,1	2,5	...	...
Construction: - total	-0,7	-0,5	15,0	1,1	29,1	29,9	31,8	26,1	...	...
- buildings	-7,8	-23,0	34,5	-26,8	92,1	103,0	84,0	90,7	...	...
Trade and service activities - total	-9,7	12,2	13,7	10,5	6,4	6,2	7,1	5,9	...	...
Wholesale and retail trade and repair of motor	-14,5	8,3	0,8	-6,5	1,8	-0,3	1,6	3,9	...	...
Retail trade, except of motor vehicles and	-5,9	16,2	15,7	10,6	8,0	7,3	8,8	7,9	...	...
Other private sector services	-11,6	12,3	15,5	13,4	6,1	6,4	7,0	4,9	...	...
Labour market					*year-on-year growth rates in %*					
Average gross wage	6,0	6,0	1,8	5,4	5,0	3,2	5,7	6,1	...	...
- private sector	4,5	5,9	6,3	6,1	6,7	6,1	7,3	6,8	...	...
- public sector	7,9	6,4	-4,8	4,6	2,1	-1,3	3,0	5,0	...	...
Real net wage[1]	7,1	3,0	-4,9	2,4	-4,7	-6,6	-4,2	-3,3	...	...
Registered unemployment rate (in %)	8,7	7,6	6,1	7,1	5,5	5,6	5,5	5,3	...	...
Registered unemployed persons	14,6	-12,6	-24,2	-21,1	-22,2	-23,1	-22,2	-21,3	-20,5	...
Persons in employment	-0,6	1,3	2,6	2,2	2,2	2,3	2,2	2,1	...	...
- private sector	-0,9	1,3	3,2	2,5	2,8	2,9	2,8	2,7	...	...
- public sector	0,1	1,1	0,9	1,3	0,5	0,6	0,5	0,4	...	...
Price Developments					*year-on-year growth rates in %*					
HICP	-0,3	2,0	7,8	2,3	11,3	11,7	11,5	10,6	10,3	10,8
- services	1,8	0,6	4,1	0,4	6,0	6,0	6,1	5,9	6,3	6,8
- industrial goods excluding energy	-0,5	1,3	5,4	1,7	6,8	6,4	6,6	7,4	7,0	6,9
- food	2,8	0,7	7,2	0,4	12,1	11,3	12,2	12,7	15,0	16,0
- energy	-10,8	11,3	25,7	14,2	34,8	40,6	36,6	27,2	20,1	20,9
Core inflation indicator[2]	0,8	0,9	4,7	0,8	6,4	6,2	6,3	6,6	6,6	6,8
Balance of Payments - Current Account					*in % GDP*					
Current account balance	7,6	3,8	0,2	4,1	2,0	-1,5	-0,6	8,1	...	...
1. Goods	5,0	1,7	-3,1	0,5	-2,5	-4,4	-4,8	1,9	...	...
2. Services	4,4	4,7	6,0	5,4	7,7	6,6	7,2	9,3	...	...
3. Primary income	-0,8	-1,7	-1,8	-1,1	-2,4	-2,3	-2,1	-2,8	...	...
4. Secondary income	-1,0	-0,9	-0,9	-0,7	-0,9	-1,4	-0,9	-0,3	...	...
					nominal year-on-year growth rates in %					
Export of goods and services	-10,0	19,5	25,6	19,3	27,7	24,6	29,4	29,2	...	...
Import of goods and services	-11,7	25,4	34,0	28,5	29,8	31,1	34,1	24,8	...	...

Public Finances	2020	2021	12 m. 'till Oct.22		2021 Jan.-Oct.		2022 Jan.-Oct.	
Consolidated general government (GG) balance[3]	*EUR milions*		*% GDP*	*y-o-y, %*	*EUR mio*	*y-o-y, %*	*EUR mio*	*y-o-y, %*
Revenue	18.529	21.383	40,0	12,5	17.397	13,8	19.245	10,6
Tax revenue	16.460	18.786	35,2	11,6	15.409	13,4	17.018	10,4
From EU budget	730	950	1,9	41,5	609	7,9	755	24,0
Other	1.338	1.646	3,0	9,2	1.379	22,6	1.472	6,7
Expenditure	22.071	24.300	42,4	3,3	19.351	9,7	19.621	1,4
Current expenditure	9.128	10.394	18,1	5,1	8.179	11,8	8.283	1,3
- wages and other personnel expenditure	4.965	5.751	9,3	-4,5	4.827	17,2	4.495	-6,9
- purchases of goods, services	3.021	3.351	6,2	10,5	2.533	9,4	2.758	8,9
- interest	778	732	1,1	-9,7	653	-6,5	583	-10,7
Current transfers	10.868	11.319	19,1	-2,6	9.437	5,3	9.173	-2,8
- transfers to individuals and households	8.251	9.168	15,7	-0,1	7.747	12,7	7.692	-0,7
Capital expenditure, transfers	1.549	1.959	4,0	24,9	1.242	29,9	1.576	26,9
GG surplus/deficit	-3.542	-2.917	-2,3		-1.954		-376	

Note: The figures for economic developments are calendar-adjusted (with the exception of economic sentiment indicators, which are seasonally adjusted). The other figures in the table are unadjusted. The monthly activity indicators in industry, construction and services are given in real terms.
[1] HICP deflator. [2] Inflation excluding energy, food, alcohol and tobacco. [3] Consolidated position of the state budget, local government budgets, pension and disability insurance subsector and compulsory health insurance subsector, according to the principle of paid realisation.
Sources: SORS, Banka Slovenije, Ministry of Finance, Banka Slovenije calculations

Table 5.2: **Key macroeconomic indicators at the quarterly level for Slovenia and the euro area**

	2019	2020	2021	21Q4	22Q1	22Q2	22Q3	2019	2020	2021	21Q4	22Q1	22Q2	22Q3
				Slovenia							*euro area*			
Economic developments							*q-o-q growth rates in %*							
GDP				5,2	-0,1	0,2	-1,4				0,5	0,6	0,8	0,2
- industry				1,2	0,3	1,1	0,3				0,2	0,4	0,5	...
- construction				1,4	2,6	1,4	3,3				0,4	2,3	-0,7	...
- mainly public sector services (OPQ)				0,6	0,2	-0,2	-0,1				-0,8	0,8	-0,5	...
- mainly private sector services (without OPQ)				3,7	1,1	1,4	-0,7				0,4	0,8	1,0	...
Domestic expenditure				3,2	3,0	1,6	-4,8				1,4	-0,2	0,8	...
- general government				1,3	0,7	-2,8	0,1				0,7	0,2	0,6	...
*- households and NPISH**				0,5	1,3	0,4	0,4				-0,2	-0,1	1,0	...
- gross capital formation				-0,9	12,2	3,9	-6,8				5,9	-0,9	0,2	...
- gross fixed capital formation				1,8	3,3	-0,8	2,6				3,4	-0,8	0,7	...
							y-o-y growth rates in %							
GDP	3,5	-4,3	8,2	10,5	9,7	8,3	3,4	1,6	-6,1	5,3	4,6	5,6	4,2	...
- industry	6,9	-3,4	9,2	5,7	4,9	4,1	2,2	0,5	-6,4	7,0	1,8	2,2	2,0	...
- construction	8,0	-1,9	10,0	7,2	7,8	7,7	10,4	0,8	-5,7	5,3	0,6	5,6	1,3	...
- mainly public sector services (OPQ)	1,7	2,4	3,8	4,8	3,7	1,3	-0,1	1,1	-2,8	3,5	1,9	1,8	0,9	...
- mainly private sector services (without OPQ)	2,3	-5,5	8,3	10,4	10,4	10,0	4,9	1,6	-6,7	5,6	5,0	6,2	5,1	...
Domestic expenditure	3,5	-4,7	9,9	13,5	16,9	10,7	2,7	2,4	-5,8	4,2	5,0	6,3	4,4	...
- general government	1,8	4,1	5,8	8,3	4,5	0,7	-0,9	1,7	1,0	4,3	2,5	2,9	1,3	...
- households and NPISH	5,3	-6,9	9,5	21,2	19,3	12,3	2,5	1,4	-7,7	3,8	6,2	8,7	5,9	...
- gross capital formation	0,6	-7,1	15,1	1,1	23,8	15,9	6,7	5,7	-7,4	5,0	5,0	4,4	3,9	...
- gross fixed capital formation	5,1	-7,9	13,7	13,2	9,4	7,3	7,1	6,9	-6,2	3,6	1,6	4,3	2,6	...
- inventories and valuables, contr. to GDP growth in p.p.	-0,8	0,1	0,4	-2,3	3,2	2,2	0,0	-0,2	-0,3	0,3	0,8	0,1	0,3	...
Labour market							*q-o-q growth rates in %*							
Employment				0,7	0,7	0,5	0,3				0,6	0,6	0,4	0,2
- mainly private sector (without OPQ)				0,7	0,7	0,6	0,2				0,6	0,6	0,4	...
- mainly public services (OPQ)				0,5	0,4	0,3	0,4				0,4	0,5	0,4	...
							y-o-y growth rates in %							
Employment	2,5	-0,7	1,3	2,5	3,2	3,1	2,0	1,3	-1,5	1,4	2,4	3,1	2,7	1,7
- mainly private sector (without OPQ)	2,6	-1,3	1,0	2,5	3,4	3,4	2,1	1,3	-2,3	1,2	2,6	3,5	3,0	...
- mainly public services (OPQ)	1,8	2,2	2,7	2,6	2,4	1,8	1,6	1,3	1,0	2,1	1,6	1,7	1,5	...
Labour costs per employee	5,0	3,4	7,9	3,2	1,3	3,0	5,5	2,2	-0,2	3,8	3,3	4,4	4,6	...
- mainly private sector (without OPQ)	4,5	1,5	8,0	7,3	6,1	6,7	7,0	2,1	-1,3	4,6	4,2	5,1	5,4	...
- mainly public services (OPQ)	6,6	9,4	7,7	-8,5	-11,7	-7,8	1,0	2,4	2,3	1,9	1,4	2,7	2,5	...
Unit labour costs, nominal**	4,0	7,3	1,1	-4,3	-4,7	-2,0	4,1	2,0	4,7	-0,1	1,1	1,9	3,0	...
Unit labour costs, real***	1,7	6,0	-1,5	-7,2	-8,7	-7,5	-5,9	0,2	2,9	-2,1	-1,7	-1,6	-1,2	...
							v %							
LFS unemployment rate	4,5	5,0	4,7	4,5	4,3	4,2	4,0	7,6	7,9	7,7	7,1	7,0	6,6	...
Foreign trade							*q-o-q growth rates in %*							
Real export of goods and services				6,4	-1,1	2,6	3,6				2,6	1,5	1,7	...
Real import of goods and services				5,5	2,6	1,4	1,8				4,7	-0,2	1,6	...
							y-o-y growth rates in %							
Real export of goods and services	4,5	-8,6	14,5	13,8	8,1	8,6	11,0	2,8	-8,9	10,5	8,0	8,5	7,7	...
Real import of goods and services	4,7	-9,6	17,6	18,1	16,5	11,6	10,8	4,8	-8,5	8,3	9,4	10,3	8,3	...
Current account balance as % of GDP****	5,9	7,6	3,8	3,8	1,6	0,6	0,2	2,3	1,6	2,3	2,3	1,6	0,6	...
External trade balance as contr. to GDP growth in p.p.	0,2	0,0	-0,8	-1,9	-5,7	-1,7	0,8	-0,7	-0,5	1,3	-0,3	-0,5	0,1	...
Financing							*in % of GDP*							
Banking system's balance sheet	87,8	98,0	94,5	94,5	92,6	88,5	...	260,1	294,8	285,9	285,9	293,5	294,4	...
Loans to NFCs	19,9	20,2	19,3	19,3	19,3	19,3	19,4	35,9	40,0	37,9	37,9	37,6	37,6	...
Loans to households	21,9	22,8	21,6	21,6	21,3	21,1	20,9	49,0	53,0	51,4	51,4	50,8	50,4	...
Inflation							*in %*							
HICP	1,7	-0,3	2,0	4,5	6,3	9,0	11,3	1,2	0,3	2,6	4,6	6,1	8,0	9,3
HICP excl. energy, food, alcohol and tobacco	1,9	0,8	0,9	2,4	4,4	5,6	6,4	1,0	0,7	1,5	2,4	2,7	3,7	4,4
Public finance							*in % of GDP*							
Debt of the general government	65,4	79,6	74,5	74,5	74,7	73,5	...	83,9	97,0	95,4	95,4	95,2	94,2	...
One year net lending/net borrowing of the general government****	0,6	-7,7	-4,7	-4,7	-3,6	-3,0	...	-0,6	-7,0	-5,1	-5,1	-4,0	-2,9	...
*- interest payment****	1,7	1,6	1,2	1,2	1,2	1,1	...	1,6	1,5	1,5	1,5	1,5	1,5	...
*- primary balance****	2,3	-6,1	-3,4	-3,4	-2,4	-1,9	...	1,0	-5,5	-3,7	-3,7	-2,5	-1,4	...

Note: Original figures are used to calculate the year-on-year rates, and seasonally adjusted figures are used to calculate the current rates of growth. The SORS quarterly national accounts figures have not yet been aligned with the initial annual estimate.

* The figures for Slovenia are calculated as the difference between the seasonally adjusted figures for aggregate final consumption and government final consumption.

** Nominal unit labour costs are the ratio of nominal compensation per employee to real labour productivity.

*** Real unit labour costs are the ratio of nominal compensation per employee to nominal labour productivity.

**** 4-quarter moving sums.

Sources: SORS, Eurostat, Banka Slovenije, ECB, Ministry of Finance, Banka Slovenije calculations

Table 5.3: **Basic measures of projection accuracy for real GDP growth measured on the basis of second observed value**

Real GDP	2001-2021			2001-2008			2009-2021			2008 and 2009			excl. 2008-2009			2004-2021		
	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV
spring projections																		
current year																		
BS	0,3	1,3	1,9	0,6	0,9	1,1	0,2	1,6	2,3	-3,3	3,3	3,9	0,7	1,1	1,3	0,4	1,5	2,0
Consensus	0,4	1,5	2,1	0,6	1,1	1,3	0,3	1,8	2,5	-3,3	3,3	3,4	0,8	1,4	1,6	0,5	1,7	2,2
EBRD							1,0	1,4	1,5									
EC	0,4	1,4	1,8	0,4	1,1	1,3	0,4	1,5	2,1	-2,6	2,6	2,9	0,7	1,2	1,4	0,6	1,5	1,9
CCIS	0,5	1,4	2,0	1,0	1,1	1,1	0,4	1,6	2,2	-2,9	2,9	3,7	1,0	1,3	1,3	0,5	1,4	2,0
IMF	0,5	1,6	2,1	0,4	1,1	1,3	0,6	1,9	2,6	-2,9	2,9	3,5	0,9	1,4	1,7	0,7	1,7	2,2
OECD							0,8	1,6	2,0									
IMAD	0,4	1,4	1,8	0,3	1,0	1,2	0,4	1,7	2,2	-2,4	2,4	2,3	0,6	1,3	1,6	0,5	1,5	1,9
WIIW							-0,4	2,3	3,6									
next year																		
BS	-0,7	2,4	3,7	-1,0	2,4	4,6	-0,4	2,3	3,1	-6,3	6,3	7,9	0,0	1,9	2,7	-0,7	2,7	4,0
Consensus	-0,6	2,6	3,9	-1,2	2,9	5,1	-0,3	2,5	3,2	-6,0	6,4	9,1	0,0	2,2	2,8	-0,7	2,8	4,1
EBRD							0,2	2,5	3,4									
EC	-0,7	2,3	3,6	-1,2	2,5	4,5	-0,4	2,2	3,0	-5,7	6,2	8,7	-0,2	1,8	2,6	-0,7	2,5	3,9
CCIS	-0,5	2,7	4,1	-1,5	3,6	6,1	-0,1	2,4	3,1	-6,3	6,3	8,3	0,3	2,3	2,9	-0,5	2,7	4,1
IMF	-0,6	2,3	3,6	-1,0	2,3	4,4	-0,3	2,3	3,1	-5,9	5,9	8,0	0,0	1,9	2,7	-0,7	2,6	3,9
OECD							-0,2	2,4	3,2									
IMAD	-0,7	2,5	3,8	-1,2	2,6	4,6	-0,4	2,5	3,3	-6,0	6,2	8,7	-0,1	2,1	2,8	-0,7	2,8	4,1
WIIW							-0,2	2,7	3,5									
autumn projections																		
current year																		
BS	0,4	0,8	1,1	0,3	0,6	0,7	0,5	1,0	1,3	-1,1	1,1	0,4	0,6	0,8	1,0	0,5	0,9	1,1
Consensus	0,3	0,9	1,1	0,2	0,7	0,9	0,4	1,0	1,3	-1,4	1,4	0,6	0,5	0,9	1,0	0,5	1,0	1,2
EBRD							1,0	1,1	1,2									
EC	0,5	0,8	0,9	0,3	0,7	0,7	0,5	0,8	1,0	-0,7	0,7	0,1	0,6	0,8	0,9	0,5	0,8	0,9
CCIS	0,5	0,8	1,0	0,2	0,7	0,9	0,6	0,8	1,0	-1,1	1,1	0,1	0,7	0,8	0,8	0,5	0,8	1,0
IMF	0,4	1,1	1,3	0,4	0,9	1,1	0,4	1,2	1,5	-2,0	2,0	1,9	0,6	1,0	1,1	0,4	1,1	1,4
OECD							0,6	0,8	1,1									
IMAD	0,3	0,8	1,0	0,2	0,6	0,8	0,5	0,9	1,0	-0,9	0,9	0,3	0,5	0,8	0,9	0,4	0,9	1,0
WIIW							0,3	1,4	1,9									
next year																		
BS	-0,3	2,3	3,7	-0,8	2,5	4,5	0,0	2,2	3,2	-6,0	6,0	7,8	0,3	1,9	2,7	-0,4	2,6	4,0
Consensus	-0,5	2,3	3,6	-1,2	2,5	4,4	0,0	2,2	3,0	-5,5	6,0	8,5	0,1	1,9	2,6	-0,5	2,6	3,9
EBRD							0,7	2,8	3,6									
EC	-0,3	2,1	3,4	-0,8	2,4	4,3	0,0	2,0	2,9	-5,5	5,5	7,6	0,3	1,8	2,5	-0,4	2,4	3,7
CCIS	-0,3	2,4	3,8	-1,2	3,0	5,2	0,2	2,1	3,0	-5,5	6,0	8,5	0,4	2,0	2,7	-0,3	2,5	3,9
IMF	-0,3	2,4	3,7	-0,9	2,4	4,6	0,1	2,4	3,3	-5,6	6,2	8,7	0,3	2,0	2,8	-0,4	2,7	4,1
OECD							0,1	2,3	3,2									
IMAD	-0,5	2,2	3,6	-1,0	2,3	4,3	-0,2	2,2	3,2	-5,4	5,7	8,1	0,1	1,9	2,7	-0,5	2,5	3,9
WIIW							-0,3	2,2	3,2									

Sources: Banka Slovenije, Consensus Economics, EBRD, European Commission, CCI, IMF, OECD, IMAD, WIIW

Table 5.4: **RMSE and SRMSE for real GDP growth projections measured on the basis of second observed value**

Real GDP	RMSE						SRMSE					
	2001-2021	2001-2008	2009-2021	2008-2009	w/o 08-09	2004-2021	2001-2021	2001-2008	2009-2021	2008-2009	w/o 08-09	2004-2021
spring projections												
current year												
BS	1,9	1,1	2,2	4,3	1,4	2,0	0,5	0,8	0,5	0,5	0,5	0,5
Consensus	2,1	1,3	2,4	4,1	1,8	2,2	0,6	0,9	0,6	0,5	0,6	0,6
EBRD			1,7						0,4			
EC	1,8	1,3	2,0	3,3	1,5	1,9	0,5	0,9	0,5	0,4	0,5	0,5
CCIS	2,0	1,4	2,2	3,9	1,6	2,0	0,5	1,0	0,5	0,5	0,5	0,5
IMF	2,1	1,3	2,5	3,8	1,9	2,3	0,6	0,9	0,6	0,5	0,6	0,6
OECD			2,1						0,5			
IMAD	1,8	1,2	2,1	2,9	1,7	1,9	0,5	0,8	0,5	0,3	0,5	0,5
WIIW			3,4						0,8			
next year												
BS	3,6	4,4	3,0	8,4	2,6	3,9	1,0	3,1	0,7	1,0	0,9	1,0
Consensus	3,9	4,9	3,1	8,8	2,8	4,1	1,0	3,4	0,7	1,1	0,9	1,0
EBRD			3,3						0,8			
EC	3,6	4,4	2,9	8,4	2,5	3,8	1,0	3,0	0,7	1,0	0,8	1,0
CCIS	4,0	5,7	3,0	8,6	2,8	4,0	1,1	3,9	0,7	1,0	0,9	1,0
IMF	3,6	4,3	3,0	8,1	2,6	3,8	1,0	3,0	0,7	1,0	0,9	1,0
OECD			3,1						0,7			
IMAD	3,8	4,5	3,2	8,6	2,7	4,0	1,0	3,1	0,7	1,0	0,9	1,0
WIIW			3,4						0,8			
autumn projections												
current year												
BS	1,1	0,7	1,3	1,1	1,1	1,2	0,3	0,5	0,3	0,1	0,4	0,3
Consensus	1,2	0,9	1,3	1,5	1,1	1,2	0,3	0,6	0,3	0,2	0,4	0,3
EBRD			1,5						0,4			
EC	1,0	0,7	1,1	0,7	1,0	1,0	0,3	0,5	0,3	0,1	0,3	0,3
CCIS	1,0	0,9	1,1	1,1	1,0	1,1	0,3	0,6	0,3	0,1	0,3	0,3
IMF	1,4	1,1	1,5	2,4	1,2	1,4	0,4	0,7	0,4	0,3	0,4	0,3
OECD			1,2						0,3			
IMAD	1,0	0,8	1,1	0,9	1,0	1,1	0,3	0,5	0,3	0,1	0,3	0,3
WIIW			1,8						0,4			
next year												
BS	3,6	4,3	3,1	8,1	2,6	3,9	1,0	3,0	0,7	1,0	0,9	1,0
Consensus	3,5	4,3	2,9	8,1	2,5	3,8	0,9	3,0	0,7	1,0	0,8	0,9
EBRD			3,5						0,8			
EC	3,4	4,1	2,8	7,7	2,5	3,6	0,9	2,8	0,7	0,9	0,8	0,9
CCIS	3,7	4,9	2,9	8,1	2,6	3,8	1,0	3,4	0,7	1,0	0,9	0,9
IMF	3,7	4,3	3,1	8,3	2,7	4,0	1,0	3,0	0,7	1,0	0,9	1,0
OECD			3,1						0,7			
IMAD	3,5	4,1	3,0	7,9	2,6	3,8	0,9	2,9	0,7	0,9	0,9	0,9
WIIW			3,0						0,7			

Sources: Banka Slovenije, Consensus Economics, EBRD, European Commission, CCI, IMF, OECD, IMAD, WIIW

Table 5.5: **Basic measures of projection accuracy for inflation measured on the basis of second observed value**

HICP/CPI	2001-2021			2001-2008			2009-2021			2008 and 2009			excl. 2008-2009			2004-2021		
	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV	ME	MAE	STDEV
spring projections																		
current year																		
BS	0,1	0,4	0,5	0,3	0,5	0,6	0,0	0,3	0,4	0,2	0,3	0,4	0,1	0,4	0,6	0,1	0,3	0,5
Consensus	-0,1	0,6	0,7	0,1	0,7	0,8	-0,2	0,5	0,6	-0,1	0,7	1,0	-0,1	0,6	0,7	-0,1	0,6	0,7
EC	0,0	0,4	0,6	0,0	0,5	0,7	0,0	0,4	0,6	0,2	0,2	0,1	0,0	0,5	0,6	0,0	0,4	0,6
CCIS	-0,1	0,5	0,6	0,2	0,5	0,7	-0,2	0,4	0,5	0,1	0,2	0,3	-0,1	0,5	0,6	-0,1	0,5	0,6
IMF	0,2	0,6	0,7	0,5	0,7	0,9	0,1	0,4	0,6	1,0	1,0	0,8	0,2	0,5	0,7	0,3	0,5	0,7
OECD							-0,1	0,5	0,6									
IMAD	0,1	0,5	0,6	0,1	0,6	0,8	0,2	0,4	0,6	0,4	0,4	0,1	0,1	0,5	0,7	0,3	0,5	0,6
WIIW							-0,5	0,9	1,0									
next year																		
BS	0,0	1,1	1,3	0,5	1,4	1,8	-0,3	0,8	1,0	-1,2	1,5	2,1	0,1	1,0	1,4	-0,2	1,0	1,4
Consensus	-0,4	1,1	1,4	0,0	1,6	2,0	-0,7	0,9	1,1	-1,6	1,6	1,3	-0,3	1,0	1,4	-0,4	1,1	1,5
EC	-0,4	1,1	1,4	-0,4	1,6	1,9	-0,5	0,8	1,1	-1,2	1,3	1,8	-0,4	1,1	1,4	-0,3	1,0	1,4
CCIS	-0,4	1,0	1,4	0,2	1,5	2,1	-0,7	0,8	1,0	-1,2	1,5	2,1	-0,3	1,0	1,4	-0,4	1,0	1,4
IMF	-0,2	1,1	1,3	0,3	1,5	1,8	-0,5	0,8	1,0	-0,5	1,1	1,5	-0,1	1,1	1,4	-0,2	1,0	1,3
OECD							-0,4	0,9	1,1									
IMAD	-0,2	0,9	1,3	0,2	1,2	1,6	-0,4	0,7	1,0	-0,9	1,4	2,0	-0,1	0,9	1,2	-0,2	1,0	1,4
WIIW							-0,5	0,8	1,1									
autumn projections																		
current year																		
BS	-0,1	0,2	0,3	-0,2	0,3	0,4	-0,1	0,1	0,1	-0,4	0,4	0,3	-0,1	0,2	0,2	-0,1	0,2	0,2
Consensus	-0,1	0,3	0,3	-0,2	0,4	0,5	0,0	0,2	0,2	-0,4	0,4	0,2	0,0	0,2	0,3	0,0	0,2	0,3
EC	-0,2	0,3	0,3	-0,5	0,5	0,6	-0,1	0,1	0,2	-0,4	0,4	0,5	-0,2	0,3	0,4	-0,1	0,2	0,2
CCIS	-0,1	0,3	0,4	-0,2	0,3	0,4	0,0	0,3	0,3	-0,2	0,3	0,4	-0,1	0,3	0,4	0,0	0,3	0,3
IMF	0,0	0,4	0,5	-0,1	0,5	0,6	0,0	0,4	0,4	0,0	0,4	0,6	0,0	0,4	0,5	0,0	0,3	0,4
OECD							0,0	0,1	0,2									
IMAD	-0,1	0,3	0,4	-0,4	0,5	0,5	0,0	0,2	0,3	-0,4	0,4	0,4	-0,1	0,3	0,4	0,0	0,2	0,3
WIIW							-0,1	0,4	0,5									
next year																		
BS	-0,2	1,0	1,2	0,1	1,1	1,5	-0,3	0,9	1,1	-1,0	1,6	2,3	-0,1	0,9	1,2	-0,2	1,0	1,3
Consensus	-0,3	1,0	1,4	-0,2	1,5	2,0	-0,4	0,8	1,0	-1,6	1,6	2,2	-0,2	1,0	1,3	-0,3	1,0	1,4
EC	-0,3	1,1	1,3	-0,4	1,4	1,8	-0,3	0,9	1,1	-1,2	1,6	2,3	-0,2	1,0	1,2	-0,3	1,0	1,3
CCIS	-0,4	1,1	1,3	-0,1	1,3	1,7	-0,6	0,9	1,1	-1,0	1,8	2,5	-0,4	1,0	1,2	-0,4	1,1	1,4
IMF	-0,2	1,0	1,2	0,0	1,3	1,6	-0,4	0,8	1,0	-0,9	1,5	2,1	-0,1	0,9	1,2	-0,2	1,0	1,3
OECD							-0,2	0,9	1,2									
IMAD	-0,3	1,0	1,3	-0,2	1,2	1,6	-0,3	0,9	1,1	-1,2	1,8	2,5	-0,2	0,9	1,1	-0,3	1,0	1,3
WIIW							-0,4	0,7	1,0									

Sources: Banka Slovenije, Consensus Economics, European Commission, CCI, IMF, OECD, IMAD, WIIW

Table 5.6: **RMSE and SRMSE for inflation projections measured on the basis of second observed value**

HICP/CPI	RMSE						SRMSE					
	2001-2021	2001-2008	2009-2021	2008-2009	w/o 08-09	2004-2021	2001-2021	2001-2008	2009-2021	2008-2009	w/o 08-09	2004-2021
spring projections												
current year												
BS	0,5	0,7	0,4	0,4	0,5	0,5	0,2	0,3	0,4	0,1	0,2	0,3
Consensus	0,7	0,7	0,7	0,7	0,7	0,7	0,3	0,4	0,6	0,2	0,3	0,4
EC	0,6	0,7	0,5	0,2	0,6	0,5	0,3	0,4	0,5	0,0	0,3	0,4
CCIS	0,6	0,6	0,6	0,2	0,6	0,6	0,3	0,3	0,5	0,1	0,3	0,4
IMF	0,7	1,0	0,5	1,1	0,7	0,8	0,3	0,5	0,5	0,3	0,3	0,5
OECD			0,6						0,6			
IMAD	0,7	0,8	0,6	0,4	0,7	0,6	0,3	0,4	0,5	0,1	0,3	0,4
WIIW			1,0						0,9			
next year												
BS	1,4	1,8	1,1	1,9	1,3	1,3	0,6	0,9	0,9	0,6	0,6	0,9
Consensus	1,5	1,8	1,2	1,8	1,4	1,5	0,7	1,0	1,1	0,6	0,6	1,0
EC	1,4	1,8	1,1	1,7	1,4	1,4	0,6	0,9	1,0	0,5	0,6	0,9
CCIS	1,4	1,9	1,2	1,9	1,3	1,4	0,6	1,0	1,1	0,6	0,6	0,9
IMF	1,4	1,7	1,1	1,1	1,4	1,3	0,6	0,9	1,0	0,4	0,6	0,8
OECD			1,1						1,0			
IMAD	1,2	1,5	1,0	1,7	1,2	1,3	0,6	0,8	0,9	0,5	0,5	0,9
WIIW			1,1						1,0			
autumn projections												
current year												
BS	0,3	0,4	0,1	0,4	0,3	0,2	0,1	0,2	0,1	0,1	0,1	0,1
Consensus	0,3	0,5	0,2	0,4	0,3	0,3	0,2	0,3	0,2	0,1	0,2	0,2
EC	0,4	0,7	0,2	0,5	0,4	0,3	0,2	0,4	0,2	0,2	0,2	0,2
CCIS	0,4	0,4	0,3	0,3	0,4	0,3	0,2	0,2	0,3	0,1	0,2	0,2
IMF	0,5	0,6	0,4	0,4	0,5	0,4	0,2	0,3	0,4	0,1	0,2	0,3
OECD			0,2						0,2			
IMAD	0,5	0,6	0,3	0,5	0,4	0,3	0,2	0,3	0,2	0,2	0,2	0,2
WIIW			0,5						0,4			
next year												
BS	1,2	1,4	1,1	1,9	1,1	1,3	0,6	0,7	1,0	0,6	0,5	0,8
Consensus	1,4	1,9	1,1	2,2	1,2	1,4	0,6	1,0	0,9	0,7	0,6	0,9
EC	1,3	1,7	1,1	2,0	1,2	1,3	0,6	0,9	1,0	0,6	0,6	0,8
CCIS	1,3	1,6	1,2	2,0	1,2	1,4	0,6	0,8	1,1	0,6	0,6	0,9
IMF	1,2	1,5	1,0	1,7	1,2	1,3	0,6	0,8	0,9	0,5	0,5	0,8
OECD			1,2						1,0			
IMAD	1,3	1,5	1,1	2,2	1,1	1,3	0,6	0,8	1,0	0,7	0,5	0,8
WIIW			1,0						0,9			

Sources: Banka Slovenije, Consensus Economics, European Commission, CCI, IMF, OECD, IMAD, WIIW