IMAD

autumn forecast of economic trends 2020

Autumn Forecast of Economic Trends 2020

Contents

Summary

The COVID-19 pandemic, in combination with strict health protection and containment measures, has represented a significant negative shock for economic activity, which was almost 8% lower year on year in Slovenia in the first half of 2020. It declined most significantly in the second quarter, when GDP was down 13% year on year. The strict measures to contain the spread of the virus led to a pronounced contraction of economic activity globally and in Slovenia, particularly in the second quarter, due to the shutdown of businesses in non-essential service activities and the hampered activity in industry and other service activities. To alleviate the negative consequences of the epidemic, comprehensive packages of measures have been adopted at the level of countries and by the ECB and the European Commission to help businesses and citizens bridge liquidity problems due to loss of income and to support a rebound of economic activity. The measures continue to be supplemented as necessary, taking into account the epidemiological and economic situation. Although they have not been able to prevent the decline in economic activity, they have had a significant impact on its scale and are essential for a restart of activity.

Economic activity in the euro area is recovering after a pronounced, almost 9%, decline in the first half of the year (almost 15% in the second quarter) but is still significantly below the pre-epidemic level in most sectors. The forecast takes into account international institutions' latest forecasts for Slovenia's trading partners (published by 8 September). In their baseline scenarios for containing the spread of the coronavirus, international institutions mainly expect a gradual and uneven recovery across euro area countries, with a faster rebound in those with a larger share of industrial activities. The continued presence of the virus will be reflected in the retention of some containment measures, which will have a larger negative impact on services, particularly tourism, meaning that especially in these activities no rapid return to pre-epidemic levels can be expected. Many indicators of economic activity for the third quarter already indicate a continuation of the recovery after a significant decline in April. However, with high uncertainty due to the worsening epidemiological picture in many trading partners, growth momentum has been weakening in recent weeks, meaning that we can expect further fluctuations in economic activity. The responsiveness of economic policies will remain the key factor in mitigating possible negative consequences, but from an epidemiological point of view, a longer lasting stabilisation of economic conditions is likely to be achieved only with an appropriate medical solution.

In the Autumn Forecast we predict a 6.7% decline in GDP in 2020; it will be followed by a recovery in the next two years, but economic activity will not reach the pre-epidemic level until 2022. The forecasts for Slovenia's main trading partners for this year have improved somewhat since June. With the recovery of economic activity and particularly with the agreement at the EU level on the financial package for faster recovery of the EU economy, confidence indicators also improved significantly in the period from May to July. Despite a renewed minor fall in some indicators in August, this will be reflected in a somewhat smaller annual decline in GDP than predicted in the Summer Forecast.[8] This year's GDP decline will be attributable to a fall in value added in many sectors, which will be a consequence of a significant contraction of activity in the first half of the year, especially in the second quarter. Following the containment of the epidemic and the easing of the most stringent protection measures, economic activity has started to recover, but as the virus is still present and some restrictions in Slovenia and trading partners remain in place, the recovery will be gradual and its pace uneven across sectors. This year, value added is set to fall most sharply in accommodation and food service activities, arts, entertainment and recreation activities, personal service activities, and transportation. A slightly smaller, but still significant, fall is also expected in manufacturing and construction. Owing to negative external impacts and containment measures both at home and abroad, we expect a significant decline in exports and imports this year. With high uncertainty affecting investment decisions, investment will also contract substantially, particularly investment in machinery and equipment. Due to

---

* https://www.umar.gov.si/fileadmin/user_upload/napovedi/vmesna/poletna_2020/slovenska/Poletna_napoved_2020.pdf

limited movement and supply during the lockdown, coupled with increased uncertainty and precautionary saving, private consumption will also drop more strongly, although disposable income will remain similar to that last year due to the government's support measures. Government consumption will strengthen temporarily in the crisis conditions. Assuming that the coronavirus is contained in a way that does not require any new major shutdowns of activity, the gradual recovery is expected to continue in the next two years, albeit at different speeds across activities. We also expect further growth in external trade and an increase in investment, particularly investment in construction, with the support of additional funds from the EU's Recovery and Resilience Facility, as well as, with some delay, investment in machinery and equipment. However, most activities are not expected to reach pre-epidemic levels until 2022.

After deteriorating in 2020, labour market conditions are expected to stabilise gradually by the end of the forecast period. The adoption of intervention measures to preserve jobs and their extension have significantly mitigated the deterioration in labour market conditions. This year, the decline in employment and growth in unemployment will therefore be lower than would otherwise be the case given the significant decline in GDP. As a result of the extension of measures in the last week of June, the recovery next year will also be faster than predicted in the Summer Forecast. Assuming a gradual recovery of the economy, labour market conditions will be improving in the course of next year, but the average number of unemployed persons will still be higher than this year due to the expected increase in unemployment in the last quarter of this year.

Uncertainty and the risks of an even sharper decline in GDP, associated with uncertain epidemiological conditions and a possible reinstatement of more stringent containment measures, remain high. There are, however, also some upside risks to the baseline projections for next year's economic growth. Slovenia and its main trading partners have witnessed an increase in the number of infections in recent weeks, which individual countries are addressing by stepping up containment measures. A possible uncontrolled spread of the virus and thus the possibility of a new major closure of certain activities represent the greatest risk to the current recovery. The reinstatement of more stringent measures would again severely hamper business operations in service activities and industry. Companies would again face more difficulties in carrying out their activities, the number of bankruptcies would increase, and greater consequences would also be felt on the labour market. If this were to happen this year, the decline in GDP could even be 2 percentage points deeper than predicted, while bankruptcies and increased unemployment would also contribute to slower recovery. However, if the spread of the virus is effectively and permanently contained or a vaccine or a medicine is developed and made widely available soon, activity could recover more rapidly than predicted in the baseline scenario.

The coronavirus crisis has also brought Slovenia certain new opportunities or risks if it does not take advantage of them. The shortening of global value chains, i.e. a shift to suppliers in closer geographical proximity, which in fact already started before the epidemic, presents an opportunity for higher economic growth in Slovenia in the medium term, as Slovenia could attract investment from Western Europe, given its well-developed infrastructure, high-quality workforce and EU membership. The extraordinary financial package (the New Generation EU) agreed in July and, over the medium term, the new multiannual financial framework also provide an opportunity to address development challenges. These include, in particular, strengthening support for research and development, innovation and digital transformation to enhance productivity; green transformation with the transition to more sustainable economic development; and systemic adjustments to social protection systems, which are for the most part dictated by demographic trends. In the initial stages of preparations for the absorption of EU funds, which are already underway, the choice of the main objectives will be crucial to avoid excessive fragmentation of funds, which has hampered the efficiency of their use in the past. In subsequent phases, the coordination of these processes will be crucial for successful implementation of the agreed objectives and for effective support for economic recovery.

▌ Forecast of Slovenia's main macroeconomic aggregates

	2019	Autumn forecast (September 2020)		
		2020	2021	2022
GDP				
GDP, real growth in %	2.4	-6.7	5.1	3.7
GDP, nominal growth in %	4.9	-4.7	6.7	5.8
GDP in EUR billion, current prices	48.0	45.8	48.8	51.6
Exports of goods and services, real growth in %	4.4	-12.5	9.3	6.6
Imports of goods and services, real growth in %	4.2	-12.0	9.6	6.8
External balance of goods and services (contribution to growth in p.p.)	*0.5*	*-1.5*	*0.5*	*0.3*
Private consumption, real growth in %	2.7	-6.6	4.7	3.0
Government consumption, real growth in %	1.6	3.0	1.0	1.3
Gross fixed capital formation, real growth in %	3.2	-13.0	11.0	8.5
Change in inventories and valuables (contribution to growth in p.p.)	*-0.4*	*0.2*	*0.0*	*0.0*
EMPLOYMENT, WAGES AND PRODUCTIVITY				
Employment according to the SNA, growth in %	2.4	-1.5	0.3	1.3
Number of registered unemployed, annual average, in '000	74.2	87.9	92.9	83.6
Registered unemployment rate in %	7.7	9.1	9.5	8.5
ILO unemployment rate in %	4.5	5.6	5.4	4.8
Gross wage per employee, nominal growth in %	4.3	3.7*	0.9*	2.7
Labour productivity (GDP per employee), real growth in %	0.1	-5.3	4.8	2.4
BALANCE OF PAYMENTS STATISTICS				
Current account BALANCE, in EUR billion	3.2	2.8	3.1	3.2
- as a % of GDP	6.6	6.1	6.3	6.3
PRICES AND EFFECTIVE EXCHANGE RATE				
Inflation (Dec/Dec), in %	1.8	0.5	1.5	1.8
Inflation (annual average), in %	1.6	0.3	1.6	1.9
Real effective exchange rate deflated by unit labour costs	1.2			
ASSUMPTIONS				
Foreign demand (imports of trading partners), real growth in %	2.6	-10.2	7.8	4.4
GDP in the euro area, real growth in %	1.3	-7.4	5.6	2.5
Brent crude oil price in USD/barrel	64.3	42.4	47.4	49.1
Non-energy commodity prices in USD, growth	-3.6	-1.5	2.0	1.0
USD/EUR exchange rate	1.120	1.138	1.181	1.181

Source: Year 2019 SURS, BoS, ECB, EIA; 2020–2021 forecasts by IMAD.
Note: * The Autumn Forecast takes into account the methodological specifics regarding the reporting of wages (which do not include compensation paid by the government), which affects the movement of wages as shown by statistical data in 2020 and 2021. The forecasts for gross wages in this forecast and our other forecasts or scenarios (except the Summer Forecast) are therefore not directly comparable.

The Autumn Forecast is based on statistical data, information and adopted measures known at the cut-off date of 8 September 2020.

autumn forecast
of economic trends 2020

1   Assumptions of the Autumn Forecast of Economic Trends 2020

After a pronounced contraction in the first half of the year, economic activity in the euro area is recovering but remains significantly below the pre-epidemic level in most sectors. Economic activity had already declined considerably in the first quarter (-3%), but, due to a longer period of strict measures, the contraction in the second quarter was even more pronounced (-14.9%). As it was nevertheless smaller than previously expected, international institutions improved slightly their forecasts for the decline in economic activity for 2020 in August and September. Given the nature of the containment measures, in the first two quarters value added declined the most in some personal services, particularly trade, tourism and transport. A significant shock was also experienced in manufacturing, which then started to recover in May. Some service activities have also been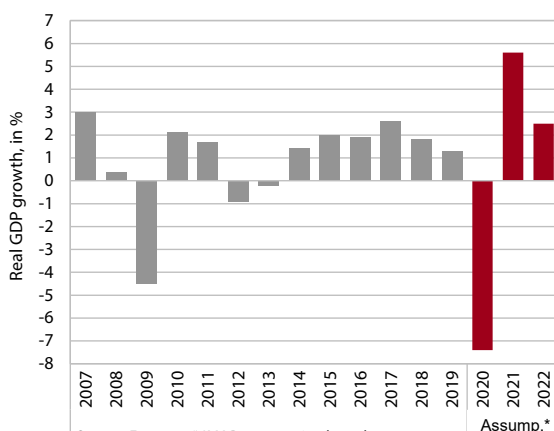 recovering rapidly after the relaxation of measures, particularly retail trade due to increased purchases to compensate for foregone purchases since March. In July, rapid activity growth was also indicated by confidence indicators, but these declined somewhat in August with a renewed tightening of some containment measures. Many economic indicators thus point to a continuation of recovery in the third quarter, but growth momentum is weakening amid high uncertainty due to the worsening epidemiological picture. Labour market conditions deteriorated markedly in the first half of the year, but without the intervention measures to preserve jobs, the deterioration would have been even greater. After April's strong rebound from the trough reached in the second half of March, financial market conditions have improved despite the resurgence of infections in several EU countries and a large number of cases in other regions of the world. The lowering of the required yields for borrowing on capital markets and stock market rises can be attributed not only to better economic data, but also to the fiscal and monetary stimulus by the world's major economies and central banks.

Table 1: Assumptions of the forecast for economic growth in Slovenia's main trading partners

Real GDP growth rates, in %	2019	2020		2021		2022
		June 2020	September 2020	June 2020	September 2020	September 2020
EU	1.5	-8.8	**-7.0**	5.7	**5.2**	**2.6**
Euro area	1.3	-9.1	**-7.4**	6.1	**5.6**	**2.5**
Germany	0.6	-6.6	**-5.8**	5.2	**4.5**	**2.6**
Italy	0.3	-11.3	**-8.6**	6.3	**5.7**	**1.8**
Austria	1.6	-6.2	**-5.8**	4.0	**4.4**	**2.4**
France	1.5	-11.4	**-8.8**	6.7	**7.1**	**2.9**
Croatia	2.9	-11.0	**-9.7**	4.6	**6.2**	**3.6**
Russia	1.3	-8.0	**-6.6**	3.4	**4.1**	**3.2**

Sources: For 2019, Eurostat; for other years, Consensus Forecasts, August 2020; Eastern Consensus Forecasts, August 2020; EC Summer Forecast, July 2020; Focus Economics, September 2020; IMF World Economic Outlook Update, June 2020; OECD Economic Outlook, June 2020; IMAD estimate.

Figure 1: After a sharp decline this year, we assume a recovery in the euro area in the next two years

Source: Eurostat; * IMAD assumption based on sources under Table 1.

Figure 2: Growth in foreign demand for Slovenian exports

Source: SURS, * IMAD assumption based on sources under Table 1. Note: * Real imports of trading partners weighted by Slovenia's share of exports to these countries.
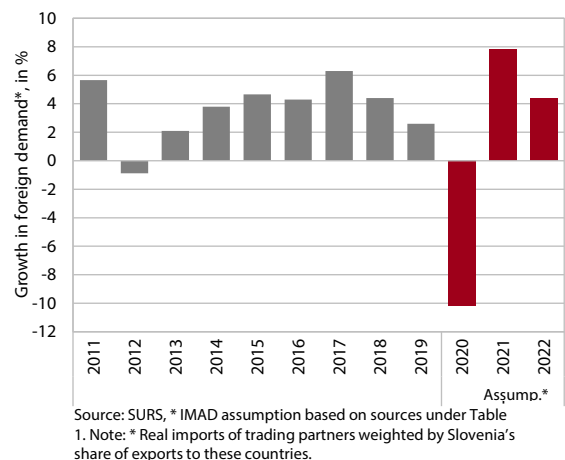
❚ Figure 3: Rapid growth in activity indicated by confidence indicators for the euro area in recent months, though in August they dropped slightly

Source: Markit.

Note: A reading above 50 signals an expansion, while a figure below 50 indicates a contraction.
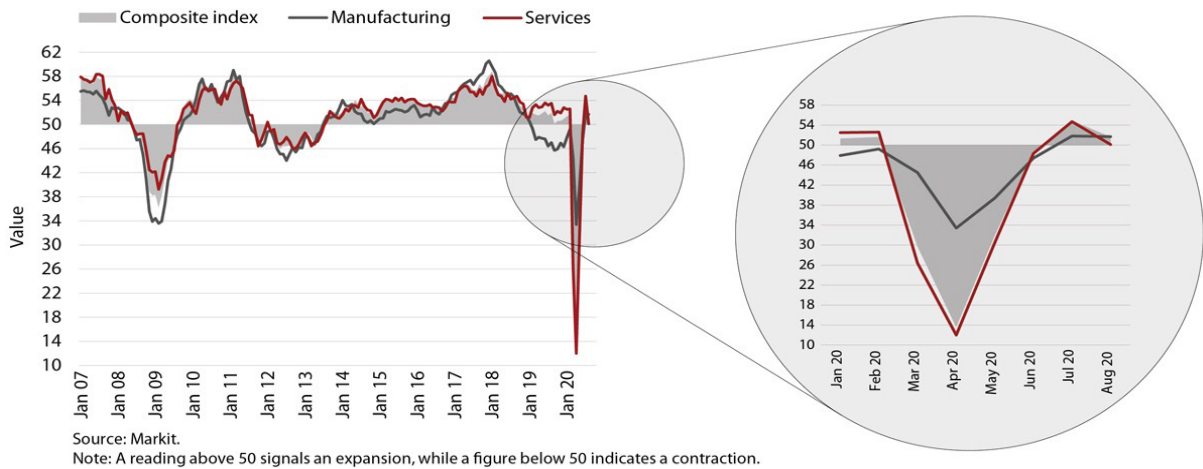
❚ Figure 4: The decline in the required bond yields is a consequence of the fiscal and monetary stimulus and better-than-expected data

Source: Bloomberg.
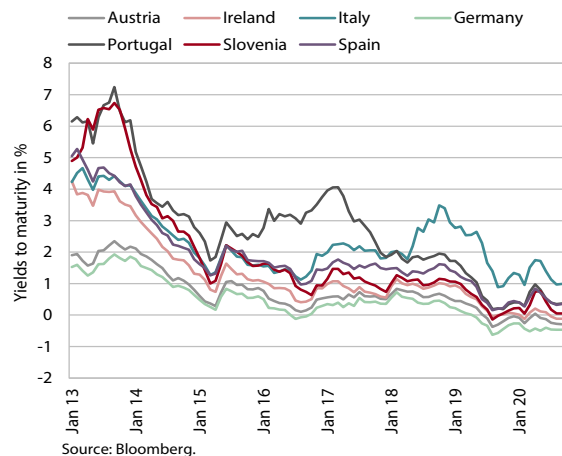
❚ Figure 5: Oil and non-energy commodity prices

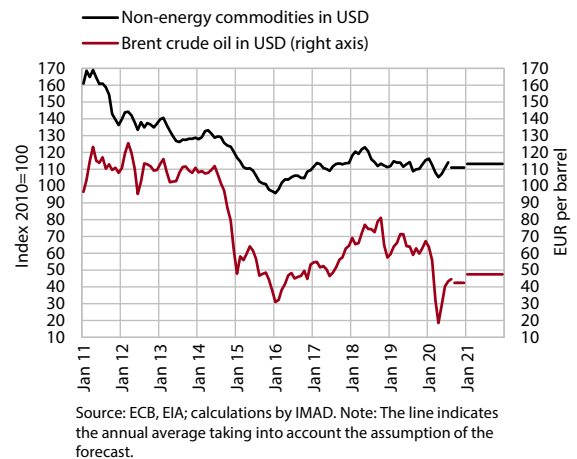Source: ECB, EIA; calculations by IMAD. Note: The line indicates the annual average taking into account the assumption of the forecast.

IMAD's Autumn Forecast is based on the latest forecasts by international institutions and assumes a recovery of activity in our trading partners in the coming quarters, but as the virus is still present and some containment measures remain in place, it will be gradual and uneven across activities and accompanied by great uncertainty. In their baseline scenarios, most international institutions assume that the spread of the coronavirus will be contained, which will prevent a renewed quarantine or lockdown of the economy. They expect the recovery to be gradual and uneven across euro area countries, with a faster rebound in those with a larger share of industrial activities. Due to the presence of the virus, some containment measures will be retained until an appropriate medical solution is found, which will have a major negative impact on services, in particular tourism. Considerable support by fiscal and monetary policy measures will limit the

negative impacts on the economy, but unemployment is nevertheless expected to rise. Together with precautionary saving, this will hamper a faster rebound in private consumption, which will otherwise be recovering with higher consumer confidence in the second half of the year. Business investment will also increase gradually, but the recovery will be slow as, amid high uncertainty, firms are likely to continue to postpone investment. Exports will also be rising in the second half of the year, with a gradual increase in foreign demand due to the recovery of global economic activity and trade.

❙ Table 2: Assumptions for oil and non-energy commodity prices and the USD/EUR exchange rate

	2019	2020		2021		2022
		June 2020	September 2020	June 2020	September 2020	September 2020
Brent Crude prices, in USD	64.3	35.8	**42.4**	37.0	**47.4**	**49.1**
Brent Crude prices, in EUR	57.5	32.8	**37.2**	34.1	**40.1**	**41.6**
Non-energy commodity prices, in USD, growth*	-3.6	-6.5	**-1.5**	2.0	**2.0**	**1.0**
USD/EUR exchange rate	1.120	1.090	**1.138**	1.085	**1.181**	**1.181**

Sources: EIA, ECB, CME; IMAD estimate.
Note: The assumptions are based on the average values and futures prices between 3 and 18 August 2020. * The structure of EMU with regard to commodity consumption.

The forecast is based on the technical assumption for the oil price, which, according to market expectations, should be lower this year than in 2019, before increasing slightly next year. We also took into account this year's decline in dollar prices of non-energy commodities and their gradual increase in 2021.[1] On the basis of price developments in the first half of the year and futures prices, the technical assumption for the average Brent Crude price underlying the forecast for 2020 is USD 42.4 per barrel. This is a significant decline on the previous year (by 34.0%), which is a consequence of lower demand for oil due to the pandemic. Taking into account the technical assumption for the EUR/USD exchange rate,[2] oil prices in euros will fall even slightly more (by 35.0%). The technical assumption for dollar prices of non-energy commodities for this year means a fall of 1.5% and for next year an increase of around 2%.

[1] The oil price assumption is based on the average futures prices and the USD/EUR exchange rates between 3 and 18 August 2020. The assumption for non-energy commodity prices is based on the ECB's data available up to 18 August 2020.

[2] The assumed USD/EUR exchange rate for the period after 18 August is equal to the average exchange rate between 3 and 18 August 2020.

2 Extensive measures to mitigate the consequences of the pandemic and support the recovery of the economy

During the first wave of the epidemic, Slovenia introduced strict measures to contain its spread, some of which remain in place for the rest of the year due to the continued presence of the virus. Because of a rising number of infections, Slovenia declared an epidemic in mid-March. To contain the spread of the virus, the government temporarily closed most educational institutions and banned the provision of the majority of non-essential services. With the improvement in the epidemiological situation, some strict containment measures began to be relaxed in April, provided that protective measures such as physical distancing, wearing masks and disinfecting hands were respected. After stemming the first wave of infections, the government declared an end of the epidemic in May. Since then the measures have been constantly adjusted with regard to the epidemiological picture.[3]

The government adopted a number of measures to mitigate the negative consequences of the epidemic for the population and the economy and assist the latter's faster recovery. The main measures of the intervention acts and the four anti-corona packages[4] to help the population were the following: reimbursement of 80% of wage compensation to workers on temporary layoff or at home due to *force majeure*, payment of basic monthly income for the self-employed and farmers and their exemption from paying social contributions, and exemption from the payment of pension and disability insurance contributions for private sector employees who worked[5] during the first wave of the epidemic. In addition, extraordinary one-off government transfers were paid to various population groups (crisis allowances for pensioners, students, recipients of social transfers, etc.), the Health Insurance Institute of Slovenia paid sickness benefits from the first day of absence, and the circle of unemployment benefit recipients was extended. These measures remained in place until the end of May, when the government declared the end of the first wave of the epidemic, with the exception of the temporary layoff measure, which was first extended until the end of June with the third anti-corona package and then until

the end of September with the fourth.[6] Additionally, the third anti-corona package also introduced the measure of partial subsidies for short-time work until the end of the year. Support for businesses was provided by the possibility of freezing advance payments of income tax and the obligation of banks to grant a one-year moratorium on liabilities under loan agreements to the affected borrowers. The second anti-corona package was aimed at providing additional liquidity to the economy through bank loans secured by a guarantee of the Republic of Slovenia (though in practice, the effect of this measure is still minimal). With the third anti-corona package, additional support for the severely affected tourism sector was ensured in the form of vouchers for all Slovenian citizens. The recovery of the economy should also be facilitated by the reduction of administrative barriers to the implementation of significant investments.

Important steps to mitigate the negative consequences of the crisis and help the economy recover have also been taken, or proposed, by the European Commission. To mitigate the impact of the coronavirus pandemic, the European Commission allows EU Member States more flexibility in the use of funds from the current multiannual financial framework[7] and state aid. Additionally, it has ensured resources for direct response to the COVID-19 crisis and resources from the EU Solidarity Fund. This makes it possible for Member States to quickly respond to a deterioration in socio-economic conditions due to the COVID-19 epidemic. A EUR 540 billion package (3.9% of EU GDP from 2019) to support economic recovery was adopted in the first months of the epidemic.[8] At the end of July, EU Member States reached an agreement on another financial package for the recovery of the EU economy after COVID-19. The package, in the overall amount of EUR 1.824 billion (13.1% of EU GDP from 2019), consists of the classical multi-annual financial framework for 2021–2027 in the total amount of EUR 1.074 billion and an extraordinary recovery instrument ("Next Generation EU") amounting to EUR 750 billion (EUR 390 billion in grants and EUR 360 billion in loans). Slovenia was assigned EUR 2,098 billion in grants

---

[3] For more information, see https://www.gov.si/teme/koronavirus-sars-cov-2/.

[4] For more detailed information on the packages and additional measures, see the Summer Forecast.

[5] This was the basis for the payment of a crisis allowance of EUR 200 by the employer.

[6] The fourth "anti-corona package" also extended the entitlement to reimbursement of wage compensation for the duration of imposed quarantine until not later than the end of September, expanded the list of providers that can accept tourism vouchers, provided funds for financing additional staff in social welfare institutions and the Employment Service of Slovenia, and established a legal basis for introducing a voluntary mobile application for informing people about contacts with infected persons.

[7] Also by the release of unspent resources and cohesion policy resources (under the structural and investment funds) – i.e. investment incentive in response to the COVID-19 outbreak to support health care systems, small and medium-sized enterprises, and the labour market.

[8] Within that, EUR 240 billion in precautionary loans from the European Stability Mechanism (ESM) to support Member States in their response to the pandemic crisis, EUR 200 billion from the Pan-European Guarantee Fund of the European Investment Bank (EIB) for loans to enterprises (small and medium-sized enterprises in particular) and EUR 100 billion in the form of favourable loans from the pan-European short-time work scheme (SURE) to prevent lay-offs.

/ Figure 6: In EMU, lending to enterprises has accelerated year on year, partly due to the ECB measures, but in Slovenia no acceleration has yet been seen

Source: BoS.

/ Figure 7: Assessment of the measures to mitigate the COVID-19 epidemic

Source: IMAD estimate and assumptions, based on data from FURS, MF, MJU and ESS.
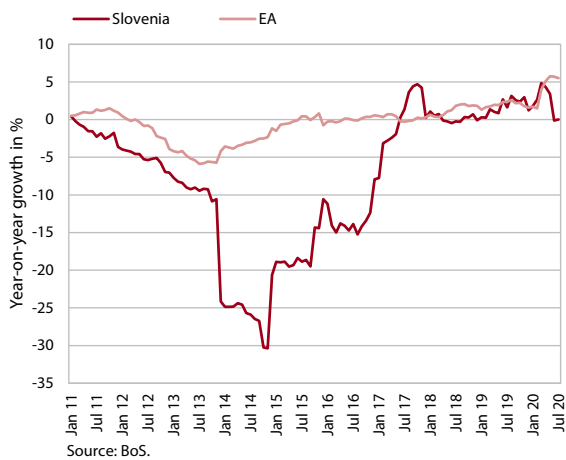
and EUR 3,593 billion in loans under this instrument.[9] The European Commission will obtain resources for its financing by borrowing on the financial markets, but the Union will also work towards introducing new own resources.[10]
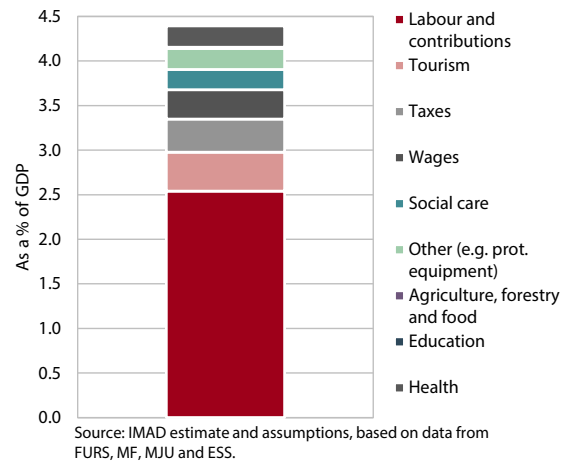
Supportive fiscal policies and the provision of liquidity to the economy and citizens via commercial banks are strongly supported by the monetary policy of the ECB. It is implemented through a comprehensive programme of securities purchases until the middle of 2021 (for now in the amount of EUR 1,500 billion or 12.6% of euro area GDP from 2019) and the increased volume of loans to commercial banks at exceptionally low interest rates. The ECB has also eased capital requirements for commercial banks and lowered criteria for collateral accepted for Eurosystem credit operations for the duration of the crisis, while banks should not pay dividends during this period. The ECB's measures have boosted bank lending activity in the euro area and lending to enterprises accelerated year on year, but in Slovenia this has not yet been the case.[11]

The measures financed from domestic and EU sources are key in preventing the epidemic from wreaking even deeper and longer-lasting consequences on the economy and to support the expected recovery of the economy in the coming years. In the Autumn Forecast for 2020, we take into account direct measures related to COVID-19, in the amount of just above EUR 2 billion or 4.4% of estimated GDP[12] (Figure 7), which are financed from both domestic and EU sources. The estimate is based on information on already executed payments of individual measures according to state budget data and data of other institutions. The expected recovery of the economy, supported by strong investment activity on the part of the government, will also be related to the upcoming closure of the current financial framework for EU funds absorption (by 2023). We also assume that the financing of projects will be supported by resources from the "New Generation EU" instrument, the Recovery and Resilience Facility.[13]

[9] The "Next EU generation" instrument is based on three pillars: the Recovery and Resilience Facility (EUR 1,589 million in grants for Slovenia) to support investments and reforms essential to a lasting recovery, to improve the resilience of Member States, and to support the green and digital transitions; React EU (EUR 312 million) for investment to repair labour markets, including by providing support to small and medium-sized enterprises; the Just Transition Mechanism (EUR 129 million for regions which have had or will have higher costs due to the structural changes necessary for the transition from fossil-intensive industries to a low-carbon economy and society by 2050); and Rural Development (EUR 68 million).

[10] A new own resource, which will be based on national contributions calculated on the amount of non-recycled plastic packaging waste in individual Member States, will be introduced in 2021. Next year, the Commission will also put forward a proposal for a carbon border adjustment mechanism and a digital levy (to be introduced by 2023).

[11] Lending to households, especially in the form of consumer loans, has also been easing in Slovenia since the end of last year, when the Bank of Slovenia tightened the borrowing conditions for households with a binding macroprudential instrument.

[12] Without the measures to mitigate the COVID-19 epidemic, GDP would have declined by at least 3 percentage points more in 2020. This was assessed on the basis of a multiplier. After 2009 the estimates of multipliers increased (see, for example, Oliver Blanchard and Daniel Leigh: "Growth Forecast Errors and Fiscal Multipliers") and were often substantially above 1. Our estimate is that the multiplier for the current year is around 0.8. Its decline is a consequence of two factors: (i) the measures and protective practices are changing consumer behaviour (forced saving) and (ii) some fiscal incentives have been implemented or will be implemented in the second half of the year (and will have an additional positive effect next year).

[13] The government confirmed the first starting points for the use of these resources (grants and loans) at the end of August 2020. In the coming weeks, it will set priorities and define reforms and projects in more detail ("Starting Points for the Preparation of the Recovery and Resilience Plan", Government of the Republic of Slovenia, 27 August 2020). Once the final plan has been confirmed in Slovenia, it will also be submitted for approval to the EU leaders.

3 Autumn Forecast

3.1 Economic growth

The spread of the COVID-19 epidemic since March and urgent measures to protect health significantly affected economic activity already in March and consequently in the first quarter as a whole. The decline in short-term indicators of economic activity in March was pronounced. Real GDP was down 2.5% year on year in the first quarter of the year. Because of increased uncertainty and the closure of all non-essential service activities, in March activity fell sharply in trade, transportation and tourism-related sectors (accommodation and foods service activities), which was reflected in a fall in private consumption in the first quarter. The value of output also declined in construction, albeit less than in other activities. At the beginning of the year, construction investment was otherwise still rising due to high activity in this sector, while investment in machinery and equipment, having already been lower year on year in the last quarter of 2019 due to the moderation of international activity, dropped sharply. This year, it fell further, given the worsening of external conditions caused by measures to contain the coronavirus spread and with high uncertainty affecting investment decisions. Strict containment measures in other EU countries significantly affected demand for Slovenian goods and services and thus external trade movements.[14] Exports and imports dropped sharply, the decline being more pronounced in trade in services, particularly travel services. Production volume in manufacturing also fell in March, especially in the manufacture of transport equipment, while production in the pharmaceutical and food-processing industries increased. Among consumption aggregates, in the first quarter only final government consumption strengthened year on year.
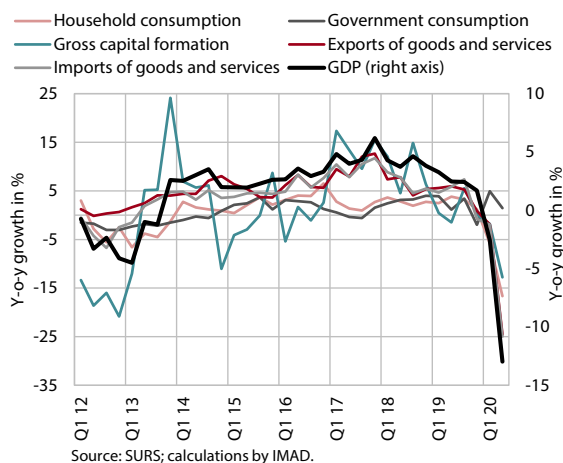
In the second quarter, the decline in economic activity deepened, as expected, although activity started to recover slowly after the largest fall in April. Real GDP fell sharply year on year, by 13%. Given the significant contraction of activity over the duration of protection measures, the decline in value added arose mainly from service activities, particularly accommodation and food service activities, trade, and transport. The volume of entertainment, sports, recreational and personal services, which had been the hardest hit by restrictions and protection measures, decreased the most. After the sharp fall in April, they started to recover with the release of containment measures, but as certain restrictions will be retained, the recovery will be slow. As a result of quarantine and the closure of all non-essential services and shops, coupled with increased uncertainty and precautionary saving, household consumption also fell notably. The value of construction output and construction investment declined as well, while the fall in investment in machinery and equipment deepened. Stringent containment measures were also reflected in a further decline in exports and imports, particularly in services trade in the segments of travel and transport. After April's sharp decline, goods trade otherwise started to grow at the monthly level in May and continued to rise in June, partly also due to faster recovery in some main trading partners. Trade in services did not yet see any visible recovery in this period. Although enterprises in industry were not ordered to close down in Slovenia, some of them did while others curtailed their operations, this mainly to ensure the necessary distance between workers or because of a shortage in production materials due to interrupted supply chains and a fall in orders due to lower foreign demand.[15] This led to a sharp fall in value added in manufacturing, where the largest decline

Figure 8: The fall in economic activity deepened in the second quarter

Source: SURS; calculations by IMAD.

Figure 9: Exports of services fell more than exports of goods

Source: SURS.

---

[14] Exports to Italy declined in particular, due to the closure of most shops and a complete halt in non-essential production in the second half of the month.
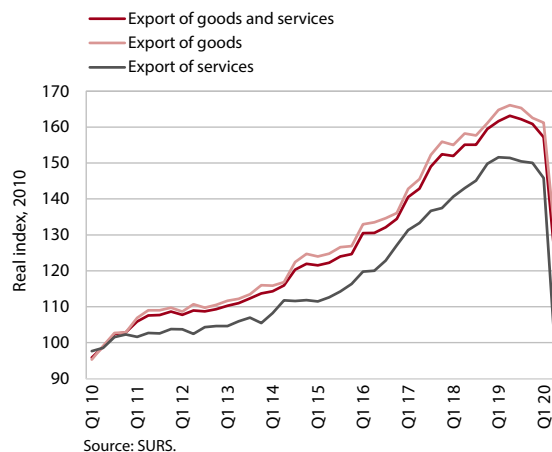
[15] In mid-April, most companies resumed production, the rest at the beginning of May.

Figure 10: Business and consumer confidence in the economy improved in August for the fourth consecutive month

Source: SURS.
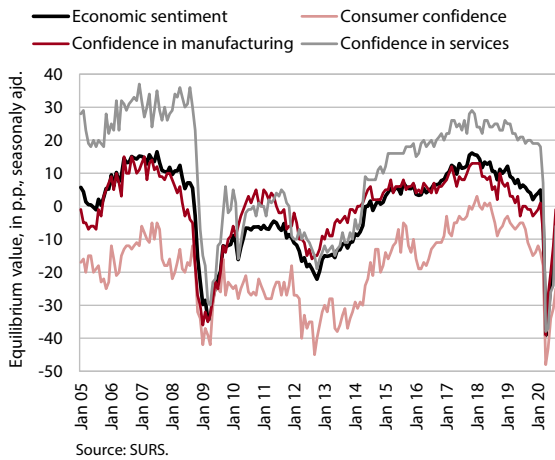
Figure 11: Electricity consumption and freight traffic indicate fluctuations in recovery

Source: DARS internal reports, ENTSO-E and Bruegel.org. Notes: *For traffic, working-day adjustment was made. For electricity only consumption on working days between 8.00 and 18.00 is considered. The percentage change is corrected for temperature.
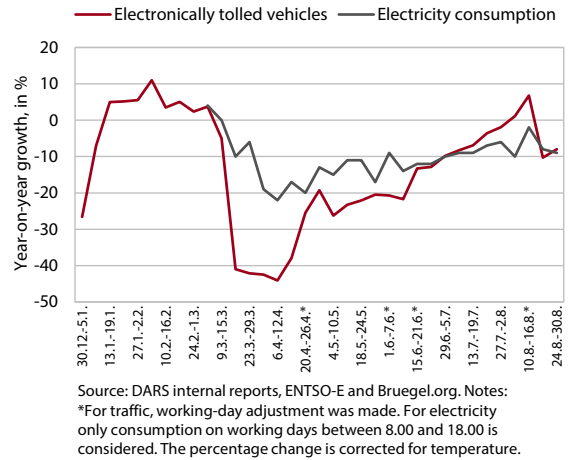
Figure 12: All manufacturing activities except the pharmaceutical industry recorded a decline in the second quarter

Source: SURS; calculations by IMAD. Note: * IMAD estimate.
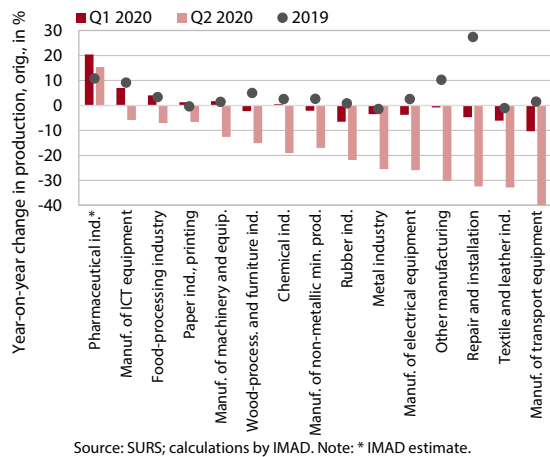
Figure 13: Service activities recorded the largest declines in April, the deepest was in accommodation and food service activities

Source: SURS; calculations by IMAD. Note: * including real estate.
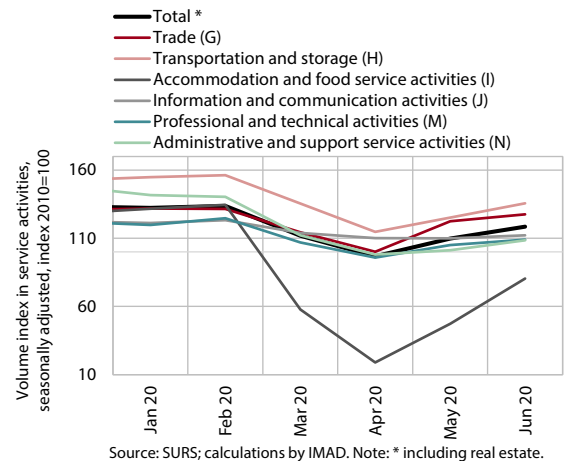
was recorded by activities related to the car industry.[16] Only pharmaceutical production increased year on year. Manufacturing activities also started recovering gradually after the sharp decline in April. In particular the manufacture of transport equipment increased in May and June, while production of most intermediate goods and the sectors related to transport, which was severely hampered during this period, recovered more slowly.

For the third quarter we expect a quarterly improvement or a smaller year-on-year decline in economic activity, but due to the high uncertainty related to the increase in the number of coronavirus cases, fluctuations in economic activity have already started to occur. Expectations of business and consumers

in Slovenia and the EU started to improve gradually in May, after plunging to historic lows in April. In August, confidence thus improved for the fourth consecutive month in Slovenia, which is related to the gradual loosening of containment measures, but it nevertheless remains significantly lower than before the global spread of the coronavirus. The recovery of economic activity is also indicated by the indicators of electricity consumption and freight traffic on Slovenian motorways, which had already been close to last year's levels in the first half of August before dropping somewhat again in the second half of the month. With the virus still present and the number of cases again rising in recent weeks, the situation remains uncertain and further fluctuations in economic activity can be expected.

---

[16] Such as motor vehicle production and the rubber and metal industries.

For 2020 we project a 6.7% decline in GDP. The assumption of the Autumn Forecast is that, as the virus is still present, some measures to contain its spread remain in place, so the recovery will be gradual and uneven. In view of the continued presence of the virus and the resurgence of infections in early September, the situation remains uncertain and further fluctuations in economic activity can be expected. In the absence of stricter containment measures in Slovenia and other EU countries, we can thus expect a rebound in activity in the third and last quarter of the year, following the sharp decline in the second quarter. GDP will remain lower in the second half of the year than in the same period of 2019, but the year-on-year declines will gradually decrease. Forecasts for Slovenia's main trading partners for this year have improved somewhat since June, and with the recovery of economic activity and, in particular, the agreement at the EU level on the financial package for faster recovery of the EU economy, confidence indicators also improved significantly in the period from May to July. Despite a

renewed minor fall in some indicators in August, this will result in a somewhat smaller annual decline in GDP than predicted in the Summer Forecast.[17] With further gradual recovery, GDP is predicted to increase by 5.1% in 2021 and by 3.7% in 2022. In 2022 it will thus reach the level before the outbreak of the epidemic.

This year's decline in GDP will result from a fall in value added in most sectors, given the significant contraction of activity over the duration of protection measures. This year, value added is set to decline the most in accommodation and food service activities, arts, entertainment, sports and recreation activities, personal service activities, and transportation. A sharp fall is also expected in manufacturing and construction. In these sectors, the decline in orders, interrupted or hampered supply chains and the absence of foreign tourists contributed to a sharp fall in activity over the duration of the stringent containment measures. After the sharp fall in activity in April, the stringent measures have

Figure 14: Contributions of value added growth to GDP growth, by activity

Source: SURS; IMAD forecast.
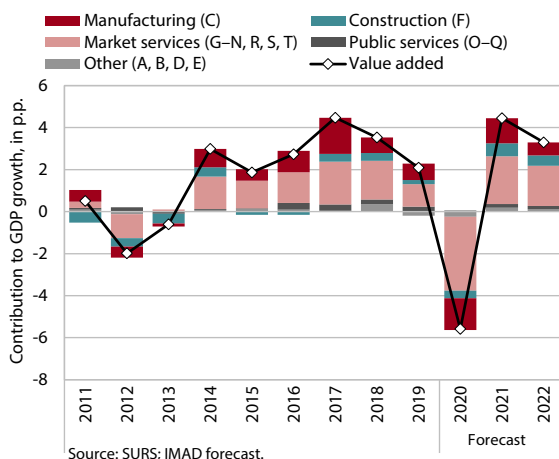
Figure 15: Contributions of expenditure components to GDP growth

Source: SURS; IMAD forecast.
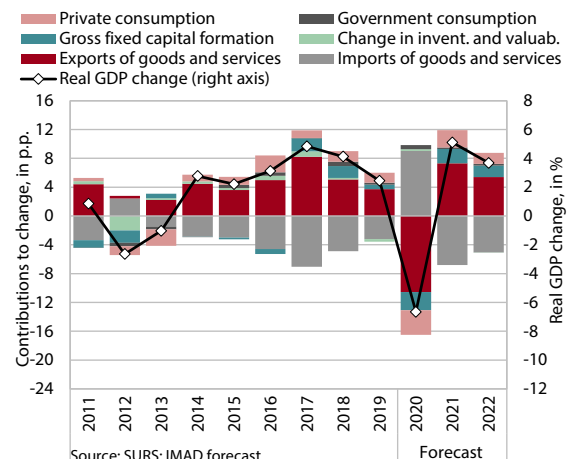
Table 3: Forecast for economic growth

Real growth rates, in %	2019	2020		2021		2022
		June 2020	September 2020	June 2020	September 2020	September 2020
GDP	2.4	-7.6	**-6.7**	4.5	**5.1**	**3.7**
Exports	4.4	-15.9	**-12.5**	9.7	**9.3**	**6.6**
Imports	4.2	-16.2	**-12.0**	10.1	**9.6**	**6.8**
External balance of goods and services (contribution to growth in p.p.)	*0.5*	*-1.2*	***-1.5***	*0.6*	***0.5***	***0.3***
Private consumption	2.7	-6.9	**-6.6**	4.0	**4.7**	**3.0**
Government consumption	1.6	3.0	**3.0**	0.7	**1.0**	**1.3**
Gross fixed capital formation	3.2	-15.5	**-13.0**	10.0	**11.0**	**8.5**
Change in inventories and valuables (contribution to growth in p.p.)	*-0.4*	*-0.4*	***0.2***	*0.0*	***0.0***	***0.0***

Source: SURS; 2020-2022 forecast by IMAD.

[17] https://www.umar.gov.si/fileadmin/user_upload/napovedi/vmesna/poletna_2020/slovenska/Poletna_napoved_2020.pdf

Figure 16: Private consumption is expected to recover in the next two years after this year's deep decline

Change in saving rate (right axis)
Private consumption (left axis)
Disposable income* (left axis)

Source: SURS; IMAD forecast.
Note: * deflated by private consumption deflator.

Figure 17: The recovery of investment after this year's sharp decline is expected to derive mainly from investment in buildings and structures

Other
Machinery and equipment
Buildings and structures
Gross fixed capital formation (right axis)

Source: SURS; IMAD forecast.

been gradually relaxed and the economy has started to recover, but the recovery is uneven and its speed varies across activities. Only a few activities are expected to see positive growth this year (for example public services and the pharmaceutical industry).

All consumption aggregates except government consumption are set to decline this year. We expect a substantial decline in international trade and investment. Private consumption is also projected to fall further this year. After a sharp decline in the second quarter, consumption will pick up in the remainder of the year but remain lower than in the same period of last year due to the ongoing containment measures, restrictions on travel to other countries and increased uncertainty. The decline in spending will also be due to increased unemployment and uncertainty in general, which is reflected in the postponement of non-essential purchases and increased saving. Disposable income is otherwise expected to remain similar this year on average to that in 2019. In addition to January's changes in the minimum wage and personal income tax, this will be largely due to government measures to mitigate the loss of income as a consequence of the epidemic (see Section 2, second paragraph). With increased uncertainty and a drop in production in the first half of the year, which is also reflected in low capacity utilisation, business investment will be scaled back or postponed. With the aggravated conditions in the international environment, particularly businesses in the tradable sector will significantly reduce investment in machinery and equipment this year. For this year we also expect lower investment in construction, but here the decline will be less pronounced due to stronger government investment. Imports and exports will be severely affected mainly by a fall in global tra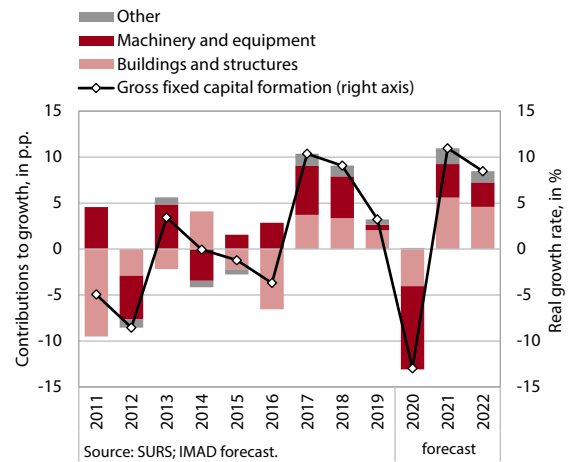de, international trade barriers and strict containment measures in EU countries. In most services the decline will be larger than in goods (it is likely to be most pronounced in the travel segment, although it will also be considerable in transport). Goods exports will also drop relatively

sharply, mainly due to the decline in April. The recovery of goods trade, having already begun in May and June, is expected to continue throughout the rest of the year, supported by a rebound of activity in Slovenia's trading partners, growth in world trade and a gradual recovery of the domestic economy. Government consumption will strengthen temporarily under the impact of measures adopted in the crisis conditions.[18]

In the next two years, all GDP aggregates on the expenditure side are expected to recover to pre-epidemic levels, while growth in government consumption will moderate. Investment, imports, exports and private consumption are set to rebound to pre-crisis levels in the next two years. Growth in domestic activity and foreign demand will be supported by measures for the recovery of the economy at both the national and EU levels, relatively favourable financing conditions, and looser monetary policy. Private consumption will rise amid growth in disposable income, while the saving rate will decline slightly, but remain higher than before the coronavirus crisis due to general uncertainty. Investment activity is also expected to grow. The increase in investment from this year's low level will reflect the recovery in the international environment, which will contribute to the strengthening of private investment. Growth in government investment will continue. Investment growth will also be positively affected by the additional EU funds from the Recovery

---

[18] The temporarily higher growth will be due to the increased purchases of protective equipment this year and a decline in revenues of public institutes and other general government units from the sale of goods and services for the market, which is hampered in the current circumstances (as this is a deductible category, their decline is strengthening government consumption this year). Growth otherwise also arises from employment growth in the general government sector. This has strengthened year on year especially in public administration due to the beginning of preparations for the Slovenian Presidency of the Council of the EU in 2021. It remains high in the health sector, while it has slowed in education.

and Resilience Facility. Growth in exports and imports will continue. Trade in goods will be recovering faster, while trade in services, particularly those related to travel, transport and leisure, will not normalise until the spread of the virus is effectively contained. Growth in government consumption will ease in the next two years due to the expected lower extraordinary purchases of protective equipment and a gradual normalisation of revenues of public institutes and other general government units from sales of goods and services for the market.[19] Employment growth in the general government sector will be gradually declining (towards 1%). It is likely to remain highest in the health sector.

In 2021 and 2022, we expect a further recovery in value added, but this will be uneven across activities. The recovery at home and abroad will be reflected in value added growth in the next two years. We expect a faster recovery in manufacturing, this related to the recovery in trading partners and rising foreign demand. Value added in manufacturing should thus already return to pre-crisis levels before the end of the forecast period. Growth in the pharmaceutical industry will continue, while particularly some industries related to the car industry (such as the metal industry) will be recovering more slowly, partly also due to its expected restructuring. A rapid recovery is also expected in the construction sector, where investment growth will be boosted by additional EU funds from the Recovery and Resilience Facility. The recovery of services, which were relatively harder hit by the coronavirus crisis, will be more diversified, as in 2021 certain measures (wearing masks, physical distancing and restrictions on public gatherings) are likely to remain in place, which will make it difficult for businesses to fully normalise their activities, especially in travel, accommodation and food service activities and arts, entertainment, recreation and sports activities. On the other hand, services more closely linked to manufacturing and construction (architectural, engineering, consultancy and employment services) will reach pre-crisis levels faster. Value added growth in public services will be moderate, resulting mainly from increased employment in health and social work.[20]

3.2 The labour market

The adoption of intervention measures to preserve jobs and their extension have significantly mitigated the deterioration in labour market conditions; the decline in employment and growth in unemployment will therefore be lower than would otherwise have been the case given the significant decline in GDP.

[19] These revenues being a deductible category within government consumption, their expected increase is reducing growth in government consumption.

[20] Expectations about further growth in employment in these activities are related to the increase in personal assistance at home, increased demand for healthcare services, and the expected increase in employment in social welfare institutions. In addition to the already confirmed public sources under the fourth anti-corona package, another possible source of finance is EU funds.

After the relatively favourable first two months of the year, labour market conditions rapidly deteriorated in the next two months following the adoption of measures to contain the coronavirus epidemic in mid-March. A significant year-on-year decline in employment and increase in registered unemployment occurred particularly in April (by 0.9% and 19.9% respectively).[21] Due to a gradual lifting of containment measures, the resumption of most activities and the adoption of intervention legislation targeted at the labour market, labour market conditions had stabilised markedly by mid-year. Nevertheless, the number of employed persons remained 1.6% lower year on year at the end of June. The decline was particularly pronounced in accommodation and food service activities, manufacturing, trade, and administrative and support service activities, which include employment activities. With intervention measures still in place, the number of registered unemployed persons dropped in August for the second consecutive month, amounting to 88,172 by the end of the month (which is, however, still almost a quarter more than one year before). In the second half of the year, the stabilisation of labour market conditions is expected to continue amid the remaining labour market measures and the recovery of economic activity. This is also indicated by the short-term indicator of expected employment, which, after a sharp fall, has been rapidly rising since May.[22] Employment is

Figure 18: This year's fall in employment and growth in unemployment were significantly mitigated by government measures

Employment according to the national accounts statistics (left axis)
Registered unemployed* (right axis)

Sources: SURS. Note: * The data for Q3 is the average of July and August.
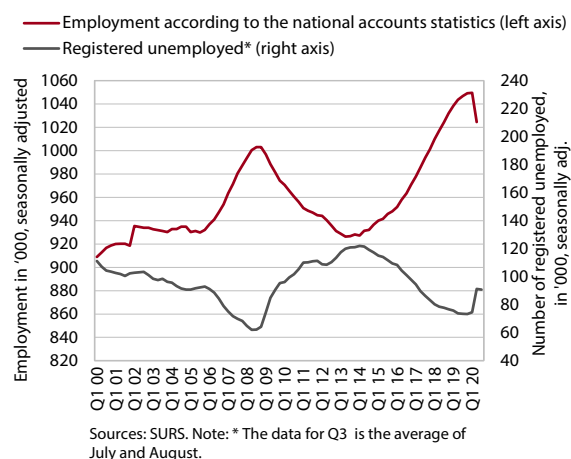
[21] According to data from the Survey of Active and Inactive Population for the second quarter, the labour market groups already the most at risk were affected the most. Compared with the same period of last year, the number of people in temporary employment decreased by around a third. Temporary employment also includes student work, which actually fell by half. Unemployment therefore increased the most especially among young people.

[22] Unemployment is otherwise expected, exceptionally, to increase slightly again particularly in October, with the expiry of the measure of reimbursement of wage compensation for temporarily laid-off workers and the transition to the scheme of partial subsidising of the reduced hours of full-time workers. In the case of partial subsidies of full-time work, employers are reimbursed a smaller part of labour costs than in

❚ Table 4: Forecasts for employment and unemployment

In %	2019	2020		2021		2022
		June 2020	September 2020	June 2020	September 2020	September 2020
Employment according to the SNA, growth	2.4	-2.4	**-1.5**	-0.3	**0.3**	**1.3**
Number of registered unemployed, annual average, in '000	74.2	94.6	**87.9**	102.7	**92.9**	**83.6**
Registered unemployment rate	7.7	9.8	**9.1**	10.5	**9.5**	**8.5**
ILO unemployment rate	4.5	6.5	**5.6**	5.9	**5.4**	**4.8**

Source: SURS; 2020–2022 forecast by IMAD.

❚ Figure 19: Employment expectations indicate a further stabilisation of labour market conditions

Source: Eurostat.
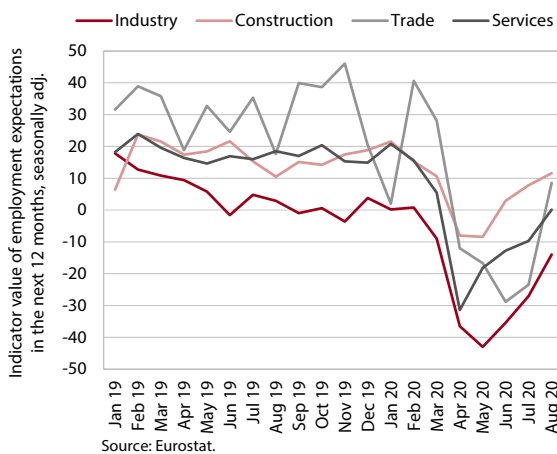
consequently expected to be 1.5% lower this year, while the number of unemployed persons will be around a fifth higher. Assuming that the economy gradually recovers, labour market conditions will improve in the course of next year, but the average number of the unemployed will be higher year on year due to this year's increase. In 2022, the improvement is expected to continue.

The movement of the statistically calculated average gross wage in 2020 and 2021 mainly reflects the methodology for calculating the average gross wage, the payment of various allowances during the epidemic and the increase in the minimum wage. In the first two months, the year-on-year growth of the average wage was still strong (4.7%), reflecting the increase in the minimum wage, a general shortage of workers and the agreements with public sector trade unions from 2018. Since March, the movement of the average wage has mainly been influenced by the method of calculating wages in connection with intervention measures for maintaining employment, as earnings statistics consider as wage only the part of the wage compensation paid by the employer and not also the part paid by the government. With many employed

persons temporarily laid off and due to the measure of partial subsidising of full-time work, the wage bill paid by employers has decreased significantly and the number of wage recipients has declined even more.[23] This has led to significant fluctuations in the level of wages paid and the number of wage recipients, which contributes to significant monthly fluctuations in the statistically calculated average wage. This, together with allowances for work in crisis conditions,[24] is the reason for this year's strong wage growth despite the decline in economic activity and to a great extent also determines the movement of the (thus calculated) wage next year. Due to the gradual return of workers included in the measures and the absence of the payment of extraordinary allowances, year-on-year wage growth is expected to decline in the coming months.[25] Together

---

the case of reimbursement of wage compensation for temporarily laid-off workers, which, in our estimation, could influence their decisions to reduce the number of workers and thus contribute to a rise in unemployment.

[23] According to the methodology for reporting wages (the statistical survey Earnings of Persons in Paid Employment by Legal Persons), employers report the number of wage recipients and the level of wage compensation only in the amount that is paid from their resources. As wage compensation (or part of wage compensation) that is not paid by the employer but by the government is not reported, the statistically recorded wage bill or the number of wage recipients can be significantly lower. The actual total compensation and receipts per person are therefore higher than the reported wage bill (paid by employers) by the amount of government subsidies.

[24] A temporary introduction of allowances for hazardous work and for higher workloads and the payment of the bonus for work in high-risk conditions (according to the collective agreement) in the public sector and the payment of the allowance for work during the epidemic in the private sector.

[25] Because of the methodological specifics related to the earnings statistics, this time the forecast of labour market developments is strongly influenced not only by the responsiveness of the labour market to economic activity, but also by the estimate of the share of workers included in labour market intervention measures. To assess the impact of the methodological specifics on the average gross wage at the aggregate level, we had to assume, for each month in which the measures were in effect, i) the number of employed persons who were, or will be, included in the temporary layoff and short-time work schemes by activity and ii) the distribution of employed persons by the level of gross wage by activity. The assumption of the number of employed persons included in the temporary layoff scheme is based on partial data from the ESS, while the assumption of the number of employed persons according to the level of gross wage is based on SURS data on the number of persons in paid employment by the amount of gross earnings by activity. On the basis of the distribution of employed persons by the level of gross wage, we estimated the number of persons receiving wages lower than or equal to the average wage by activity. Then we assessed the movement of the average gross wage in individual months using the estimate of the number of persons covered by individual intervention measures by activity and the distribution of employed persons by the level of gross wage by activity. A considerable risk to the forecast for the average gross wage thus also arises from the accuracy of assumptions about the number of persons who were and will be included in the job retention schemes.

Table 5: Forecast for growth in the average gross wage per employee

Growth rates, in %	2019	2020		2021		2022
		June 2020	September 2020	June 2020	September 2020	September 2020
Gross wage per employee – nominal	4.3	1.4*	3.7*	0.7*	0.9*	2.7
- private sector	3.9	-1.0*	1.9*	0.7*	1.1*	2.4
- public sector	5.4	4.9*	6.2*	0.8*	1.0*	3.3
Gross wage per employee – real	2.7	1.1*	3.4*	-1.0*	-0.7*	0.8
- private sector	2.2	-1.4*	1.6*	-1.0*	-0.5*	0.5
- public sector	3.7	4.5*	5.9*	-0.9*	-0.6*	1.4

Source: SURS; 2020–2022 forecast by IMAD.
Note: The Autumn and Summer Forecasts 2020 take into account the methodological specifics regarding the reporting of wages (i.e. excluding compensation paid by the government).

Figure 20: Intervention measures for maintaining employment led to a decline in the wage bill paid by employers and an even larger decline in the number of wage recipients, so the growth of the average wage increased significantly
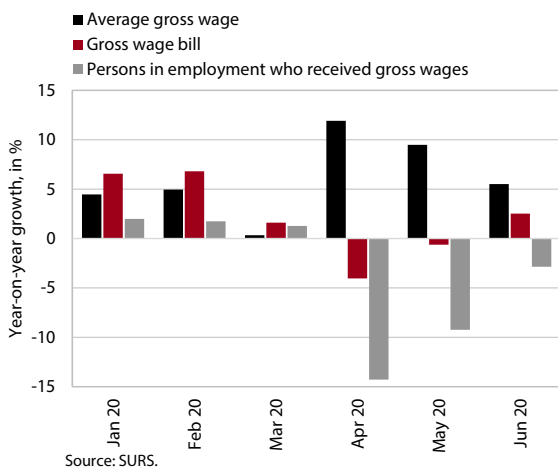
Source: SURS.

with the lifting of measures for preserving jobs, this will also affect the level of the statistically recorded wage next year: it will therefore remain at a similar level as this year, as no major upward pressures on wage growth are expected in the projected economic conditions of a gradual recovery. These factors affect wage movements in both the public and the private sectors, but in the private sector the methodological effect of temporarily layoffs is significantly higher.

In the circumstances of the epidemic and measures to preserve jobs, the movement of the average wage does not reflect the movement of earnings of employed persons or the basis for social security contributions. This is a consequence of the above-mentioned methodology for the statistical reporting of wages, which covers only the part of wages paid by employers. However, an estimate of the wage bill regardless of the payer (i.e. an estimate of the basis for social security contributions), which, in addition to the wage compensation paid by employers, also includes

government expenditure on reimbursement of wage compensation for temporary lay-offs and short-time work, shows an increase of 4.0% in 2020 and 1.6% in 2021.

3.3 Inflation

This year, inflation will be lower on average than in 2019, mainly due to lower energy prices, while in the next two years it will increase to the pre-epidemic level, under the assumption of moderate economic recovery. After rising to around 2% early in the year under the impact of higher growth in (unprocessed) food prices, inflation fell significantly following the outbreak of the epidemic, mainly due to lower prices of energy. Lower prices of oil products and electricity year on year are also the main reason for the low inflation rate in the year as a whole (0.3%). In other groups, price rises are expected to be mostly moderate this year; somewhat faster growth will be recorded for services related to housing, health care, personal care and food. With a gradual recovery of the economy, inflation will increase somewhat in 2021 and 2022, in 2021 largely due to higher energy prices and in 2022 also due to higher growth in prices of services.

Figure 21: This year's low inflation is mainly a consequence of a fall in energy prices
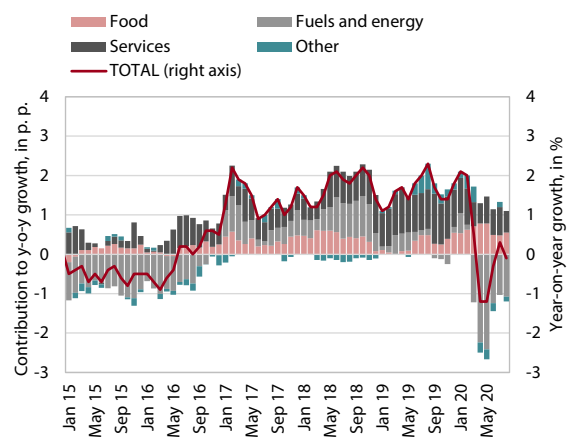
Source: SURS; calculations by IMAD.

Table 6: Inflation forecast

In %	2019	2020		2021		2022
		June 2020	September 2020	June 2020	September 2020	September 2020
Inflation – Dec/Dec	1.8	0.7	**0.5**	1.4	**1.5**	**1.8**
Inflation – annual average	1.6	0.4	**0.3**	1.7	**1.6**	**1.9**

Source: SURS; 2020–2022 forecast by IMAD.

Figure 22: Inflation will return to the pre-epidemic level in the next two years

Source: SURS, forecast by IMAD.
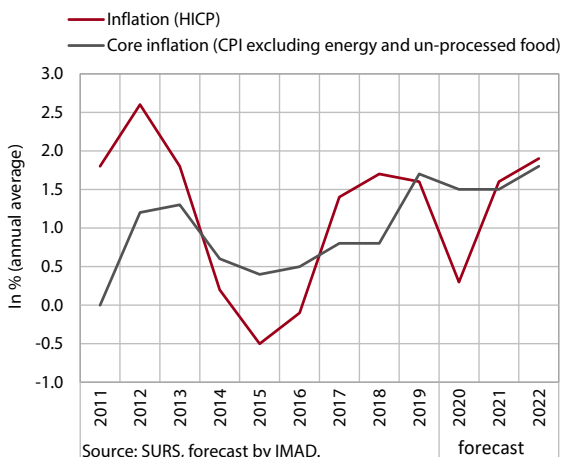
3.4 Current account

The current account surplus as a share of GDP will remain at a high level of more than 6% in 2020–2022. The persistence of the substantial surplus relative to GDP is a consequence of strong private sector saving, also owing to the increased uncertainty related to the coronavirus crisis. Investment is set to decline this year and then rise moderately in the remainder of the forecast period.[26] The surplus will continue to be underpinned by trade in both goods and services, but this year the impact of services trade will decline due to a significant fall in travel and transport services during this crisis. This will be the main factor in the decline of the surplus from last year's 6.6% of GDP to 6.1% of GDP this year. In the next two years, the surplus will increase slightly mainly due to a wider surplus in *services trade* related to the recovery in transport, travel and other services. Meanwhile, the surplus in goods trade will decline, as goods exports will be rising more slowly than imports, which will be supported by growth in domestic investment and a pick-up in consumption. Price movements will have a significant positive impact on the balance of goods trade

this year and a neutral impact in the next two.[27] More specifically, as a result of a fall in energy and industrial producer prices this year, import prices will decline more than export prices, which will improve the terms of trade by 1.4% and increase the trade surplus in goods by more than half. The deficit in the balance of *primary income* will narrow in the forecast period, this year on account of lower payments of dividends and reinvested profits of foreign investors as a result of lower profits due to the economic crisis. In the next two years, inflows are expected to be higher, as Slovenia will receive more subsidies from the EU budget.[28] However, the deficit in *secondary income* will widen and thus contribute slightly to a moderation of the current account surplus. The moderation will be mainly a consequence of lower receipts from the Economic Social Fund (ESF),[29] higher payments[30] into the EU budget and higher net outflows of private sector transfers.

Figure 23: The current account surplus will remain high in the forecast period

Source: BoS; calculations and forecast by IMAD.   forecast

---

[26] Also on account of additional EU funds absorption.
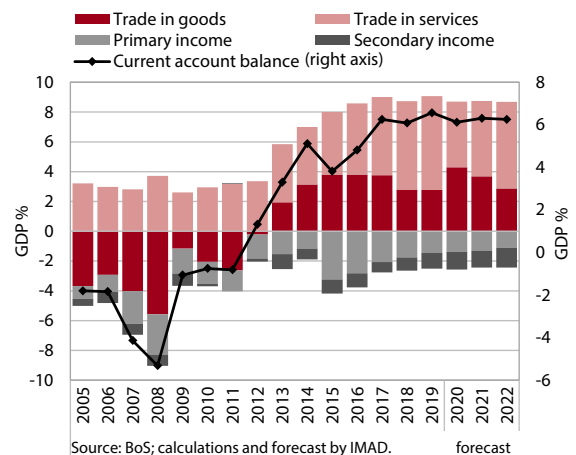
[27] In 2021 and 2022, we expect the terms of trade to remain unchanged, as, assuming a relatively low volatility of energy and other commodity prices, growth in export and import prices will be moderate in the next two years.

[28] Most subsidies are resources for the implementation of the Common Agricultural and Fisheries Policy, while part of subsidies are funds from the Recovery and Resilience Facility.

[29] The bulk of resources from the ESF under the current multiannual financial framework have already been drawn.

[30] I.e. the payments of VAT- and GNI-based contributions. These are current transfers, which account for around 85% of EU budget revenues.

▮ Table 7: Forecast for the current account balance – The balance of payments statistics

		2020		2021		2022
	2019	**June 2020**	**September 2020**	**June 2020**	**September 2020**	**September 2020**
Current account, in EUR million	3,151	3,008	2,801	3,274	3,078	3,228
Current account, as a % of GDP	6.6	6.6	6.1	6.8	6.3	6.3

Source: BoS – Balance of payments statistics; 2020–2022 forecast by IMAD.

▮ Figure 24: Price movements will have a significant positive impact on goods trade balance this year

Source: SURS; forecast and calculations by IMAD.
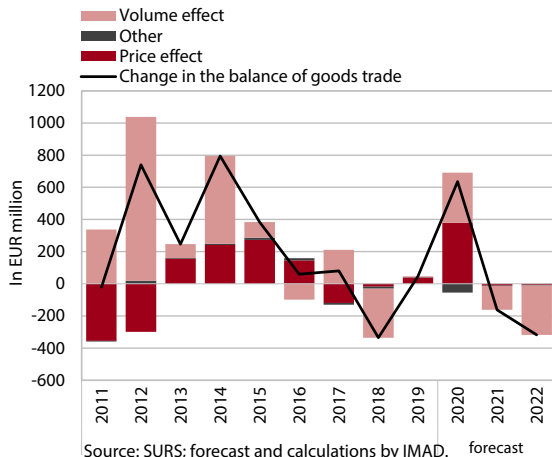
4   Risks to the forecast

The greatest risk to the Autumn Forecast is associated with uncertain epidemiological conditions and the possibility of reinstatement of stricter containment measures in Slovenia and our main trading partners. In Slovenia and its main trading partners, an increase in the number of infections has been recorded in recent weeks, which individual countries are addressing by stepping up containment measures. A possible uncontrolled spread of the virus and thus the possibility of a new major closure of certain activities represent the greatest risk to the current recovery. The reinstatement of more stringent measures would again severely hamper business operations in service activities and industry. Companies would again face more difficulties in carrying out their activities, the number of bankruptcies would increase and greater consequences would also be felt on the labour market. If this were to happen this year, the decline in GDP could even be 2 percentage points deeper, while bankruptcies and increased unemployment would also contribute to slower recovery.

Risks are also associated with uncertainties in the international environment, which already existed before the epidemic; their materialisation would also lead to lower economic growth than projected in the Autumn Forecast. Following the UK's withdrawal from the EU in January this year, economic cooperation between the two trading partners remains unchanged until the end of this year. However, if by the end of the transition period (i.e. by the end of 2020) no agreement is reached, the barriers to cooperation may increase significantly, which could, particularly indirectly, also have a negative effect on economic growth in Slovenia. The risks also include the possible introduction of new protectionist measures by the US, such as imposing new barriers to trade and technological cooperation with the EU and China. Relations between the US and the EU have otherwise improved slightly after the signing of an agreement at the end of August in which they agreed to abolish or reduce tariffs on certain products. According to both sides, the agreement should be just the beginning of a process that will lead to the creation of more free trade between the EU and the US. The tensions between the US and China, however, have increased again in recent months due to a number of disagreements, including on data security and the coronavirus pandemic. Moreover, China's compliance with the first part of the trade deal, which commits it to substantially increase its imports from the US by 2021, is severely hampered amid the sharp decline in world trade due to the pandemic.

There are, however, also some possibilities for higher-than-forecast economic growth, especially next year. This could be the case if the spread of the virus is effectively and permanently contained, i.e. a vaccine or medicine is developed and made available sooner, and if there are no further increases in external trade barriers or other negative shocks. This would lower uncertainty, which would improve economic sentiment internationally and in Slovenia and boost investment and growth in production and final consumption.

The coronavirus crisis has also brought Slovenia certain new opportunities, or risks if it fails to take advantage of them. It has revealed the weaknesses of global trade and global value chains, which were disrupted or even broken during the epidemic. This could accelerate the shortening of global value chains or a shift towards suppliers in closer geographical proximity, which had in fact already started before the epidemic. Companies will give priority to greater security of supply, despite possible higher costs. This presents an opportunity for higher economic growth in the medium term, as Slovenia could attract investment from Western Europe, given its well-developed infrastructure, high-quality workforce and EU membership. The extraordinary financial package (New Generation EU) agreed in July and, over the medium term, the new multiannual financial framework also provide an opportunity to address development challenges. These include in particular: strengthening support for research and development, innovation and digital transformation to enhance productivity; green transformation with the transition to more sustainable economic development; and systemic adjustments to social protection systems, which are for the most part dictated by demographic trends. In the initial stages of preparations for the absorption of EU funds, which are already underway, the choice of the main objectives will be crucial to avoid excessive fragmentation of funds, which has hampered the efficiency of their use in the past. In subsequent phases, particularly the coordination of these processes will be crucial for successful implementation of the agreed objectives and effective support to the recovery of the economy.

5   Output gap and potential GDP growth

Potential GDP[31] growth, assessed in the current conditions of domestic and international risks and subject to significant uncertainties,[32] should gradually recover in the next two years after this year's decline. It is set to amount to 1.9% on average in the forecast period, which is more than in the last ten-year period, when it has been influenced by the effects of the crisis. However, it is significantly lower than before 2009, when Slovenia was still rapidly catching up with more developed EU Member States. The greatest contribution to potential growth in the forecast period will still be made by total factor productivity (1.3 p.p.), whose growth is expected to be similar to that before the previous economic and financial crisis. With rising investment, the contribution of capital will increase gradually in the 2020–2022 period, but it will remain significantly lower on average (at 0.3 p.p.) than in the longer period before the previous crisis.[33] This is a consequence of the low investment volume in the several-year period following its onset. Labour should contribute 0.4 p.p. on average to potential growth in the forecast period. It will continue to be negatively affected by a gradual decline in the number of working-age people (20–64 years), which will be partly mitigated by an expected net inflow of foreign workers and a further increase in the activity rate. The contribution of the activity rate to potential growth should, however, drop towards the end of the forecast period.

[31] From a macroeconomic perspective, potential GDP is an indicator which shows the output an economy can achieve without creating inflationary pressure (i.e. by overheating). The actual output (actual GDP) can be above the level of the potential output of an economy (potential GDP), which causes an increase in inflation. The difference between actual GDP and potential GDP expressed as a percentage of potential GDP is referred to as a country's output gap. IMAD's calculation of potential GDP is based on a production function method, which does not differ from the European Commission's method in its essential attributes. The method assumes that potential GDP can be represented by a combination of production factors labour (this is dependent on demographic factors, the activity rate and the natural unemployment rate), capital and total factor productivity. The disparities between potential GDP or output gap calculations by IMAD and the EC are largely due to the differences in i) the lengths of the forecast periods, ii) the forecasts of macroeconomic indicators, and iii) certain input data (IMAD uses the August revision of SURS data and updated demographic projections calculated by a microsimulation model by the IER (source: SURS); in the series of data on employment according to national accounts statistics, IMAD's calculations also take into account a correction for the break in the data series in 2002).

[32] In the current situation, the estimate of potential GDP and consequently the output gap is subject to additional uncertainties and risks of subsequent changes. Potential GDP cannot be measured directly and its estimate may change due to various factors, such as changes in the methodology for calculating potential GDP, revisions to GDP growth in previous years, changes in the forecast of GDP growth in the years ahead and changes in the length of the time series included. As a result of these factors, subsequent estimates for the same year may lead to significant changes in the estimate of potential GDP and output gap. Their current estimates should therefore be considered only in the context of the assumptions and the broader economic picture at the time when they were made.

[33] The contribution of capital to potential GDP growth in the 2000–2008 period, when it was also relatively stable, averaged 1.7 p.p.

Figure 25: Potential GDP change: A comparison of IMAD and EC calculations
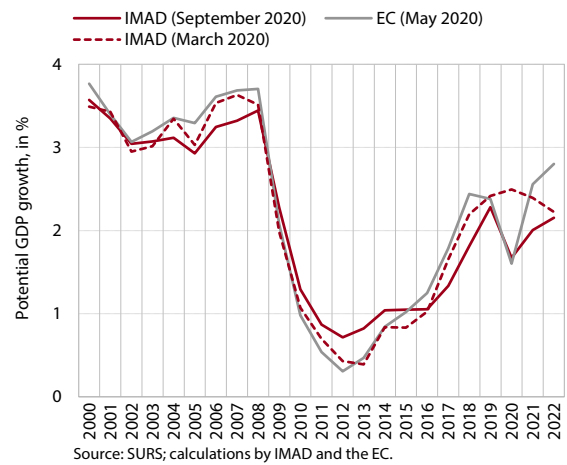
Source: SURS; calculations by IMAD and the EC.

Figure 26: GDP and potential GDP
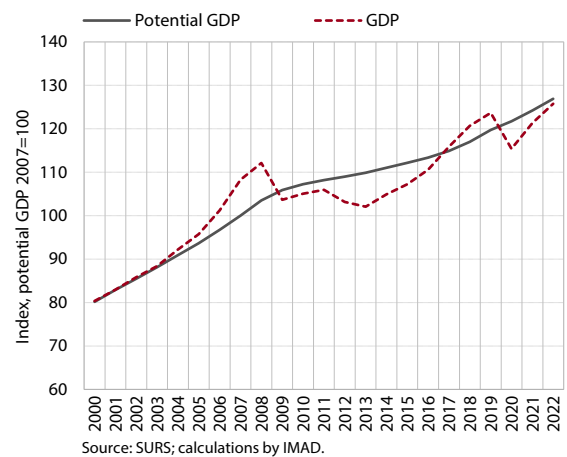
Source: SURS; calculations by IMAD.

Figure 27: Contributions of individual components to potential GDP growth
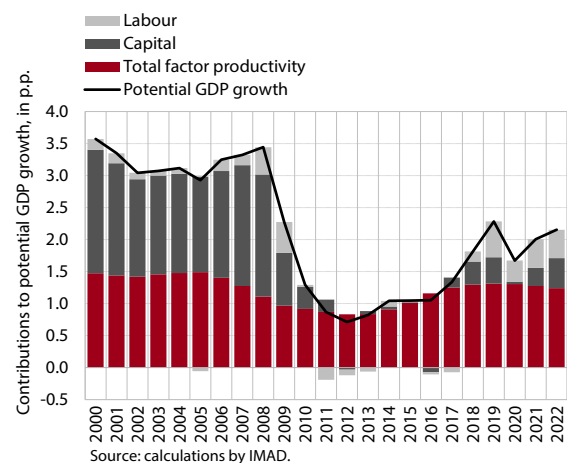
Source: calculations by IMAD.

▌Figure 28: Output gap: A comparison of IMAD and EC calculations

IMAD (September 2020) —— EC (May 2020)
IMAD (March 2020)

Source: SURS; calculations by IMAD and the EC.
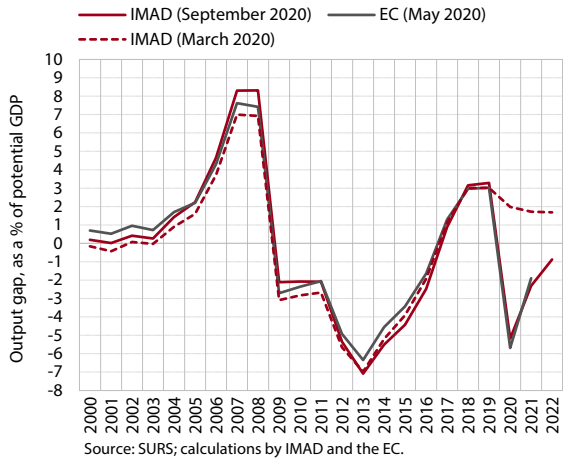
1   Appendix: Assessing forecasting performance

1.1   Methodology

IMAD regularly assesses the accuracy of its forecasts in comparison with other institutions[34] **that publish forecasts of economic trends for Slovenia.** The analysis, which captures the latest data for 2019, covers the forecasts[35] for two key macroeconomic variables: real economic growth and average annual inflation. The movement of the actual values of the two variables over time is shown in Figure 29. The assessment of forecasting performance is based on a comparison of the forecast values with the first statistical annual estimates using various statistical measures of accuracy.[36] In the following paragraphs we present a comparison of the size of errors made by individual institutions in their

Figure 29: Movement of variables analysed

Source: SURS.
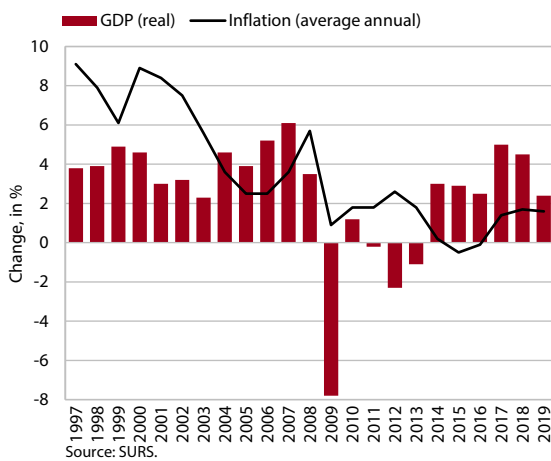
[34] In addition to the forecasts made by the Institute of Macroeconomic Analysis and Development (IMAD), the analysis covers forecasts by the Bank of Slovenia (BoS), the Chamber of Commerce and Industry of Slovenia (CCIS), and, among international institutions, the European Commission (EC), the International Monetary Fund (IMF), Wiener Institut fuer Internationale Wirtschaftsvergleiche (WIIW), and, for the last few years, the Organisation for Economic Co-operation and Development (OECD) and Consensus Economics.

[35] Spring forecasts for the year ahead (SF_{t+1}), autumn forecasts for the year ahead (AF_{t+1}), spring forecasts for the current year (SF_t) and autumn forecasts for the current year (AF_t).

[36] The arithmetic mean ($ME = \frac{1}{T}\sum_{t=1}^{T}(P_t - R_t)$), mean absolute error ($MAE = \frac{1}{T}\sum_{t=1}^{T}(|P_t - R_t|)$), root mean square error ($RMSE = \sqrt{\frac{1}{T}\sum_{t=1}^{T}(P_t - R_t)^2}$), standardised mean absolute error ($stdMAE = \frac{MAE}{sd(R_t)}$) and standardised root mean square error ($stdRMSE = \frac{RMSE}{sd(R_t)}$), where the designations of variables and symbols have the following meanings: R actual value, P forecast, sd standard deviation and T number of forecasts. For detailed results see the Statistical Appendix.

2018–2019 forecasts for 2019, followed by an assessment of the performance of IMAD forecasts for the period after 1997. The last part includes a comparative analysis of the forecasting performance of six institutions, where the analysed period is from 2002 to 2019, the longest period for which forecasts of all the institutions are available.[37]

For a less biased comparison of institutions' forecasting performance, the impact of the time when the forecast was released must be excluded from the comparison. As is evident from Figure 30, in 2019 most institutions published their forecasts after the release of the quarterly data for GDP (for the last quarter of the previous year or the second quarter of the current year) at a later time than IMAD. This was the case in the entire period analysed. Institutions that release their forecasts at a later time have an advantage in terms of information, which can be manifested in smaller forecasting errors. For this reason, we compared the forecasting accuracy of institutions using a new, less biased method[38] based on the calculation of an adjusted mean absolute error (the adjusted MAE statistic), which eliminates the timing effect. The adjusted MAE statistic is calculated by an econometric model which assumes that the absolute forecast error is dependent on the amount of information available to the forecasting institution when preparing the forecast, the general forecasting ability of the institution (i.e. individual or fixed effects), and also the fact that some years are more difficult to forecast. The estimated individual (fixed) effects of this model can then be interpreted as adjusted absolute forecast errors.

Figure 30: Timeline of forecasts released by individual institutions in 2019

Source: Forecasts of individual institutions.

[37] Excluding the OECD and Consensus Economics, as their forecasts for Slovenia have only been available since 2009.

[38] We used this method for the first time in the *Autumn Forecast of Economic Trends 2018* (see Section 5). For a detailed description of the method, see Andersson, M. K., Aranki, T., and Reslow, A. (2017). "Adjusting for Information Content when Comparing Forecast Performance". *Journal of Forecasting*, 36(7), 784–794.

1.2 Outcomes

All institutions overestimated real economic growth in their forecasts for 2019. In their spring forecasts from 2018, the institutions predicted 3.5% economic growth on average in 2019, expecting it to be underpinned by both domestic demand and relatively favourable export activity. The lowest economic growth was forecast by the CCIS (2.8%) and the highest by the BoS and the OECD (3.9%). Until spring 2019, the forecasts of all institutions (except the CCIS) still persisted with a figure above 3%. In their autumn forecasts from 2019, the forecasts of most institutions declined below 3%, mainly as a consequence of moderating growth in foreign demand, and hovered around 2.9%, on average, 0.5 p.p. above the actual value of 2.4%. The most accurate last forecasts for 2019 were made by the BoS and the EC (errors of 0.2 p.p.), while the errors of other institutions ranged between 0.4 and 0.7 p.p.; IMAD was at the lowest limit of this interval, with an error of 0.4 p.p.

The forecasts of inflation for 2019 were also higher than the actual figures in most institutions. In their forecasts from 2018, most institutions expected a continuation of moderate inflation at around or just above 2% in 2019. Their forecasts were mainly based

on expectations regarding further growth in domestic demand. In 2019 most institutions revised their forecasts slightly downwards, which was mainly due to weaker indicators for the external environment. The latest inflation forecasts, from autumn 2019, stabilised at a level close to 1.8%, with all institutions (except the BoS) slightly overestimating actual inflation, which was ultimately 1.6% (CPI) and 1.7% (HICP). A totally accurate last forecast was made by the BoS (released in December 2019); IMAD's error was 0.2 p.p., which is comparable to other institutions that forecast CPI inflation.

In IMAD forecasts, no major systematic deviations from actual values have been observed over a longer time horizon. In assessing the forecasting performance, it is necessary to focus on a longer time horizon. Below we first assess the performance of IMAD forecasts for real GDP growth and average annual inflation in the period after 1997. This assessment is followed by a comparison of the forecasting accuracy among institutions using a method that excludes the impact of the time when the forecast was prepared/released. The first characteristic by way of which the forecasting performance can be assessed is the forecast bias. A forecast is biased when it systematically under- or over-estimates the actual value of the projected variable. The forecast bias is determined

❚Table 8: Errors in real GDP growth forecasts for 2019, by forecasting institution

Realisation: 2.4 %	Spring forecast from 2018 (SFt+1)		Autumn forecast from 2018 (AFt+1)		Spring forecast from 2019 (SFt)		Autumn forecast from 2019 (AFt)	
	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.
IMAD	3.8	1.4	3.7	1.3	3.4	1.0	2.8	0.4
BoS	3.9	1.5	3.4	1.0	3.2	0.8	2.6	0.2
CCIS	2.8	0.4	3.5	1.1	2.9	0.5	2.9	0.5
EC	3.6	1.2	3.3	0.9	3.1	0.7	2.6	0.2
IMF	3.2	0.8	3.4	1.0	3.4	1.0	2.9	0.5
WIIW	3.5	1.1	3.6	1.2	3.2	0.8	2.9	0.5
OECD	3.9	1.5	3.6	1.2	3.4	1.0	3.1	0.7
Consensus Economics	3.3	0.9	3.4	1.0	3.3	0.9	3.1	0.7

Source: Forecasts by individual institutions; calculations by IMAD.
Note: Negative values of errors indicate an underestimation, while positive values indicate an overestimation of actual trends.

❚Table 9: Errors in average annual inflation forecasts for 2019, by forecasting institution

Realisation: CPI: 1.6 % HICP: 1.7%	Spring forecast from 2018 (SFt+1)		Autumn forecast from 2018 (AFt+1)		Spring forecast from 2019 (SFt)		Autumn forecast from 2019 (AFt)	
	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.
IMAD	1.9	0.3	2.1	0.5	1.6	0	1.8	0.2
BoS*	2.2	0.5	2.2	0.5	1.7	0	1.7	0
CCIS	2.2	0.6	2.2	0.6	1.9	0.3	1.8	0.2
EC*	2.0	0.3	2.3	0.6	1.8	0.1	1.8	0.1
IMF	2.0	0.4	2.0	0.4	1.4	-0.2	1.8	0.2
WIIW*	1.8	0.1	2.0	0.3	1.8	0.1	1.8	0.1
OECD*	2.7	1.0	2.2	0.5	1.4	-0.3	1.8	0.1
Consensus Economics	1.9	0.3	1.9	0.3	1.7	0.1	1.7	0.1

Source: Forecasts by individual institutions; calculations by IMAD.
Notes: * The forecasts by the BoS, EC, WIIW and OECD refer to HICP inflation. Negative values of errors indicate an underestimation, while positive values indicate an overestimation of actual trends.

❙ Figure 31: Mean absolute errors in IMAD forecasts for real GDP growth (left) and average annual inflation (right)

Source: IMAD forecasts.
Note: *Excluding 2009, 2011, 2012 and 2014.
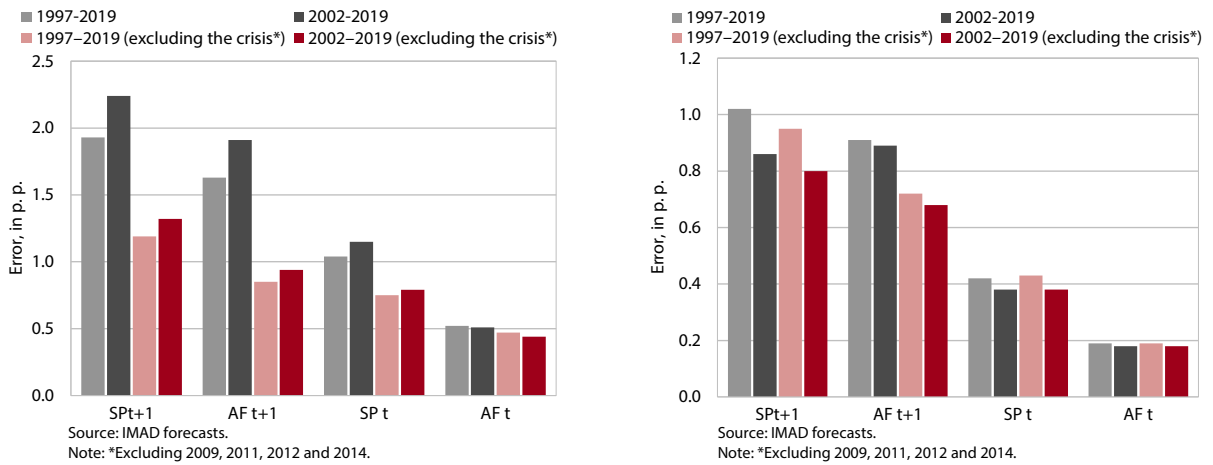
by the sign in front of the mean error of the forecast. The calculations show that in the 1997–2019 period, IMAD slightly overestimated real GDP growth in SF_{t+1} and AF_{t+1}, which is evident from the positive values of mean forecast errors (0.60 p.p. and 0.40 p.p. respectively). The values of mean errors for real GDP growth in SF_t and AF_t are insignificant (0.08 p.p. and −0.06 p.p. respectively), meaning that the forecasts are not biased. The forecasts for average annual inflation are not biased either, the mean error of all forecasts being only −0.02 p.p.

The accuracy of IMAD forecasts increases with the shortening of the forecast horizon. Another important factor in assessing the forecasting reliability is the accuracy of the forecast, which is determined by calculating the mean absolute error (MAE)[39] (this should be as small as possible over a longer time horizon). Between 1997 and 2019, the mean absolute error in IMAD forecasts for real GDP growth was 1.93 p.p. in SF_{t+1} and 1.63 p.p. in AF_{t+1}; in SF_t in AF_t it amounted to 1.04 p.p. and 0.52 p.p. respectively. The mean absolute errors in the forecasts for inflation were somewhat smaller,[40] 1.02 p.p. in SF_{t+1}, 0.91 p.p. in AF_{t+1}, 0.42 p.p. in SF_t and 0.19 p.p. in AF_t. Somewhat larger errors were observed particularly in the forecasts for real GDP growth over a shorter time horizon (for example in 2002–2019), which is mainly due to larger errors during the period of the economic and financial crisis and later in the transition into the phase of recovery, when forecasting was more difficult due to greater uncertainty (see Figure 27). Moreover, a detailed examination of errors in IMAD forecasts also shows that absolute errors in real economic growth and average annual inflation decline with the shortening of the forecast horizon, meaning that IMAD forecasts effectively take into account all new information available at the time of the preparation of each new forecast.

In comparing the forecasting reliability of institutions, it is necessary to consider the time when the forecast was released. The time of release can have a significant impact on accuracy, as institutions that release their forecasts later in the year have more information and can make more accurate forecasts. This new information may involve not only new data on indicator movements and revisions of already released data, but also changes in the assumptions about developments in the international environment, which represent a significant factor of uncertainty for an open economy such as Slovenia's. In the last years, fiscal policy guidelines and fiscal consolidation measures have also become a significant factor to consider (they are usually defined after IMAD has already completed the forecasts). With the introduction of the fiscal rule, the forecasting process became somewhat more predictable in terms of the set goals (particularly regarding the four general government accounts), but the uncertainty about revenue and expenditure structure, which is determined in detail after the completion of the IMAD forecasts, remains. For these reasons, we based our comparative assessment of the institutions' forecasting reliability on the calculation of the adjusted MAE statistic, which allows less biased evaluations as it eliminates the timing effect.

---

[39] Another measure is the RMSE, which penalises large errors, as these are less desirable.

[40] The same conclusions can also be drawn based on the calculation of the standardised MAE and RSME statistics, which are more appropriate for direct comparisons of the accuracy of individual variables.

Figure 32: (Adjusted) mean absolute errors in real GDP growth forecasts for 2002–2019, by forecasting institution
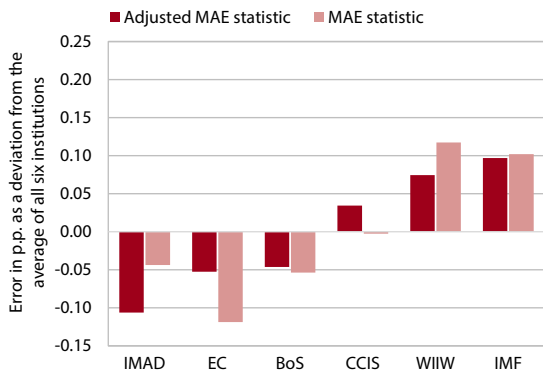
Source: Forecasts by individual institutions; IMAD estimates according to the methodology of Andersson, Aranki and Reslow (2017).
Note: A negative (positive) value of the statistic means that the forecast ability of the forecasting institution is above (below) average.

Figure 33: (Adjusted) mean absolute errors in average annual inflation forecasts for 2002–2019, by forecasting institution
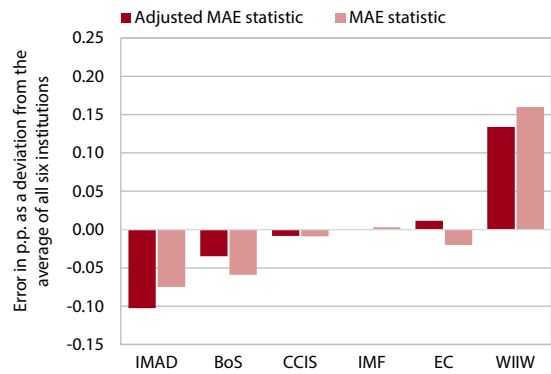
Source: Forecasts by individual institutions; IMAD estimates according to the methodology of Andersson, Aranki and Reslow (2017).
Note: A negative (positive) value of the statistic means that the forecast ability of the forecasting institution is above (below) average.

The evaluations of the adjusted MAE statistics for a longer time period show a high reliability of IMAD's forecasts for real economic growth and average annual inflation. Figures 28 and 29 present the rankings of the institutions with regard to the value of the adjusted MAE statistic in the forecasts for real economic growth and average annual inflation (a negative/positive value of the statistic indicates above-/below-average forecast ability of the forecaster). Of all institutions analysed, IMAD made the most accurate forecasts for real economic growth in 2002–2019 on average, followed by the BoS and the European Commission, which were similarly successful. IMAD was also the most accurate, on average, in the forecasts for average annual inflation, followed by the BoS.[41]

---

[41] With the concurrent use of CPI and HICP inflation, we implicitly assume equal ability of forecasting CPI inflation and HICP inflation. Since the two series have similar variance and persistence, this assumption can be fully acceptable. We also assume an equal expected forecast error in CPI inflation and HICP inflation in each time period. Since the series are very similar, this assumption is not so problematic.

statistical appendix

Table of contents

▌Table 1: Main macroeconomic indicators of Slovenia   Real growth rates in %, unless otherwise indicated

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								forecast		
GROSS DOMESTIC PRODUCT	-1.0	2.8	2.2	3.1	4.8	4.1	2.4	-6.7	5.1	3.7
GDP in EUR m* (current prices, fixed exchange rate 2007)	36,454	37,634	38,853	40,367	42,987	45,755	48,007	45,769	48,818	51,630
GDP per capita in EUR (current prices and at current exchange rate)	17,700	18,253	18,830	19,551	20,809	22,083	22,983	22,069	23,539	24,895
GDP per capita in USD (current prices and at current exchange rate)	23,508	24,249	20,892	21,641	23,508	26,080	25,729	25,115	27,800	29,401
GDP per capita (PPS)[1]	21,600	22,100	22,700	23,500	25,100	26,400	27,200			
GDP per capita (PPS EU27_2020=100)[1]	83	83	83	84	86	87	88			
EMPLOYMENT AND PRODUCTIVITY										
Employment according to National Accounts	-1.1	0.4	1.3	1.8	3.0	3.2	2.4	-1.5	0.3	1.3
Registered unemployed (annual average in thousand)	119.8	120.1	112.7	103.2	88.6	78.5	74.2	87.9	92.9	83.6
Rate of registered unemployment in %	13.1	13.1	12.3	11.2	9.5	8.2	7.7	9.1	9.5	8.5
Rate of unemployment by ILO in %	10.1	9.7	9.0	8.0	6.6	5.1	4.5	5.6	5.4	4.8
Labour productivity (GDP per employee)	0.1	2.4	0.9	1.3	1.8	0.9	0.1	-5.3	4.8	2.4
WAGES *										
Gross wage per employee - nominal growth in %	-0.2	1.1	1.0	1.8	2.7	3.4	4.3	3.7	0.9	2.7
Private sector activities	0.6	1.4	0.5	1.7	2.9	4.0	3.9	1.9	1.1	2.4
Public service activities	-1.3	0.9	2.1	2.3	2.9	3.0	5.4	6.2	1.0	3.3
Gross wage per employee - real growth in %	-1.9	0.9	1.5	2.0	1.3	1.6	2.7	3.4	-0.7	0.8
Private sector activities	-1.2	1.2	1.0	1.8	1.5	2.3	2.2	1.6	-0.5	0.5
Public service activities	-3.0	0.7	2.6	2.4	1.5	1.3	3.7	5.9	-0.6	1.4
INTERNATIONAL TRADE										
Exports of goods and services	3.1	6.0	4.7	6.5	10.5	6.1	4.4	-12.5	9.3	6.6
Exports of goods	3.3	6.3	5.3	6.2	10.6	5.8	4.4	-10.2	8.4	4.8
Exports of services	2.0	5.0	2.4	7.7	10.2	7.4	4.2	-21.1	12.8	13.7
Imports of goods and services	2.1	4.2	4.3	6.7	10.1	6.6	4.2	-12.0	9.6	6.8
Imports of goods	2.9	3.8	5.1	7.0	10.4	7.3	4.6	-11.7	9.6	6.1
Imports of services	-2.3	6.1	0.1	4.7	8.6	3.0	2.0	-13.7	9.6	10.8

▌ Table 1: Main macroeconomic indicators of Slovenia - continue · Real growth rates in %, unless otherwise indicated

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast	
BALANCE OF PAYMENTS STATISTICS										
Current account balance in EUR m	1,204	1,924	1,482	1,942	2,689	2,784	3,151	2,801	3,078	3,228
- As a per cent share relative to GDP	3.3	5.1	3.8	4.8	6.3	6.1	6.6	6.1	6.3	6.3
External balance of goods and services in EUR m	2,130	2,636	3,110	3,462	3,874	3,997	4,357	3,979	4,272	4,483
- As a per cent share relative to GDP	5.8	7.0	8.0	8.6	9.0	8.7	9.1	8.7	8.8	8.7
FINAL DOMESTIC DEMAND										
Final consumption	-3.4	1.1	2.1	3.9	1.5	2.9	2.4	-4.1	3.6	2.5
As a % of GDP	75.7	73.9	72.8	73.0	71.0	70.2	70.1	71.7	70.7	70.0
in which:										
Private consumption	-3.9	1.6	2.0	4.4	2.0	2.8	2.7	-6.6	4.7	3.0
As a % of GDP	56.1	55.0	54.0	53.9	52.5	51.9	51.7	50.8	50.7	50.3
Government consumption	-2.0	-0.2	2.3	2.5	0.3	3.2	1.6	3.0	1.0	1.3
As a % of GDP	19.6	18.9	18.8	19.1	18.4	18.3	18.4	20.9	20.0	19.8
Gross fixed capital formation	3.4	-0.1	-1.2	-3.7	10.4	9.1	3.2	-13.0	11.0	8.5
As a % of GDP	19.6	19.1	18.7	17.4	18.3	19.2	19.3	17.8	18.8	19.7
EXCHANGE RATE AND PRICES										
Ratio of USD to EUR	1.328	1.329	1.110	1.107	1.129	1.181	1.120	1.138	1.181	1.181
Real effective exchange rate - deflated by CPI[2]	1.2	-0.2	-4.1	0.2	0.4	0.8	-0.3	-0.3	0.5	0.2
Inflation (end of the year), %[3]	0.7	0.2	-0.4	0.5	1.7	1.4	1.8	0.5	1.5	1.8
Inflation (year average), %[3]	1.8	0.2	-0.5	-0.1	1.4	1.7	1.6	0.3	1.6	1.9
Brent Crude Oil Price USD / barrel	108.6	98.9	52.4	44.8	54.3	71.0	64.3	42.4	47.4	49.1

Source of data: SURS, BoS, Eurostat, calculations and forecasts by IMAD.
Note: * The Autumn Forecast takes into account the methodological specifics regarding the reporting of wages (which do not include compensation paid by the government), which affects the movement of wages as shown by statistical data in 2020 and 2021. The forecasts for gross wages in this forecast and our other forecasts or scenarios (except the Summer Forecast) are therefore not directly comparable.
[1] Measured in purchasing power standard.
[2] Growth in value denotes real appreciation of national currency and vice versa.
[3] Consumer price index.

▌ **Table 2a: Gross value added by activity and gross domestic product**   EUR million, current prices

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast		
A	Agriculture, forestry and fishing	718.6	759.1	814.6	806.2	796.4	963.2	948.2	1,075.6	1,074.0	1,052.6
BCDE	Mining and quarrying, manufacturing, electricity and water supply, waste management	8,363.0	8,736.8	9,080.9	9,480.9	10,203.4	10,724.0	11,188.1	10,549.8	11,325.8	12,040.4
	of which: C Manufacturing	6,984.6	7,385.1	7,747.0	8,145.6	8,866.6	9,346.4	9,707.4	9,108.1	9,812.4	10,526.3
F	Construction	1,657.9	1,852.3	1,808.3	1,816.4	2,014.2	2,286.3	2,443.8	2,357.1	2,733.8	2,952.5
GHI	Trade, transportation and storage, accommodation and food service activities	6,303.8	6,497.2	6,852.4	7,248.1	7,808.9	8,404.6	8,778.5	8,078.2	8,763.3	9,396.7
J	Information and communication	1,321.2	1,391.5	1,357.4	1,384.8	1,477.8	1,537.8	1,629.9	1,624.8	1,855.1	1,925.5
K	Financial and insurance activities	1,257.6	1,304.1	1,362.2	1,349.5	1,428.2	1,519.0	1,579.0	1,670.6	1,635.9	1,694.5
L	Real estate activities	2,572.5	2,529.9	2,652.9	2,699.7	2,805.3	2,939.3	3,091.4	3,135.2	3,100.4	3,183.6
MN	Professional, scientific, technical, administrative and support services	3,011.0	3,222.7	3,346.6	3,458.2	3,798.3	4,088.7	4,341.3	3,959.0	4,296.0	4,570.0
OPQ	Public administration, education, human health and social work	5,446.7	5,389.7	5,469.2	5,806.8	6,083.0	6,402.0	6,850.0	6,872.4	7,079.1	7,425.0
RST	Other service activities	856.5	848.9	847.2	902.3	934.7	973.6	1,032.2	846.7	1,001.3	1,162.2
1. TOTAL VALUE ADDED		**31,508.8**	**32,532.0**	**33,591.7**	**34,952.8**	**37,350.2**	**39,838.5**	**41,882.4**	**40,169.4**	**42,864.7**	**45,403.0**
2. CORRECTIONS (a - b)		4,945.6	5,102.3	5,260.9	5,413.8	5,636.9	5,916.3	6,124.3	5,599.7	5,953.4	6,226.8
a) Taxes on products and services		4,979.0	5,134.7	5,291.0	5,445.6	5,669.2	5,951.8	6,163.3	5,621.9	5,976.1	6,250.5
b) Subsidies on products and services		33.5	32.4	30.1	31.9	32.3	35.5	39.0	22.1	22.7	23.7
3. GROSS DOMESTIC PRODUCT (3=1+2)		**36,454.3**	**37,634.3**	**38,852.6**	**40,366.6**	**42,987.1**	**45,754.8**	**48,006.6**	**45,769.1**	**48,818.1**	**51,629.8**

Source of data: SURS, forecasts by IMAD.

▌Table 2b: Gross value added by activity and gross domestic product

Structure in %, current prices

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast		
A	Agriculture, forestry and fishing	2.0	2.0	2.1	2.0	1.9	2.1	2.0	2.3	2.2	2.0
BCDE	Mining and quarrying, manufacturing, electricity and water supply, waste management	22.9	23.2	23.4	23.5	23.7	23.4	23.3	23.0	23.2	23.3
	of which: C Manufacturing	19.2	19.6	19.9	20.2	20.6	20.4	20.2	19.9	20.1	20.4
F	Construction	4.5	4.9	4.7	4.5	4.7	5.0	5.1	5.1	5.6	5.7
GHI	Trade, transportation and storage, accommodation and food service activities	17.3	17.3	17.6	18.0	18.2	18.4	18.3	17.6	18.0	18.2
J	Information and communication	3.6	3.7	3.5	3.4	3.4	3.4	3.4	3.5	3.8	3.7
K	Financial and insurance activities	3.4	3.5	3.5	3.3	3.3	3.3	3.3	3.6	3.4	3.3
L	Real estate activities	7.1	6.7	6.8	6.7	6.5	6.4	6.4	6.8	6.4	6.2
MN	Professional, scientific, technical, administrative and support services	8.3	8.6	8.6	8.6	8.8	8.9	9.0	8.6	8.8	8.9
OPQ	Public administration, education, human health and social work	14.9	14.3	14.1	14.4	14.2	14.0	14.3	15.0	14.5	14.4
RST	Other service activities	2.3	2.3	2.2	2.2	2.2	2.1	2.2	1.8	2.1	2.3
1. TOTAL VALUE ADDED		**86.4**	**86.4**	**86.5**	**86.6**	**86.9**	**87.1**	**87.2**	**87.8**	**87.8**	**87.9**
2. CORRECTIONS (a - b)		13.6	13.6	13.5	13.4	13.1	12.9	12.8	12.2	12.2	12.1
a) Taxes on products and services		13.7	13.6	13.6	13.5	13.2	13.0	12.8	12.3	12.2	12.1
b) Subsidies on products and services		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
3. GROSS DOMESTIC PRODUCT (3=1+2)		**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source of data: SURS, forecasts by IMAD.

❚ Table 3a: Gross value added by activity and gross domestic product   EUR million

		constant previous year prices							constant 2019 prices		
		2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
									forecast		
A	Agriculture, forestry and fishing	704.8	733.0	858.7	819.4	785.1	895.6	917.9	958.2	987.4	1,007.6
BCDE	Mining and quarrying, manufacturing, electricity and water supply, waste management	8,078.2	8,695.4	8,891.7	9,505.6	10,212.9	10,570.9	11,034.2	10,332.2	10,926.3	11,259.6
	of which: C Manufacturing	6,740.2	7,300.8	7,593.1	8,140.6	8,841.0	9,183.1	9,701.0	8,979.3	9,518.1	9,813.2
F	Construction	1,652.1	1,820.9	1,792.9	1,747.4	1,967.2	2,174.7	2,379.1	2,271.5	2,545.2	2,775.6
GHI	Trade, transportation and storage, accommodation and food service activities	6,261.0	6,522.2	6,858.4	7,229.7	7,707.8	8,276.7	8,690.0	7,843.6	8,357.3	8,804.5
J	Information and communication	1,366.6	1,383.8	1,419.0	1,348.2	1,445.4	1,541.7	1,573.8	1,580.2	1,660.0	1,752.1
K	Financial and insurance activities	1,325.1	1,239.6	1,261.4	1,406.0	1,342.8	1,417.3	1,562.6	1,570.3	1,602.5	1,651.4
L	Real estate activities	2,409.6	2,605.0	2,534.5	2,662.5	2,729.8	2,823.0	2,970.0	3,105.3	3,137.9	3,170.9
MN	Professional, scientific, technical, administrative and support services	2,999.7	3,287.1	3,373.6	3,447.2	3,722.2	4,034.6	4,156.9	3,818.2	4,049.2	4,213.2
OPQ	Public administration, education, human health and social work	5,592.5	5,460.5	5,400.5	5,593.2	5,927.7	6,181.0	6,510.2	6,874.0	6,953.1	7,019.1
RST	Other service activities	865.8	847.1	842.5	893.0	915.6	949.1	997.6	845.9	973.2	1,090.5
1. TOTAL VALUE ADDED		**31,255.6**	**32,594.5**	**33,233.0**	**34,652.2**	**36,756.2**	**38,864.4**	**40,792.2**	**39,199.4**	**41,192.2**	**42,744.4**
2. CORRECTIONS (a - b)		4,624.6	4,868.9	5,233.0	5,413.3	5,561.5	5,892.9	6,080.4	5,614.3	5,910.0	6,090.4
a) Taxes on products and services		4,660.4	4,901.7	5,266.3	5,443.0	5,594.5	5,927.2	6,116.5	5,636.3	5,932.2	6,113.2
b) Subsidies on products and services		35.8	32.8	33.3	29.7	33.0	34.3	36.1	22.1	22.3	22.8
3. GROSS DOMESTIC PRODUCT (3=1+2)		**35,880.1**	**37,463.4**	**38,466.0**	**40,065.5**	**42,317.6**	**44,757.4**	**46,872.6**	**44,813.7**	**47,102.1**	**48,834.8**

Source of data: SURS, forecasts by IMAD.

▮ Table 3b: Gross value added by activity and gross domestic product   Real growth rates in %

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
										forecast	
A	Agriculture, forestry and fishing	-1.0	2.0	13.1	0.6	-2.6	12.5	-4.7	1.0	3.0	2.0
BCDE	Mining and quarrying, manufacturing, electricity and water supply, waste management	-0.4	4.0	1.8	4.7	7.7	3.6	2.9	-7.6	5.7	3.0
	of which: C Manufacturing	-0.7	4.5	2.8	5.1	8.5	3.6	3.8	-7.5	6.0	3.1
F	Construction	-9.2	9.8	-3.2	-3.4	8.3	8.0	4.1	-7.0	12.0	9.0
GHI	Trade, transportation and storage, accommodation and food service activities	0.3	3.5	5.6	5.5	6.3	6.0	3.4	-10.6	6.5	5.3
J	Information and communication	1.4	4.7	2.0	-0.7	4.4	4.3	2.3	-3.0	5.0	5.5
K	Financial and insurance activities	-2.8	-1.4	-3.3	3.2	-0.5	-0.8	2.9	-0.5	2.0	3.0
L	Real estate activities	0.4	1.3	0.2	0.4	1.1	0.6	1.0	0.5	1.0	1.0
MN	Professional, scientific, technical, administrative and support services	0.5	9.2	4.7	3.0	7.6	6.2	1.7	-12.0	6.0	4.0
OPQ	Public administration, education, human health and social work	-0.7	0.3	0.2	2.3	2.1	1.6	1.7	0.4	1.1	0.9
RST	Other service activities	0.3	-1.1	-0.8	5.4	1.4	1.5	2.5	-18.0	15.0	12.0
1. TOTAL VALUE ADDED		**-0.7**	**3.4**	**2.2**	**3.2**	**5.2**	**4.1**	**2.4**	**-6.4**	**5.1**	**3.8**
2. CORRECTIONS (a - b)		-3.2	-1.5	2.6	2.9	2.7	4.5	2.8	-8.3	5.3	3.1
a) Taxes on products and services		-3.2	-1.6	2.6	2.9	2.7	4.6	2.8	-8.5	5.2	3.0
b) Subsidies on products and services		2.0	-1.9	2.8	-1.2	3.7	6.1	1.7	-43.4	1.0	2.2
3. GROSS DOMESTIC PRODUCT (3=1+2)		**-1.0**	**2.8**	**2.2**	**3.1**	**4.8**	**4.1**	**2.4**	**-6.7**	**5.1**	**3.7**

Source of data: SURS, forecasts by IMAD.

❚ Table 4a: Gross domestic product and primary incomes   EUR million, current prices

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								forecast		
1. Compensation of employees	**18,073.4**	**18,408.0**	**18,935.4**	**19,954.3**	**21,243.0**	**22,813.4**	**24,503.7**	**24,808.3**	**25,445.4**	**26,514.4**
Wages and salaries	15,479.2	15,792.6	16,223.9	17,155.8	18,267.7	19,603.7	21,033.8	21,269.2	21,841.7	22,759.3
Employers' social contributions	2,594.2	2,615.4	2,711.5	2,798.5	2,975.3	3,209.7	3,469.9	3,539.1	3,603.7	3,755.1
2. Taxes on production and imports	**5,474.7**	**5,638.3**	**5,799.1**	**5,955.0**	**6,196.9**	**6,524.1**	**6,757.2**	**6,200.4**	**6,561.4**	**6,853.6**
Taxes on products and services	4,979.0	5,134.7	5,291.0	5,445.6	5,669.2	5,951.8	6,163.3	5,621.9	5,976.1	6,250.5
Other taxes on production	495.7	503.6	508.1	509.3	527.6	572.3	593.9	578.5	585.3	603.1
3. Subsidies	**673.7**	**581.5**	**528.1**	**548.1**	**575.3**	**610.4**	**644.7**	**1,884.0**	**875.0**	**781.0**
Subsidies on products and services	33.5	32.4	30.1	31.9	32.3	35.5	39.0	22.1	22.7	23.7
Other subsidies on production	640.3	549.1	498.1	516.2	543.0	575.0	605.7	1,861.9	852.3	757.3
4. Gross operating surplus / mixed income	**13,580.0**	**14,169.5**	**14,646.4**	**15,005.4**	**16,122.5**	**17,027.7**	**17,390.4**	**16,644.5**	**17,686.2**	**19,042.8**
Consumption of fixed capital	7,705.5	7,792.2	7,991.3	8,093.2	8,283.8	8,674.3	8,881.2	8,467.3	9,031.3	9,499.9
Net operating surplus	5,874.5	6,377.3	6,655.1	6,912.2	7,838.7	8,353.5	8,509.2	8,177.2	8,654.9	9,542.9
5. Gross domestic product (5=1+2-3+4)	**36,454.3**	**37,634.3**	**38,852.6**	**40,366.6**	**42,987.1**	**45,754.8**	**48,006.6**	**45,769.1**	**48,818.1**	**51,629.8**

Source of data: SURS, forecasts by IMAD.

❚ Table 4b: Gross domestic product and primary incomes   Structure in %, current prices

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								forecast		
1. Compensation of employees	**49.6**	**48.9**	**48.7**	**49.4**	**49.4**	**49.9**	**51.0**	**54.2**	**52.1**	**51.4**
Wages and salaries	42.5	42.0	41.8	42.5	42.5	42.8	43.8	46.5	44.7	44.1
Employers' social contributions	7.1	6.9	7.0	6.9	6.9	7.0	7.2	7.7	7.4	7.3
2. Taxes on production and imports	**15.0**	**15.0**	**14.9**	**14.8**	**14.4**	**14.3**	**14.1**	**13.5**	**13.4**	**13.3**
Taxes on products and services	13.7	13.6	13.6	13.5	13.2	13.0	12.8	12.3	12.2	12.1
Other taxes on production	1.4	1.3	1.3	1.3	1.2	1.3	1.2	1.3	1.2	1.2
3. Subsidies	**1.8**	**1.5**	**1.4**	**1.4**	**1.3**	**1.3**	**1.3**	**4.1**	**1.8**	**1.5**
Subsidies on products and services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Other subsidies on production	1.8	1.5	1.3	1.3	1.3	1.3	1.3	4.1	1.7	1.5
4. Gross operating surplus / mixed income	**37.3**	**37.7**	**37.7**	**37.2**	**37.5**	**37.2**	**36.2**	**36.4**	**36.2**	**36.9**
Consumption of fixed capital	21.1	20.7	20.6	20.0	19.3	19.0	18.5	18.5	18.5	18.4
Net operating surplus	16.1	16.9	17.1	17.1	18.2	18.3	17.7	17.9	17.7	18.5
5. Gross domestic product (5=1+2-3+4)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source of data: SURS, forecasts by IMAD.

▌ **Table 5a: Gross domestic product by expenditures**　　　　　　　　　　　　EUR million, current prices

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	**36,454.3**	**37,634.3**	**38,852.6**	**40,366.6**	**42,987.1**	**45,754.8**	**48,006.6**	**45,769.1**	**48,818.1**	**51,629.8**
2	EXPORTS OF GOODS AND SERVICES	27,055.1	28,659.2	29,974.3	31,474.4	35,664.2	38,785.4	40,535.3	34,896.3	38,457.8	41,377.3
3	IMPORTS OF GOODS AND SERVICES	25,350.3	26,117.4	26,865.5	28,024.2	31,795.8	34,792.5	36,148.6	30,885.3	34,154.0	36,863.2
4	EXTERNAL BALANCE OF GOODS AND SERVICES (4=2-3)	1,704.8	2,541.7	3,108.8	3,450.2	3,868.4	3,992.9	4,386.7	4,010.9	4,303.9	4,514.1
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	34,749.5	35,092.6	35,743.8	36,916.3	39,118.7	41,761.9	43,619.9	41,758.2	44,514.2	47,115.7
6	FINAL CONSUMPTION (6=7+8)	27,609.3	27,801.3	28,298.3	29,472.8	30,499.4	32,139.6	33,669.3	32,807.3	34,529.2	36,165.8
7	PRIVATE CONSUMPTION	20,449.4	20,692.9	20,985.0	21,759.9	22,576.7	23,745.8	24,823.1	23,256.4	24,752.9	25,967.7
	- Households	20,107.0	20,339.1	20,640.2	21,416.4	22,219.1	23,365.9	24,419.2	22,876.0	24,358.3	25,553.6
	- NPISH's	342.4	353.8	344.8	343.5	357.6	379.9	403.9	380.4	394.6	414.2
8	GOVERNMENT CONSUMPTION	7,159.9	7,108.4	7,313.3	7,712.9	7,922.6	8,393.8	8,846.2	9,551.0	9,776.3	10,198.0
9	GROSS CAPITAL FORMATION (9=10+11)	7,140.2	7,291.3	7,445.6	7,443.6	8,619.3	9,622.3	9,950.6	8,950.9	9,985.0	10,949.9
10	GROSS FIXED CAPITAL FORMATION	7,157.3	7,191.0	7,247.8	7,019.4	7,874.7	8,771.0	9,266.7	8,150.7	9,183.0	10,148.3
11	CHANGES IN INVENTORIES AND VALUABLES	-17.1	100.3	197.8	424.2	744.7	851.4	683.9	800.2	802.0	801.6

Source of data: SURS, forecasts by IMAD.

▌ **Table 5b: Gross domestic product by expenditures**　　　　　　　　　　　　Structure in %, current prices

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2	EXPORTS OF GOODS AND SERVICES	74.2	76.2	77.1	78.0	83.0	84.8	84.4	76.2	78.8	80.1
3	IMPORTS OF GOODS AND SERVICES	69.5	69.4	69.1	69.4	74.0	76.0	75.3	67.5	70.0	71.4
4	EXTERNAL BALANCE OF GOODS AND SERVICES (4=2-3)	4.7	6.8	8.0	8.5	9.0	8.7	9.1	8.8	8.8	8.7
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	95.3	93.2	92.0	91.5	91.0	91.3	90.9	91.2	91.2	91.3
6	FINAL CONSUMPTION (6=7+8)	75.7	73.9	72.8	73.0	71.0	70.2	70.1	71.7	70.7	70.0
7	PRIVATE CONSUMPTION	56.1	55.0	54.0	53.9	52.5	51.9	51.7	50.8	50.7	50.3
	- Households	55.2	54.0	53.1	53.1	51.7	51.1	50.9	50.0	49.9	49.5
	- NPISH's	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
8	GOVERNMENT CONSUMPTION	19.6	18.9	18.8	19.1	18.4	18.3	18.4	20.9	20.0	19.8
9	GROSS CAPITAL FORMATION (9=10+11)	19.6	19.4	19.2	18.4	20.1	21.0	20.7	19.6	20.5	21.2
10	GROSS FIXED CAPITAL FORMATION	19.6	19.1	18.7	17.4	18.3	19.2	19.3	17.8	18.8	19.7
11	CHANGES IN INVENTORIES AND VALUABLES	0.0	0.3	0.5	1.1	1.7	1.9	1.4	1.7	1.6	1.6

Source of data: SURS, forecasts by IMAD.

▌**Table 6a: Gross domestic product by expenditures**   EUR million

		constant previous year prices						constant 2019 prices		
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	**35,880.1**	**37,463.4**	**38,466.0**	**40,065.5**	**42,317.6**	**44,757.4**	**46,872.6**	**44,813.7**	**47,102.1**	**48,834.8**
2	EXPORTS OF GOODS AND SERVICES	27,234.8	28,681.3	30,018.0	31,914.7	34,792.1	37,843.9	40,490.6	35,462.7	38,745.5	41,284.1
3	IMPORTS OF GOODS AND SERVICES	25,725.4	26,404.1	27,245.3	28,652.1	30,864.3	33,893.4	36,258.6	31,809.6	34,863.3	37,248.6
4	EXTERNAL BALANCE OF GOODS AND SERVICES (4=2-3)	1,509.4	2,277.2	2,772.6	3,262.5	3,927.8	3,950.5	4,232.0	3,653.1	3,882.2	4,035.5
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	34,370.7	35,186.3	35,693.4	36,803.0	38,389.8	40,806.9	42,640.6	41,160.6	43,219.9	44,799.3
6	FINAL CONSUMPTION (6=7+8)	27,255.5	27,923.8	28,387.8	29,392.6	29,919.1	31,385.2	32,901.4	32,298.4	33,469.0	34,300.5
7	PRIVATE CONSUMPTION	20,020.4	20,781.5	21,112.7	21,899.6	22,184.6	23,209.1	24,376.3	23,186.8	24,266.3	24,982.6
	- Households	19,677.9	20,427.7	20,769.2	21,558.7	21,834.0	22,837.0	23,982.8	22,807.5	23,879.5	24,584.2
	- NPISH's	342.5	353.8	343.5	340.9	350.6	372.1	393.5	379.3	386.8	398.5
8	GOVERNMENT CONSUMPTION	7,235.1	7,142.3	7,275.1	7,493.1	7,734.4	8,176.1	8,525.2	9,111.6	9,202.7	9,317.8
9	GROSS CAPITAL FORMATION (9=10+11)	7,115.3	7,262.4	7,305.6	7,410.3	8,470.7	9,421.7	9,739.2	8,862.2	9,750.9	10,498.8
10	GROSS FIXED CAPITAL FORMATION	7,136.3	7,152.8	7,103.8	6,980.2	7,747.0	8,589.0	9,054.4	8,062.0	8,948.9	9,705.1
11	CHANGES IN INVENTORIES AND VALUABLES	-21.0	109.6	201.8	430.1	723.7	832.7	684.8	800.2	802.0	793.7

Source of data: SURS, forecasts by IMAD.

▌**Table 6b: Gross domestic product by expenditures**   Real growth rates in %

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	**-1.0**	**2.8**	**2.2**	**3.1**	**4.8**	**4.1**	**2.4**	**-6.7**	**5.1**	**3.7**
2	EXPORTS OF GOODS AND SERVICES	3.1	6.0	4.7	6.5	10.5	6.1	4.4	-12.5	9.3	6.6
3	IMPORTS OF GOODS AND SERVICES	2.1	4.2	4.3	6.7	10.1	6.6	4.2	-12.0	9.6	6.8
4	*EXTERNAL BALANCE OF GOODS AND SERVICES[1]*	*0.8*	*1.6*	*0.6*	*0.4*	*1.2*	*0.2*	*0.5*	*-1.5*	*0.5*	*0.3*
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	-1.9	1.3	1.7	3.0	4.0	4.3	2.1	-5.6	5.0	3.7
6	FINAL CONSUMPTION (6=7+8)	-3.4	1.1	2.1	3.9	1.5	2.9	2.4	-4.1	3.6	2.5
7	PRIVATE CONSUMPTION	-3.9	1.6	2.0	4.4	2.0	2.8	2.7	-6.6	4.7	3.0
	- Households	-4.0	1.6	2.1	4.5	1.9	2.8	2.6	-6.6	4.7	3.0
	- NPISH's	1.5	3.3	-2.9	-1.1	2.1	4.1	3.6	-6.1	2.0	3.0
8	GOVERNMENT CONSUMPTION	-2.0	-0.2	2.3	2.5	0.3	3.2	1.6	3.0	1.0	1.3
9	GROSS CAPITAL FORMATION (9=10+11)	4.6	1.7	0.2	-0.5	13.8	9.3	1.2	-10.9	10.0	7.7
10	GROSS FIXED CAPITAL FORMATION	3.4	-0.1	-1.2	-3.7	10.4	9.1	3.2	-13.0	11.0	8.5
11	*CHANGES IN INVENTORIES AND VALUABLES[1]*	*0.2*	*0.3*	*0.3*	*0.6*	*0.7*	*0.2*	*-0.4*	*0.2*	*0.0*	*0.0*

Source of data: SURS, forecasts by IMAD.
Note: [1] Contribution to real GDP growth (percentage points).

❚ Table 7: Balance of payments - balance of payments statistics   EUR million

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
									forecast	
I. CURRENT ACCOUNT	**1,204**	**1,924**	**1,482**	**1,942**	**2,689**	**2,784**	**3,151**	**2,801**	**3,078**	**3,228**
1. GOODS	708	1,181	1,476	1,536	1,617	1,281	1,327	1,963	1,801	1,484
1.1. Exports of goods	21,692	22,961	24,039	24,991	28,372	30,816	31,984	28,043	30,614	32,353
1.2. Imports of goods	20,984	21,780	22,563	23,454	26,756	29,535	30,656	26,080	28,813	30,869
2. SERVICES	1,422	1,454	1,634	1,925	2,258	2,716	3,030	2,016	2,471	3,000
2.1. Exports	5,368	5,699	5,940	6,501	7,305	8,001	8,559	6,854	7,847	9,035
- Transport	1,398	1,529	1,654	1,839	2,076	2,335	2,434	2,174	2,383	2,523
- Travel	2,094	2,140	2,162	2,271	2,523	2,704	2,753	1,118	1,384	1,822
- Other	1,877	2,030	2,124	2,391	2,706	2,962	3,372	3,563	4,080	4,689
2.2. Imports	3,946	4,245	4,306	4,575	5,047	5,285	5,529	4,838	5,377	6,035
- Transport	738	814	846	917	1,005	1,007	1,071	967	1,059	1,121
- Travel	1,068	1,119	1,109	1,176	1,322	1,389	1,383	701	853	1,081
- Other	2,140	2,311	2,351	2,482	2,720	2,889	3,074	3,170	3,465	3,834
1., 2. EXTERNAL BALANCE OF GOODS AND SERVICES	**2,130**	**2,636**	**3,110**	**3,462**	**3,874**	**3,997**	**4,357**	**3,979**	**4,272**	**4,483**
Exports of goods and services	27,060	28,660	29,979	31,491	35,678	38,817	40,543	34,897	38,462	41,388
Imports of goods and services	24,930	26,025	26,869	28,029	31,803	34,820	36,185	30,918	34,190	36,904
3. PRIMARY INCOME	**-562**	**-437**	**-1,255**	**-1,139**	**-886**	**-807**	**-700**	**-625**	**-634**	**-570**
3.1. Receipts	590	888	1,070	1,259	1,374	1,592	1,563	1,235	1,362	1,490
- Compensation of employees	205	238	302	355	378	454	450	365	370	390
- Investment	54	368	511	637	703	793	732	528	523	591
- Other primary income	331	282	258	267	293	345	382	341	468	509
3.2. Expenditure	1,152	1,325	2,326	2,398	2,260	2,399	2,264	1,860	1,995	2,059
- Compensation of employees	105	118	126	132	149	173	197	115	130	145
- Investment	917	1,063	2,057	2,081	1,929	2,022	1,856	1,562	1,659	1,699
- Other primary income	130	144	143	184	182	204	211	182	206	216
4. SECONDARY INCOME	**-364**	**-274**	**-372**	**-381**	**-299**	**-406**	**-506**	**-554**	**-560**	**-685**
4.1. Receipts	629	706	730	713	828	789	795	829	877	793
4.2. Expenditure	994	980	1,103	1,094	1,127	1,196	1,301	1,383	1,437	1,478
II. CAPITAL ACCOUNT	**162**	**79**	**412**	**-303**	**-324**	**-225**	**-169**			
1. Non-produced non-financial assets	-10	-24	-37	-45	-76	-47	-6			
2. Capital transfers	172	102	449	-258	-248	-178	-162			
III. FINANCIAL ACCOUNT	**1,619**	**2,273**	**1,774**	**1,187**	**2,088**	**2,527**	**2,282**			
1. Direct investment	-47	-584	-1,269	-864	-495	-933	-692			
- Assets	24	155	292	434	570	362	533			
- Liabilities	71	739	1,560	1,298	1,065	1,295	1,224			
2. Portfolio investment	-4,097	-3,954	3,035	5,023	2,987	750	843			
3 Financial derivatives	27	-51	-98	-270	-185	-86	-178			
4. Other investment	5,731	6,773	219	-2,606	-308	2,743	2,272			
4.1. Assets	912	4,801	-653	-2,221	-1,381	2,031	3,474			
4.2. Liabilities	-4,819	-1,972	-872	385	-1,073	-713	1,202			
5. Reserve assets	5	89	-113	-97	89	52	37			
IV. NET ERRORS AND OMISSIONS	**254**	**270**	**-120**	**-452**	**-277**	**-32**	**-700**			

Source of data: BoS, forecasts by IMAD.
Note: The Slovenian Balance of Payments and International Investment Position conforms to the methodology of the the IMF's 'Balance of Payments and International Investment Position Manual.

▮ **Table 8: Labour market**

	2013	2014	2015	2016	2017	20187	2019	2020	2021	2022
								forecast		
LABOUR SUPPLY										
Activity rate (20-64 years, in %)	74.9	75.1	76.0	76.2	78.6	79.5	79.0	79.7	80.3	81.3
Active population (ILO definition - in thousands)	1,008	1,015	1,008	995	1,027	1,033	1,029	1,025	1,026	1,033
- yearly growth (in %)	-0.6	0.7	-0.7	-1.3	3.2	0.7	-0.5	-0.3	0.1	0.7
EMPLOYMENT AND UNEMPLOYMENT										
Employment (National accounts concept, in thousands)	927.7	931.7	943.9	960.7	989.4	1,020.7	1,045.0	1,029.6	1,032.7	1,046.0
- yearly growth (in %)	-1.1	0.4	1.3	1.8	3.0	3.2	2.4	-1.5	0.3	1.3
Employment (ILO concept, in thousands)	906.0	917.0	917.6	915.1	959.0	980.5	982.8	967.9	970.8	983.4
- yearly growth (in %)	-1.9	1.2	0.1	-0.3	4.8	2.2	0.2	-1.5	0.3	1.3
Employment rate (20-64 yeras, in %)	67.2	67.8	69.1	70.1	73.4	75.4	75.5	75.4	76.0	77.4
Formal employment (statistical register, in thousands) *	793.6	797.8	804.6	817.2	845.5	872.8	894.2	881.5	884.6	896.6
- yearly growth (in %)	-2.0	0.5	0.9	1.6	3.5	3.2	2.5	-1.4	0.4	1.4
Paid employment (in thousands)	698.7	703.0	713.1	730.5	755.3	780.2	801.9	790.0	792.4	803.5
- yearly growth (in %)	-2.6	0.6	1.4	2.4	3.4	3.3	2.8	-1.5	0.3	1.4
Self employed (in thousands)	94.9	94.8	91.6	86.7	90.2	92.6	92.3	91.5	92.3	93.2
- yearly growth (in %)	2.1	-0.1	-3.4	-5.3	4.0	2.7	-0.3	-0.9	0.9	1.0
Unemployment (ILO concept, in thousands)	101.8	98.0	90.5	79.7	67.5	52.8	45.8	56.9	55.0	49.5
- yearly growth (in %)	13.5	-3.7	-7.7	-11.9	-15.3	-21.8	-13.3	24.5	-3.3	-10.0
Unemployment (registered, in thousands)	119.8	120.1	112.7	103.2	88.6	78.5	74.2	87.9	92.9	83.6
- yearly growth (in %)	8.8	0.2	-6.1	-8.5	-14.1	-11.5	-5.5	18.5	5.7	-10.0
Unemployment rate (ILO concept, in %)	10.1	9.7	9.0	8.0	6.6	5.1	4.5	5.6	5.4	4.8
Unemployment rate (registered, in %)	13.1	13.1	12.3	11.2	9.5	8.2	7.7	9.1	9.5	8.5

Sources of data: SURS, ESS, forecasts by IMAD and Eurostat.
Note: * According to the Statistical Register of Employment, including the forecast of self employed farmers.

▌Table 9: Indicators of international competitiveness   annual growth rates in %

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
								forecast		
Effective exchange rate[1]										
Nominal	0.9	0.2	-3.0	0.9	0.5	0.8	-0.4	0.9	0.6	0.0
Real - based on consumer prices	1.2	-0.2	-4.1	0.2	0.4	0.8	-0.3	-0.3	0.5	0.2
Real - based on ULC in economy as a whole	-0.1	-1.4	-3.4	1.1	0.0	1.2	1.2	5.3	-1.2	0.3
Unit labour costs components										
Nominal unit labour costs	0.4	-1.1	0.6	1.8	1.2	3.0	4.5	8.4	-2.5	0.4
Compensation of employees per employee	0.5	1.2	1.5	3.1	3.0	3.9	4.5	2.7	2.2	2.7
Labour productivity, real [2]	0.1	2.3	0.9	1.3	1.8	0.9	0.1	-5.3	4.8	2.4
Real unit labour costs	-1.2	-1.5	-0.4	1.0	-0.4	0.7	2.0	6.2	-3.9	-1.6
Labour productivity, nominal [3]	1.7	2.8	1.9	2.1	3.4	3.2	2.5	-3.2	6.3	4.4

Sources of data: SURS national accounts statistics, ECB, OECD, Consensus Forecasts, European Comision, calculations and forecasts by IMAD.
Notes: [1] Harmonised effective exchange rate - 37 group of trading partners; 19 extra Euro area and 18 Euro area countries; a rise in the value indicates appreciation and of national currency and vice versa. [2] GDP per employee (in constant prices); [3] GDP per employee (in current prices).

▌Table 10a: Consolidated general government revenues; GFS - IMF Methodology   EUR million, current prices

CONSOLIDATED GENERAL GOVERNMENT REVENUES	2013	2014	2015	2016	2017	2018	2019
I. TOTAL GENERAL GOVERNMENT REVENUES	**14,728**	**15,494**	**15,714**	**15,842**	**16,803**	**18,594**	**19,232**
TAX REVENUES	**12,648**	**13,193**	**13,746**	**14,240**	**15,162**	**16,225**	**17,179**
TAXES ON INCOME AND PROFIT	2,137	2,386	2,585	2,681	2,967	3,296	3,614
Personal income tax	1,868	1,916	1,986	2,079	2,197	2,447	2,592
Corporate income tax	265	468	595	599	766	846	997
SOCIAL SECURITY CONTRIBUTIONS	5,127	5,272	5,474	5,721	6,092	6,550	7,021
TAXSES ON PAYROLL AND WORKFORCE	23	20	20	20	21	22	23
TAXES ON PROPERTY	254	245	238	256	274	278	296
DOMESTIC TAXES ON GOODS AND SERVICES	5,027	5,191	5,347	5,433	5,723	5,989	6,127
Value added tax	3,029	3,153	3,229	3,272	3,504	3,757	3,872
Excise duties	1,491	1,491	1,515	1,551	1,585	1,560	1,543
TAXES ON INTERN. TRADE AND TRANSACTIONS	77	78	82	82	83	90	99
OTHER TAXES	1	0	1	48	1	0	-1
NON-TAX REVENUES	**989**	**1,184**	**956**	**963**	**1,089**	**1,351**	**1,114**
CAPITAL REVENUES	67	53	96	96	91	153	136
DONATIONS RECEIVED	**33**	**19**	**12**	**10**	**9**	**12**	**14**
TRANSFERED REVENUES	**53**	**5**	**21**	**51**	**52**	**56**	**58**
RECEIPTS FROM THE EU BUDGET	**938**	**1,040**	**882**	**481**	**399**	**797**	**731**

Source of data: MF, Ministry of Finance Bulletin and Government Finance Accounts of the Republic of Slovenia, SURS.

▌Table 10b: Consolidated general government revenues; GFS - IMF Methodology   per cent share relative to GDP

CONSOLIDATED GENERAL GOVERNMENT REVENUES	2013	2014	2015	2016	2017	2018	2019
I. TOTAL GENERAL GOVERNMENT REVENUES	**40.4**	**41.2**	**40.4**	**39.2**	**39.1**	**40.6**	**40.1**
TAX REVENUES	**34.7**	**35.1**	**35.4**	**35.3**	**35.3**	**35.5**	**35.8**
TAXES ON INCOME AND PROFIT	5.9	6.3	6.7	6.6	6.9	7.2	7.5
Personal income tax	5.1	5.1	5.1	5.1	5.1	5.3	5.4
Corporate income tax	0.7	1.2	1.5	1.5	1.8	1.8	2.1
SOCIAL SECURITY CONTRIBUTIONS	14.1	14.0	14.1	14.2	14.2	14.3	14.6
TAXSES ON PAYROLL AND WORKFORCE	0.1	0.1	0.1	0.0	0.0	0.0	0.0
TAXES ON PROPERTY	0.7	0.7	0.6	0.6	0.6	0.6	0.6
DOMESTIC TAXES ON GOODS AND SERVICES	13.8	13.8	13.8	13.5	13.3	13.1	12.8
Value added tax	8.3	8.4	8.3	8.1	8.2	8.2	8.1
Excise duties	4.1	4.0	3.9	3.8	3.7	3.4	3.2
TAXES ON INTERN. TRADE AND TRANSACTIONS	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OTHER TAXES	0.0	0.0	0.0	0.1	0.0	0.0	0.0
NON-TAX REVENUES	**2.7**	**3.1**	**2.5**	**2.4**	**2.5**	**3.0**	**2.3**
CAPITAL REVENUES	0.2	0.1	0.2	0.2	0.2	0.3	0.3
DONATIONS RECEIVED	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TRANSFERED REVENUES	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
RECEIPTS FROM THE EU BUDGET	**2.6**	**2.8**	**2.3**	**1.2**	**0.9**	**1.7**	**1.5**

Source of data: MF, Ministry of Finance Bulletin and Government Finance Accounts of the Republic of Slovenia, SURS.

Table 11a: Consolidated general government expenditure; GFS - IMF Methodology   EUR million, current prices

CONSOLIDATED GENERAL GOVERNMENT EXPENDITURE	2013	2014	2015	2016	2017	2018	2019
II. T O T A L E X P E N D I T U R E S	**16,286**	**16,755**	**16,956**	**16,497**	**17,102**	**18,067**	**18,969**
CURRENT EXPENDITURE	**6,838**	**7,043**	**7,168**	**7,407**	**7,733**	**7,966**	**8,228**
WAGES AND OTHER PERSONNEL EXPENDITURE	3,114	3,116	3,124	3,278	3,406	3,583	3,837
EMPLOYER'S SOCIAL SECURITY CONTRIBUTIONS	503	494	486	508	533	585	634
PURCHASES OF GOODS AND SERVICES	2,239	2,233	2,311	2,371	2,627	2,634	2,728
INTEREST PAYMENTS	840	1,097	1,043	1,074	985	868	791
RESERVES	143	103	204	176	183	297	238
CURRENT TRANSFERS	**7,671**	**7,592**	**7,540**	**7,700**	**7,913**	**8,237**	**8,704**
SUBSIDIES	520	467	399	397	425	444	468
TRANSFERS TO INDIVIDUALS AND HOUSEHOLDS	6,343	6,335	6,371	6,496	6,665	6,926	7,324
OTHER CURRENT TRANSFERS	809	789	770	807	822	867	912
CAPITAL EXPENDITURE AND TRANSFERS - TOTAL	**1,351**	**1,717**	**1,815**	**962**	**1,078**	**1,432**	**1,527**
CAPITAL EXPENDITURE	1,032	1,451	1,520	784	891	1,160	1,253
CAPITAL TRANSFERS	319	266	295	178	187	272	274
PAYMENTS TO THE EU BUDGET	**425**	**403**	**433**	**427**	**378**	**433**	**510**
III. GENERAL GOVERNMENT SURPLUS / DEFICIT (I. - II.)	**-1,558**	**-1,261**	**-1,242**	**-654**	**-299**	**526**	**263**

Source of data: MF, Ministry of Finance Bulletin and Government Finance Accounts of the Republic of Slovenia, SURS.

Table 11b: Consolidated general government expenditure; GFS - IMF Methodology   Per cent share relative to GDP

CONSOLIDATED GENERAL GOVERNMENT EXPENDITURE	2013	2014	2015	2016	2017	2018	2019
II. T O T A L E X P E N D I T U R E S	**44.7**	**44.5**	**43.6**	**40.9**	**39.8**	**39.5**	**39.5**
CURRENT EXPENDITURE	**18.8**	**18.7**	**18.5**	**18.3**	**18.0**	**17.4**	**17.1**
WAGES AND OTHER PERSONNEL EXPENDITURE	8.5	8.3	8.0	8.1	7.9	7.8	8.0
EMPLOYER'S SOCIAL SECURITY CONTRIBUTIONS	1.4	1.3	1.3	1.3	1.2	1.3	1.3
PURCHASES OF GOODS AND SERVICES	6.1	5.9	5.9	5.9	6.1	5.8	5.7
INTEREST PAYMENTS	2.3	2.9	2.7	2.7	2.3	1.9	1.6
RESERVES	0.4	0.3	0.5	0.4	0.4	0.7	0.5
CURRENT TRANSFERS	**21.0**	**20.2**	**19.4**	**19.1**	**18.4**	**18.0**	**18.1**
SUBSIDIES	1.4	1.2	1.0	1.0	1.0	1.0	1.0
TRANSFERS TO INDIVIDUALS AND HOUSEHOLDS	17.4	16.8	16.4	16.1	15.5	15.1	15.3
OTHER CURRENT TRANSFERS	2.2	2.1	2.0	2.0	1.9	1.9	1.9
CAPITAL EXPENDITURE AND TRANSFERS - TOTAL	**3.7**	**4.6**	**4.7**	**2.4**	**2.5**	**3.1**	**3.2**
CAPITAL EXPENDITURE	2.8	3.9	3.9	1.9	2.1	2.5	2.6
CAPITAL TRANSFERS	0.9	0.7	0.8	0.4	0.4	0.6	0.6
PAYMENTS TO THE EU BUDGET	**1.2**	**1.1**	**1.1**	**1.1**	**0.9**	**0.9**	**1.1**
III. GENERAL GOVERNMENT SURPLUS / DEFICIT (I. - II.)	**-4.3**	**-3.4**	**-3.2**	**-1.6**	**-0.7**	**1.2**	**0.5**

Source of data: MF, Ministry of Finance Bulletin and Government Finance Accounts of the Republic of Slovenia, SURS.

Acronyms

Acronyms in the text

LFS – Labour Force Survey, **GDP** – gross domestic product, **BoS** – Bank of Slovenia, **CPI** – Consumer Price Index, **DARS** - Motorway Company of the Republic of Slovenia, **EC** – European Commission, **ECB** – European Central Bank, **EIA** – Energy Information Administration, **EMU** – European Economic and Monetary Union, **ENTSO-E** – European Network of Transmission System Operators for Electricity, **EU** – European Union, **EUR** – euro, **EUROSTAT** – Statistical Office of the European Communities, **FURS** – Financial Administration of the Republic of Slovenia, **GFS** – Government Finance Statistics, **CCIS** – Chamber of Commerce and Industry of Slovenia, **HICP** – Harmonised Index of Consumer Prices, **CPI** – Consumer Price Index, **IER** – Institute for Economic Research, **IMF** – International Monetary Fund, **ILO** – International Labour Organisation, **AF** – autumn forecast, **ME** – Mean Error, **MAE** – Mean Absolute Error, **MF** – Ministry of Finance, **MJU** – Ministry of Public Administration, **OECD** – Organisation for Economic Co-operation and Development, **SF** – spring forecast, **PPS** – Purchasing Power Standard, **RMSE** – Root Mean Square Error, **SURS** – Statistical Office of the RS, **USD** – US dollar, **IMAD** – Institute of Macroeconomic Analysis and Development, **WIIW** – Wiener Institut fuer Internationale Wirtschaftsvergleiche, **US** – United States of America, **UK** – United Kingdom, **ESS** – Employment Service of Slovenia.

autumn forecast of
economic trends 2020