spring forecast of economic trends 2016

IMAD

Spring Forecast of Economic Trends 2016 (Pomladanska napoved gospodarskih gibanj 2016)
Ljubljana, March 2016

Publisher: IMAD, Ljubljana, Gregorčičeva 27

Responsible person: Boštjan Vasle, MSC, director
Editor: Jure Brložnik

Authors of Spring Forecast of Economic Trends (listed alphabetically):
Aleš Delakorda, MSc, Janez Dodič, Lejla Fajić, Barbara Ferk, MSc, Marko Glažar, MSc, Marjan Hafner, MSc, Matevž Hribernik, Slavica Jurančič, Tanja Kosi Antolič, PhD, Mateja Kovač, MSc, Janez Kušar, Jože Markič, PhD, Helena Mervic, Ana Murn, PhD, Tina Nenadič, MSc, Mitja Perko, MSc, Jure Povšnar, Ana Tršelič Selan, MSc, Mojca Koprivnikar Šušteršič, Branka Tavčar, Ana Vidrih, MSc, Ivanka Zakotnik, Eva Zver, MSc

Editorial board:
Marijana Bednaš, MSc, Aleš Delakorda, MSc, Lejla Fajić, Alenka Kajzer, PhD, Rotija Kmet Zupančič, MSc, Janez Kušar, Boštjan Vasle, MSc

Translated by: Marija Kavčič
Graphs, Statistical appendix: Marjeta Žigman, Bibijana Cirman Naglič
DTP: Bibijana Cirman Naglič
Concept and design: Katja Korinšek, Pristop

Contents

Summary

The Spring Forecast is based on economic developments in previous quarters, and assumes that current economic policies will continue and that the situation in the euro area will remain stable. International institutions envisage the recovery to continue in the euro area. GDP growth in the euro area will be similar in 2016 to that in 2015, but will be lower than the autumn forecast. The ECB's monetary policy will remain expansionary, but it has not yet contributed significantly to providing credit to the business sector. Slovenia will continue to consolidate its public finances, primarily by retaining the current temporary measures. The labour market and fiscal performance, in particular, will be increasingly affected by demographic changes, i.e. the expected decline in the working-age population and the rising share of the older population.

The Spring Forecast envisages GDP growth to reach 1.7% in 2016 and 2.4% in 2017. In 2016 economic trends will be particularly affected by the relatively moderate growth in foreign demand, significant changes in the dynamics of investment growth after the expiry of access to EU funds under the previous financial perspective, and the continued increase in private consumption. The relative slowdown in economic growth in comparison to 2015 will primarily be due to considerably lower levels of government investment. After the standstill in the last quarter of 2015, export growth will also fall slightly this year. It will also be affected by a smaller positive contribution of increased car sales abroad. The forecast otherwise projects that export companies will maintain their competitive position, which has improved notably in the last three years. As a result of production growth, capacity utilisation has also increased significantly over the past years, and this will boost growth in investment in machinery and equipment, which has been rising since early 2015. While lending activity remains weak, access to investment funding has improved due to better business performance and the lower indebtedness of the corporate sector. Company performance has also been boosted by improvements to terms of trade, which have resulted in real disposable gross income increasing over the past three years. Residential construction, which has fallen by over 50% in the last six years, is also expected to pick up in 2016. Total gross fixed capital formation will be lower this year than in 2015 owing to a considerable decline in government investment during the transition to the absorption of EU funds under the 2014–2020 financial perspective. The contribution of private consumption to economic growth will continue to increase in 2016. Household consumption growth, which resumed in 2014 after two years of decline, will primarily be boosted by the continuation of positive labour market developments amid relatively high levels of consumer confidence. Similar to 2015, government consumption will increase slightly owing to the expected increase in employment and higher expenditure on social transfers and goods and services. Total domestic consumption will see lower growth than last year, particularly due to lower government investment. Slightly improved economic growth is envisaged for 2017. In addition to exports, which will follow the expected increase in foreign demand and further growth in private consumption, investment consumption will again make a more significant contribution to GDP growth due to the anticipated increase in government investment amid further growth in private investment. The contribution of domestic consumption will therefore be considerably larger, and the resulting relatively higher imports of consumer and investment goods will reduce the contribution of foreign trade.

The labour market will continue to recover in 2016 and in 2017, in line with the recovery of economic activity. Employment, which started to pick up at the end of 2013, will increase further this year, but its growth will be somewhat lower (0.9%) than last year due to lower GDP growth. The number of people in work will increase in most sectors, notably manufacturing and market services. Further growth will also be recorded in employment activities which are an important factor in labour market flexibility. After declining until last year, employment will also rise slightly in the general government; however, as fiscal restrictions will remain in place, this growth will be modest. In 2016 unemployment will continue to drop, falling to 107,400 in the year as a whole. The reasons for this will be the same as in 2015: fewer people will lose their jobs due to business reasons or company bankruptcies, and there will be fewer first-time jobseekers, which is attributable to a further decline in the number of young people finishing school. Demographic changes, such as the drop in the working-age population (20–64 years), will also increasingly impact labour market trends. Amid continued economic growth, a further increase in employment and a decline in unemployment will also be recorded in 2017.

Wage growth will accelerate slightly in 2016 and 2017. In the private sector, the nominal wage growth for 2016 (0.6%) will be similar to last year. This relatively low wage growth amid rising economic activity reflects the absence of inflationary pressures and the efforts of enterprises to maintain their competitive position. Significantly higher wage growth (3.5%) is expected for the public sector owing to the payment of promotion pay rises that were suspended during the crisis. In 2017 nominal wage growth will increase slightly again (2.0%), partly on the back of stronger growth in the private sector, but also owing to the relatively high growth in the public sector that has arisen from the current agreements in place. In the coming years, the movements of total wage growth will follow the movements of productivity growth.

Owing to the fall in the price of oil and other imported industrial goods, prices for 2016 will remain at a similar level to 2015, but a moderate rise is expected for 2017. Consumer price growth has been very low since the beginning of the crisis, reflecting weak economic activity and the internal adjustment of relative prices; since mid-2014, the significant decline in commodity prices, particularly oil, has been a key driver behind this trend. This led to a period of deflation at the end of last year, the first time this has happened since Slovenia's independence. Lower energy prices, in particular, will also have a decisive impact on inflation this year, which is, amid very small inflationary pressures, forecast to stand at 0.6% at the end of 2016 in most groups of products and services. Taking the year as a whole, Slovenia will record deflation of 0.3% since prices will drop year-on-year for most months. A further recovery in economic activity, particularly the strengthening of private consumption, will otherwise contribute to a modest increase in core inflation. Higher household spending will impact the growth of prices of non-energy goods and services. The pressure for relative price adjustments is easing steadily, particularly in the non-tradable sector. Assuming an increase in import prices and higher economic growth, we expect renewed overall consumer price growth in 2017, but it will remain relatively low (1.3% for the year as a whole).

The current account surplus, which has reflected the widening gap between saving and investment in recent years, will stand at 7.5% of GDP this year and will continue to remain high in 2017. The increasing excess of saving over investment reflects the deleveraging of the private sector and weak investment activity on the part of enterprises, which is hindered not only by the cautious approach taken by banks with regard to granting new loans, but also the reluctance of enterprises to seek funding for investment. Private sector investment will recover gradually in 2016, but the total gross saving will nevertheless remain considerably higher than gross investment, which will decline for the first time since 2012. The current account surplus will also continue to widen due to favourable terms of trade (a larger decline in import prices than export prices), but less so than in 2014 and 2015 when import prices declined while export prices maintained their levels. Similar to recent years, the growth of the surplus in services trade will be underpinned primarily by trade in travel and transport services. The strengthening of investment and private consumption in the coming years will — amid slightly higher expected growth in exports — contribute only gradually to a decline in the current account surplus, which will therefore remain high in 2017 (6.8% of GDP).

The key risks to the central scenario of IMAD's Spring Forecast arise from the international environment. GDP growth in the euro area is expected to be similar to last year, but international institutions have been lowering their forecasts in recent months due to uncertainties in the global environment, particularly with regard to growth in emerging market economies. This is also reflected in increased uncertainty on the currency markets, which could strengthen this trend if higher exchange rate volatility were to occur. Domestically, uncertainty is still associated with the process of fiscal consolidation and related measures. There are also doubts concerning the estimate of EU funds absorption since it may decline even more, which would further reduce investment growth and the economic growth expected for 2016. On the upside, Slovenia's competitive position may continue to improve, which would result in higher growth in exports and GDP.

Spring forecast of Slovenia's main macroeconomic aggregates

	2015	Spring forecast (March 2016)		
		2016	2017	2018
GROSS DOMESTIC PRODUCT				
GDP, real growth (%)	2.9	1.7	2.4	2.3
GDP in EUR m, current prices	38,543	39,598	40,613	41,880
EMPLOYMENT, EARNINGS AND PRODUCTIVITY				
Employment according to the SNA, growth (%)	1.4	0.9	0.9	0.7
Number of registered unemployed, annual average (in '000)	112.7	107.4	101.0	94.7
Registered unemployment rate (%)	12.3	11.7	11.0	10.3
ILO unemployment rate (%)	9.0	8.6	8.1	7.5
Gross earnings per employee, real growth (%)	1.2	2.0	0.7	0.7
- private sector activities	1.0	0.9	0.5	0.9
- public sector activities	1.7	3.8	1.1	0.6
Labour productivity (GDP per employee), real growth (%)	1.4	0.8	1.5	1.7
EXTERNAL TRADE				
Exports of goods and services, real growth (%)	5.2	3.7	4.8	4.9
Exports of goods	5.1	3.5	4.9	5.0
Exports of services	5.4	4.3	4.2	4.2
Imports of goods and services, real growth (%)	4.4	3.0	5.1	5.0
Imports of goods	4.9	2.9	5.3	5.1
Imports of services	1.8	3.7	4.3	4.4
BALANCE OF PAYMENTS STATISTICS				
Current account BALANCE (EUR m)	2,810	2,960	2,754	2,627
- as a % of GDP	7.3	7.5	6.8	6.3
External balance of goods and services (EUR m)	3,661	4,157	3,841	3,846
- as a % of GDP	9.5	10.5	9.5	9.2
DOMESTIC DEMAND				
Domestic consumption, real growth (%)	2.1	1.0	2.3	2.1
of which:				
Private consumption	1.7	2.1	1.7	1.7
Government consumption	0.7	0.9	0.2	0.1
Gross fixed capital formation	0.5	-3.0	6.0	5.0
Change in inventories, contribution to GDP growth, in percentage points	0.8	0.2	0.0	0.0
EXCHANGE RATES AND PRICES				
USD/EUR exchange rate	1.110	1.111	1.114	1.114
Real effective exchange rate – CPI deflator	-3.8	-0.1	-0.4	-0.4
Inflation (Dec–Dec)	-0.5	0.6	1.2	1.4
Inflation (annual average)	-0.5	-0.3	1.3	1.3
Oil price (Brent crude, USD/barrel)	52.4	35.0	41.5	45.1

Source: Year 2015 SURS, BoS, ECB, EIA; years 2016–2018 IMAD forecasts.

The Spring Forecast is based on statistical data, information and adopted measures known at the cut-off date of 3 March 2016.

spring forecast
of economic trends 2016

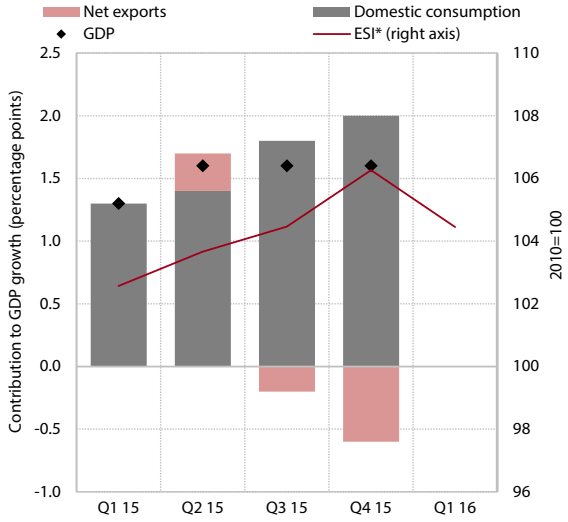
1. Assumptions of the Spring Forecast of Economic Trends 2016

1.1. International environment

Economic growth will continue among key trading partners in the period 2016–2018, but growth prospects have deteriorated. Last year the growth rates of the global economy and trade slowed, primarily owing to lower growth in emerging market economies. This was reflected in the slower growth of euro area exports, but GDP growth (1.6%) was higher than in 2014, particularly due to the strengthening private consumption. At the beginning of 2016, business confidence in the euro area deteriorated notably, which indicates weaker growth in economic activity in the year ahead. The worsening of expectations is reflected in the latest forecasts by some international institutions (particularly the OECD), according to which GDP growth among some of the main trading partners in the euro area will be lower this year than in 2015 (see Table 1). The lower GDP growth in the euro area will mainly be attributed to the further slowdown in the growth of exports, but export growth is expected to start increasing gradually in 2017. The recovery of investment is set to continue, reflecting better financing conditions, higher profits and lower indebtedness in the business sector, but will remain weak owing to reduced foreign demand and the uncertainty on the financial markets. The main driver of GDP growth in the euro area will remain private consumption, as a consequence of higher growth in real disposable income along with improving labour market conditions and the low price of oil.

The Spring Forecast assumes lower average prices for oil and other commodities in 2016. The dollar price of oil has been falling since June 2014, when it totalled USD 110/barrel. It dropped by almost half in 2015 as a whole, and then fell further to USD 30/barrel in the first two months of 2016. Based on price realisations in January and February and futures prices, the technical assumption of the forecast for the average price of Brent crude in 2016 is USD 35 per barrel. According to the data available from futures contracts, the price of oil should increase gradually over the next two years. The assumption concerning the movement of non-energy prices also assumes a further decline after last year's fall. The technical assumption for the average value of the euro against the US dollar in 2016 is USD 1.111 to the euro, which is similar to last year (see Table 2).

Figure 1: **GDP and the economic sentiment indicator (ESI) for the euro area**



Source: Eurostat, EC. Note: * *The figure for Q1 2016 is the average of January and February.

Table 1: **Assumptions of the forecast concerning economic growth among Slovenia's main trading partners**

Real growth rates, (%)	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
EU	1.9	2.0	1.8	1.9	1.9	1.8
Euro area	1.6	1.8	1.4	1.7	1.7	1.6
Germany	1.7	2.0	1.4	2.0	1.7	1.6
Italy	0.8	1.2	1.0	1.2	1.4	1.1
Austria	0.9	1.5	1.4	1.5	1.6	1.5
France	1.2	1.6	1.2	1.6	1.5	1.5
Croatia	1.6	1.0	1.5	1.5	1.8	2.1
Russia	-3.7	0.4	-1.4	1.3	1.2	1.9

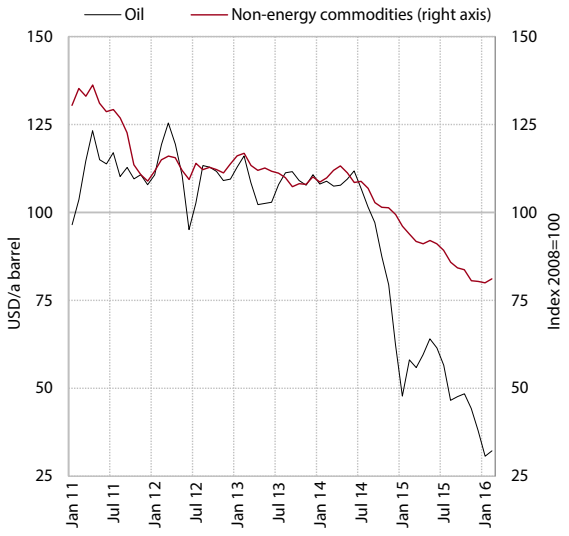
Source: Eurostat (for 2015); Consensus Forecasts, February 2016; Eastern Consensus Forecasts, February 2016; EC Winter Forecast, January 2016; IMF World Economic Outlook Update, January 2015; OECD Interim Economic Outlook, February 2016; and IMAD estimates.

Table 2: **Assumptions for prices of oil, non-energy commodities and the USD/EUR exchange rate**

	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
Brent crude price (USD)	52.4	55.0	35.0	60.0	41.5	45.1
Brent crude price (EUR)	47.2	49.9	31.4	54.4	37.2	40.5
Non-energy commodity prices (in USD), growth	-17.5	0.0	-5.0	0.0	0.0	0.0
USD/EUR exchange rate	1.110	1.102	1.111	1.102	1.114	1.114

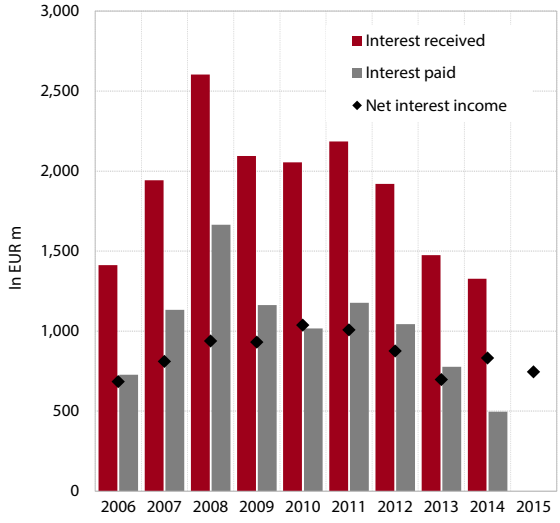
Source: EIA, IMF, ECB, CME, IMAD estimate. Note: The assumptions for the oil price and the exchange rate take into account the futures prices and the USD/EUR exchange rate between 1 and 18 February 2016.

Figure 2: **Oil and non-energy price movements**



Source: EIA, IMF; calculations by IMAD.

Figure 3: **Movements of interest received and interest paid in the Slovenian banking system**



Source: BoS. Note: For 2015, only data on net interest income is available.

1.2. The banking system

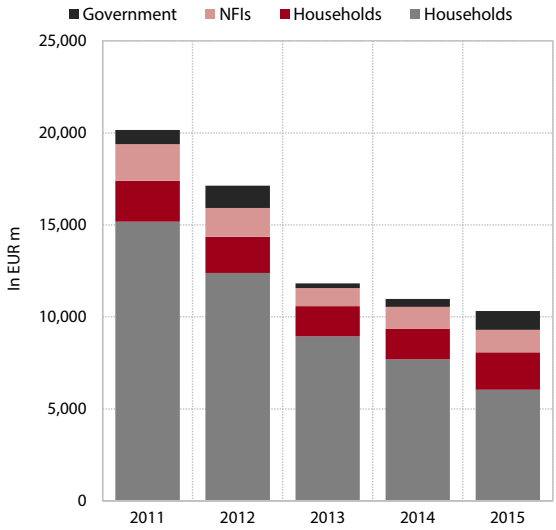
The forecast assumes that the relatively stable situation in the banking system will continue. At the end of 2015, the banks' assets improved significantly; in our view, this is also a result of the positive effects of the master restructuring agreements (MRA). The amount of arrears of more than 90 days dropped to EUR 3.5 bn (9.9% of the banking system's total exposure). Bank deleveraging abroad is gradually easing and foreign liabilities are appreciably lower than before the crisis. In January, they totalled EUR 5.4 bn, EUR 13.7 bn less than in September 2008.[1] Non-banking system deposits are gradually rising, but almost exclusively on account of short-term deposits, which does not provide a solid foundation for the long-term financing of the economy. The capital adequacy of the Slovenian banking system remains appropriate. Banking system performance is improving, primarily owing to lower impairments and provisions created, but net interest income is falling. We estimate that this is a consequence of not only very low deposit interest rates but also modest lending activity and the very rapid adjustment of lending interest rates in the past year, which are nevertheless still relatively higher than the euro area average.

With a stable situation in the banking system, we assume a further improvement in the conditions for loan growth and a stronger role for other sources of finance. In 2015, new bank lending to enterprises declined further — to EUR 6 bn — which is around 20% less than in 2014. New lending to households and the government increased. In the coming years, we expect not only further growth in household loans amid rising consumption and a rebound in the housing market, but also, with the expected further growth in economic activity, a revival in lending to enterprises. This will also reflect a further improvement in the quality of the banks' assets. We estimate that bank lending activity could also be boosted by low net interest income. We assume that funding conditions will not change significantly over the forecast horizon. In view of the Slovenian banking sector's reluctance to grant loans, the economy is partly replacing this source of finance with borrowing abroad and inter-company loans, whereas financially sounder enterprises also issue debt securities. Despite these and

[1] The figure covers liabilities to all foreign sectors, not only foreign banks. In 2008, these liabilities (close to EUR 18 bn) accounted for over 35% of the banking system's total assets.

other more favourable sources of finance (SID bank, the Slovene Enterprise Fund), small and medium-sized enterprises remain the most vulnerable sector of the economy in terms of access to finance. In the past three years, non-financial corporations have also increased their own resources. Having risen by EUR 1.5 bn to EUR 5.3 bn in this period, the bank deposits of Slovenian non-financial corporations could become an important source of finance for Slovenia's economy in the future.

Figure 4: **Amount of new loans in the Slovenian banking system**



Source: BoS; calculations by IMAD.

1.3. Public finance

The Spring Forecast takes into account the government's stance that fiscal consolidation will continue over the forecast horizon. According to the Ministry of Finance, the general government deficit fell to below 3% of GDP last year. We also took into consideration government commitments to continue to reduce the deficit in the coming years. Fiscal consolidation will involve the extension of the majority of measures that were in place last year. It will therefore mainly affect wage policy and social transfers and, consequently, household disposable income and private consumption. In support of this process, additional measures were introduced in order to curb the grey economy. In the coming years, economic activity will also be significantly impacted by cohesion policy funds, which will drop significantly upon transition to the 2014–2020 financial perspective,[2] but are expected to start increasing after 2016.

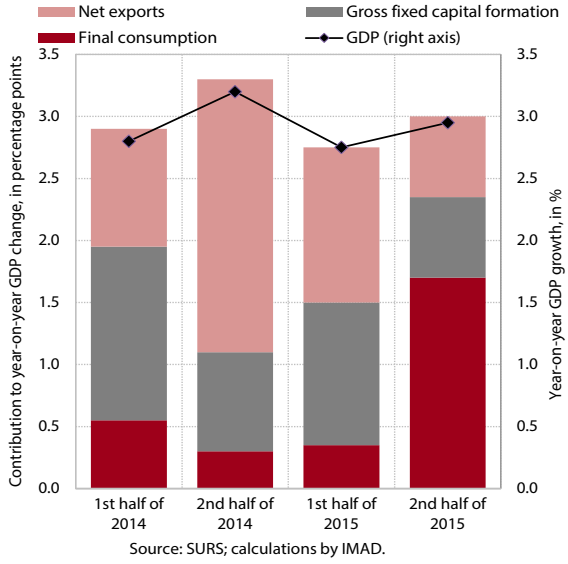
[2] Poročilo o stanju sistema izvajanja evropske kohezijske politike za obdobje 2014–2020 (Report on the state of implementation of the EU Cohesion Policy 2014–2020, Government Office for Development and European Cohesion Policy, March 2016).

2. Forecast of economic trends in Slovenia

2.1. GDP – consumption aggregates

The relatively strong growth in GDP continued in 2015 (2.9%), again largely on account of exports, but also due to stronger growth in private consumption. Export growth was boosted by growth in foreign demand and further competitiveness gains. Despite the deceleration at the end of the year, exports remained the main driver of economic recovery. The recovery of domestic consumption also continued, mostly on account of private consumption. More specifically, stronger employment growth and higher average gross earnings translated into stronger growth in household disposable income and, in turn, a recovery in private consumption. Meanwhile, investment growth slowed owing to a renewed decline in construction investment. This sector otherwise improved noticeably in 2014, particularly regarding investment in public infrastructure related to the accelerated absorption of EU funds before the expiry of the last financial perspective. Private investment in machinery and equipment expanded last year. Government consumption rose last year for the first time since 2010. Its growth was underpinned by all categories of government consumption, notably the increase in intermediate consumption, expenditure on social benefits in kind and cash, and the consumption of fixed capital.[3]

Figure 5: **Slovenia's GDP – expenditure structure**



Source: SURS; calculations by IMAD.

In 2016, GDP growth will slow (1.7%), primarily owing to a significant decline in government investment upon the transition to the new financial perspective,

[3] We estimate that a significant part of the increase in expenditure on intermediate consumption and social benefits in kind stemmed from public institutes in the health care sector, which was made possible by an increase in HIIS revenue (HIIS – the Health Insurance Institute of Slovenia) due to the extension of contribution bases.

but also due to lower growth in exports.[4] After three years of recovery, total investment consumption will decline this year because government investment will drop significantly during the transition to the 2014–2020 financial perspective. The expected further growth of exports and domestic demand, an improvement in business performance and indebtedness indicators, and better access to funding will boost growth in private investment. With a rebound on the real estate market and a better income situation for households, we also project a modest recovery in housing investment. After two years of relatively strong growth, exports will slow, but they will remain the key driver of economic growth. Growth in foreign demand will be similar to last year; after improving noticeably for three years, Slovenia will now consolidate its competitive position. With a further improvement in labour market conditions, private consumption growth will continue to strengthen this year, mainly owing to higher wage growth. Government consumption growth will continue.

With a further increase in real growth in disposable income, private consumption growth will be higher than in 2015 (2.1%). Higher growth in disposable income than last year will mainly reflect stronger wage bill growth as a result of higher growth in the average wage caused, in turn, by accelerated growth in the public sector and further growth in employment. Owing to the easing of some of the austerity measures adopted in previous years, this year will also record higher growth in social benefits and transfers. Pension expenditure will also increase, given the estimated higher growth of the number of pensioners and the adjustment of pensions early in the year. The strengthening of disposable income in real terms will also be affected by deflation expected for the year as a whole. A further recovery in consumption is also suggested by the consumer confidence indicator, which remains high despite the decline at the end of 2015. This year we expect a further increase in the consumption of durables, which has been rising since the end of 2013, but is still lower than before the crisis. Similar to 2015, we expect a moderate improvement in spending on other goods and services (particularly semi-durable goods and expenditure on tourism-related services), which represent the largest share of private consumption.

Figure 6: **Selected private consumption indicators**

Source: SURS; calculations by IMAD.

Growth in government consumption will continue this year (0.9%). This will be underpinned by further employment growth in the general government sector, increased expenditure on social transfers as a result of the extension of eligibility for certain transfers (subsidising school meals), and other expenditure on social transfers and health care services enabled by the growth in HIIS revenue owing to the expected increase in contribution bases. We also project a further increase in expenditure on intermediate consumption, but this will remain moderate owing to the effect of ongoing measures for streamlining the functioning of governmental bodies, municipalities and public institutes (streamlining public procurement procedures, limiting local government costs, etc.)

Owing to a significant fall in government investment, total investment consumption will decline this year by 3.0%. The possibility to absorb EU funds from the

Table 3: **Forecast for economic growth**

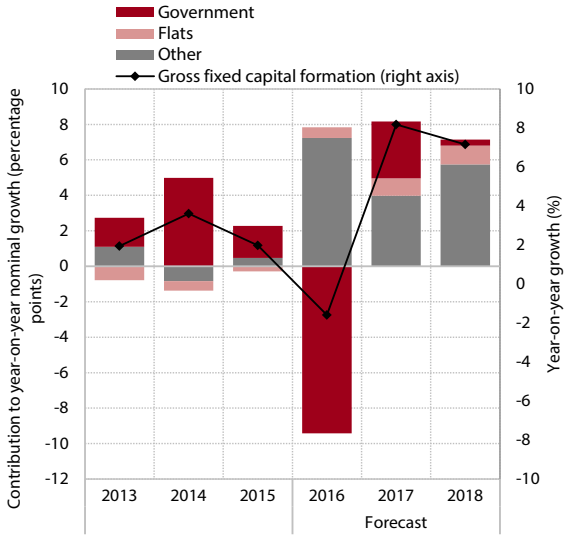
Real growth rates, (%)	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
Gross domestic product	2.9	2.3	1.7	2.3	2.4	2.3
Exports	5.2	5.2	3.7	4.9	4.8	4.9
Imports	4.4	3.8	3.0	5.0	5.1	5.0
External balance of goods and services (contribution to growth in percentage points)	*0.9*	*1.4*	*0.8*	*0.4*	*0.3*	*0.4*
Private consumption	1.7	2.6	2.1	2.2	1.7	1.7
Government consumption	0.7	-0.4	0.9	-0.3	0.2	0.1
Gross fixed capital formation	0.5	-1.8	-3.0	5.0	6.0	5.0
Change in inventories and valuables (contribution to growth in percentage points)	*0.8*	*-0.1*	*0.2*	*-0.1*	*0.0*	*0.0*

Source: SURS; 2010–2018 forecasts by IMAD.

[4] GDP movements in 2015 and 2016 are also significantly impacted by the number of working days: last year had three days more than the preceding year, while 2016 has three days less. According to the working-day adjusted data, the slowdown in GDP growth in 2016 relative to 2015 is therefore much smaller.

previous financial perspective, the main reason for the high level of government investment in 2014 and 2015, expired in 2015. During the transition to the new financial perspective, the absorption of EU funds will decline considerably, which means that government investment will also be significantly reduced. According to the state budget adopted, investment expenditure will decline by over half a billion euros in 2016 (by more than 40%), which will be reflected in significantly lower investment in construction. With the continued recovery of the real estate market, we otherwise expect slight growth in housing investment. Housing investment picked up slightly at the end of last year after having fallen by over 50% during the crisis. Better prospects are also envisaged as a result of a higher number of building permits issued for flats.[5] The overall decline in investment will be mitigated particularly by stronger growth in private investment in machinery and equipment. This will benefit from improved business performance, the deleveraging that has taken place in recent years and low interest rates. High capacity utilisation and further growth in demand on Slovenia's key markets will boost investment growth in industry, while final consumption growth will help create an environment that is conducive for investment in the services sector.

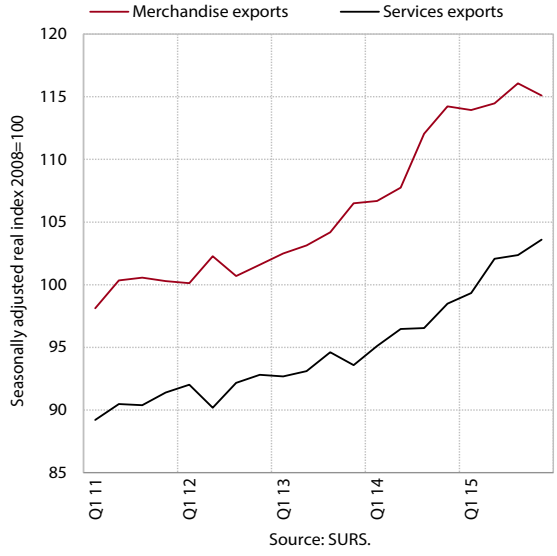
Figure 7: **Structure of nominal gross fixed capital formation**



Source: SURS; calculations and forecast by IMAD.

After the standstill at the end of last year and with the competitiveness position maintained at the achieved level, export growth (3.7%) will slow this year, although growth in foreign demand will remain similar to last year.[6] Given the deteriorated expectations regarding the economic developments in some key trading partners in the EU, growth in foreign demand is not expected to strengthen this year; prospects for Russia also remain uncertain. The deterioration of expectations for this year was also affected by a decline in real merchandise exports in the last quarter of 2015 (-0.8%, seasonally adjusted).[7] After three years of significant improvement in export performance,[8] when Slovenia's market share in the EU exceeded pre-crisis level in 2014, we expect Slovenia's export competitiveness to remain at the level achieved. This year's moderation in total exports will also be affected by lower growth in motor vehicle exports, which had already eased in the second half of last year as a result of the base effect.[9] After maintaining relatively strong growth for two years, growth in services exports will also slow in 2016. After last year's appreciable increase in foreign tourist spending, exports of travel are expected to see more moderate growth this year; growth in exports of transport services will also be lower, consistent with merchandise trade developments. The relatively high growth of exports of some business services, notably telecommunication, computer and information services, will continue.

Figure 8: **Real exports of goods and services**



Source: SURS.

Amid more modest growth in domestic consumption, the growth of imports will also be lower than last year. As a result of slower growth in exports and value added, particularly in the manufacturing sector, and the expected decline in investment, growth in merchandise imports will also slow down. However, with the acceleration of growth in private consumption, imports of consumer goods will

[5] The number of flats planned by issuing building permits rose by 3.2% last year: in the first half of the year it declined, while in the second half it increased.

[6] Export movements in 2015 and 2016 are also significantly affected by the number of working days. While 2015 had three working days more than the preceding year, 2016 has three days less. The rates of the working-day adjusted growth of exports in 2015 and 2016 will be similar.

[7] With unfavourable movements in the last quarter of 2015, the carryover into 2016 is fairly low. This means that if real merchandise exports remain at the level of the last quarter of 2015 for the whole of 2016, its average growth in 2016 will total only 0.2%.

[8] Export performance is calculated as the ratio of the Slovenian real exports of goods and services to the real imports of goods and services of Slovenia's trading partners, weighted by the Slovenian shares of exports to these countries.

[9] Motor vehicle exports picked up markedly upon commencement of the production of two new car models in the third quarter of 2014.

pick up. Imports of services will strengthen this year after last year's modest growth. Growth will mainly be driven by higher spending by domestic tourists abroad (imports of travel), which rose last year for the first time since the beginning of the crisis. We also expect higher imports in other business services as well as the telecommunication, computer and information services.

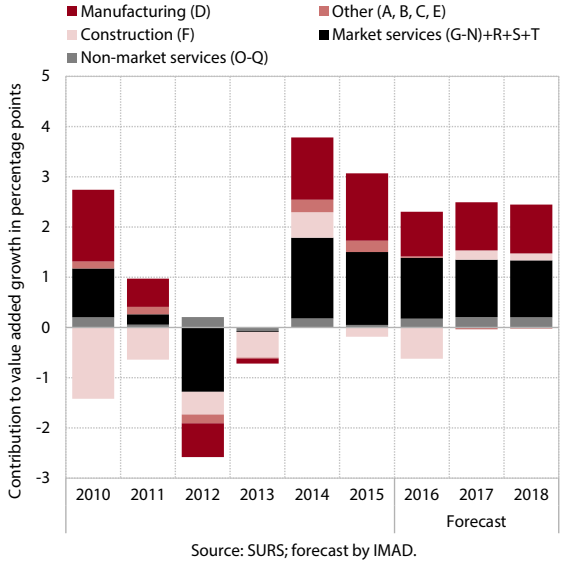
In 2017–2018 economic growth will again strengthen slightly. Export growth will follow the growth in demand from key trading partners and, amid an expected improvement in the international environment, will be higher than this year. It will continue to rely on exports to Slovenia's trading partners from the EU, with exports outside the EU also projected to improve. The recovery of private consumption will also continue in 2017 and 2018, as disposable income will continue to rise, mainly owing to further growth in the total wage bill. Investment consumption will also rise again, which will be the main driver behind the improvement on the economic growth figures for 2016. With the expected increase in the absorption of EU funds under the new financial perspective, government investment will expand. Growth in private consumption and a rebound on the real estate market will be reflected in a continuation of the gradual recovery in housing investment. Business sector investment will also increase further. In the manufacturing sector, investment will be boosted by high capacity utilisation as a result of the expected increase in foreign demand; in the services sector, it will mainly reflect higher domestic demand. Amid growing expenditure across most expenditure categories, government consumption will also continue to increase in this period; however, since fiscal restrictions will remain in place, growth will be modest. Owing to rising growth in domestic consumption, and the resulting higher imports of consumer and investment goods, net exports will make a smaller contribution to economic growth.

2.2. Value added by sector

Value added continued to increase in 2015 in most sectors except construction, where it fell again after recovering for one year. Total growth was therefore slightly lower than in the preceding year (2.9% in 2015 and 3.8% in 2014). Amid growing foreign demand and a further improvement in competitiveness, the relatively strong growth of value added continued in the manufacturing sector. This derived primarily from medium-low-technology industries (particularly the metal and rubber industries), which had lower costs owing to low commodity prices, and medium-high-technology industries (the manufacture of motor vehicles and electrical equipment). With high domestic production activity and a rebound in private consumption, value added growth also continued to strengthen in most of the key market services. It was also boosted in some sectors by increased sales on foreign markets (particularly in transportation, accommodation and food service activities, and computer programming). With a decline in civil engineering activity (particularly municipal infrastructure), which had risen sharply in the preceding year due to the absorption of EU funds, value added in the construction sector once again fell in 2015 after a year of growth. Building construction activity continued at the lowest level recorded since the onset of the crisis. Owing to the continuation of austerity measures, the growth of value added in public services remained weak last year.

This year the growth of value added will slow before strengthening slightly in 2017–2018. In addition to slower growth in manufacturing due to the expected moderation in merchandise export growth, a steeper decline in construction activity is also expected this year. This will be linked to the significant contraction in government investment due to the strong decline in the absorption of EU funds at the beginning of the new financial perspective. Domestic production and construction activity will contribute to more modest growth in most market services, although higher private consumption will have a favourable impact on individual subsectors (in particular retail trade, accommodation and food service activities, and various recreational and personal service activities). The slightly higher growth of value added in Slovenia's economy over the next two years will be mainly underpinned by a gradual rebound in construction activity, boosted by a restart in the absorption of EU funds and a gradual pick-up in the construction of (residential and non-residential) buildings. Value added will continue to increase in the manufacturing sector, but its growth will be lower than in 2014–2015, when it was relatively strong due to the commencement of production of two new car models. Relative to this year, growth in market services will not change significantly. In public services, the loosening of restrictions on new hires will lead to a gradual increase in the very modest growth of value added seen in recent years.

Figure 9: **Contribution to the increase in value added**

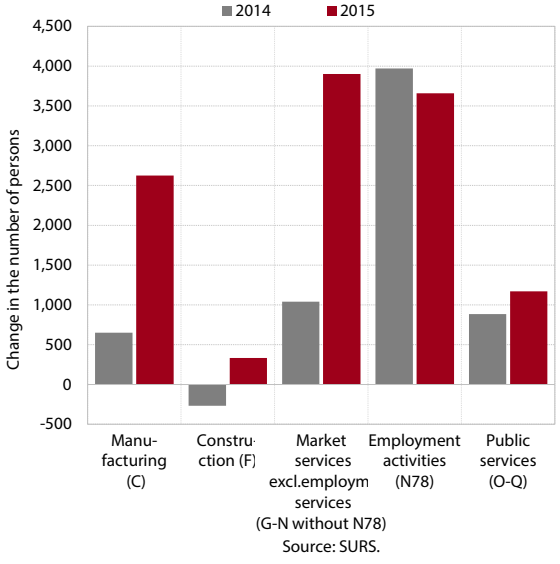


Source: SURS; forecast by IMAD.

2.3. Employment and unemployment

As a result of more modest growth in activity, employment[10] growth (0.9%) will be slightly lower than last year. Employment started to recover at the end of 2013, and its growth strengthened in 2015 to 1.4%. With a further pick-up in economic activity, employment increased in most private sector activities, particularly medium-technology manufacturing, accommodation and food service activities, transportation and trade. In the last two years, employment growth has been strongest in employment activities which provide labour to other sectors, particularly manufacturing, but their contribution to total employment growth declined in 2015. With favourable expectations about future employment in most sectors, we expect further growth in total employment this year, but this will slow slightly owing to lower growth in activity. With increased production activity, employment will rise further in manufacturing, while the strengthening of foreign and, notably, domestic demand will continue to favourably impact employment in most non-financial market services. Growth in employment activities will continue, which indicates the need for more flexible forms of employment as employers are still cautious about hiring. Employment in the general government, which was already up last year, will continue to rise; however, as fiscal restrictions will remain in place, this growth will be modest. Given the considerable decline in government investment, we estimate that employment will fall in construction and, with moderate activity, again in financial end insurance activities.

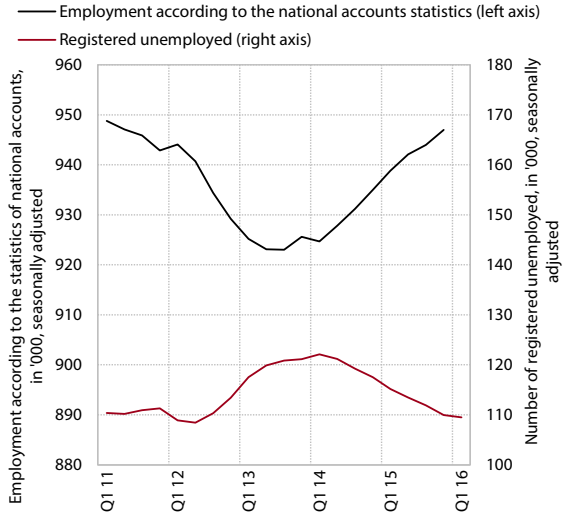
Figure 10: **Change in employment by activity**



Source: SURS.

Employment growth will continue in the next two years, but will be more modest due to rising demographic pressures. The growth of employment in 2017 will be similar to this year and recorded in most private sector activities. Further growth is expected in manufacturing and market services, particularly those related to domestic demand. Because of a pick-up in investment, employment will also increase in the construction sector. In the general government, employment will strengthen slightly but its growth will remain moderate. Employment will also increase in 2018, but we believe this growth will ease off as the pressures associated with a faster decline in the number of working-age people become more pronounced, which will reduce the supply of labour (see Box 2).

Figure 11: **Number of employed and registered unemployed**



Source: SURS, ESS; calculations by IMAD. Note: * The figure for Q1 2016 is the average of January and February.

Owing to higher activity and higher employment, the number of registered unemployed persons declined more significantly last year; in the period 2016–2018, favourable developments will continue. The decline in the number of registered unemployed, which started in the first half of 2014, continued in 2015 (to 112,700 in

Table 4: **Forecasts for employment and unemployment**

(%)	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
Employment according to the SNA, growth	1.4	1.1	0.9	0.9	0.9	0.7
Number of registered unemployed, annual average	112.7	108.6	107.4	102.2	101.0	94.7
Registered unemployment rate	12.3	11.8	11.7	11.1	11.0	10.3
ILO unemployment rate	9.0	8.9	8.6	8.5	8.1	7.5

Source: SURS; 2010–2018 forecasts by IMAD.

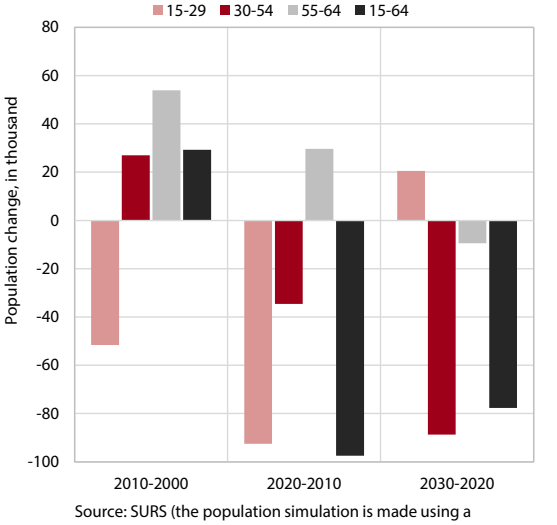
[10] Employment according to the statistics of national accounts.

the year as a whole). The outflow from unemployment increased while the inflow into unemployment declined, mainly due to fewer job losses for business reasons and company bankruptcies. There were also fewer first-time jobseekers, which in our view is partly due to fewer young people finishing school. By the end of February 2016, unemployment had declined further according to seasonally adjusted data, with 116,039 people registered as unemployed at the end of the month, which is 5.3% or 6,513 less than in February 2015. This number will continue to decline for the remainder of the year. The inflow into the unemployment register will fall slightly again, for similar reasons to last year. The further decline in the number of young people finishing school will again be reflected in a smaller number of first-time jobseekers. The outflow into employment will otherwise be smaller than last year, but much larger than during the crisis. Amid continued economic growth, unemployment will continue to decline over the next two years. According to our estimates, this will be increasingly related to demographic trends as the working-age population (20–64 years) declines.

Box 1: **Impact of demographic trends on the labour market**

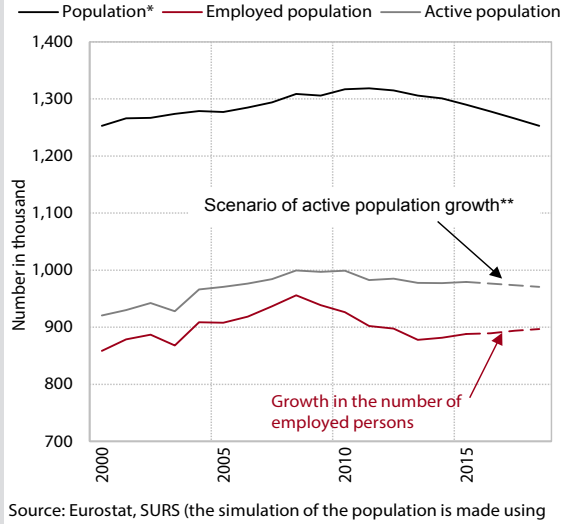
The number of working-age people (20–64 year) started to decline in 2012, a trend that will continue at a vigorous pace for the next ten years.[11] According to the population projection put forward by Eurostat,[12] which assumes an average positive net migration of around 2,700 persons in the age group of 20–64 years per year, the decline in the number of working-age people will be at its most intense in the next ten years (by approximately 10,000 per year). The number of people in the most economically active group (30–54 years) will fall fastest after 2020 owing to the entry into this group of generations born after 1990; since this time, 10,000 fewer children per year have been born than was the case until 1980, when the number of births started to decline. The number of working-age people first declined in 2012, by around 4,000;[13] in 2014 it fell by almost 8,000, and it is expected to fall even more in the years to come. Taking into account the current migration trends (almost no positive net migration, on average, in the last three years) we made our own projection, which differs from Eurostat's projection particularly in a smaller and more gradual positive net migration. According to our projection, the working-age population is set to fall much more. Unfavourable demographic trends also put significant pressure on the public finances due to lower taxes and contributions collected and higher expenditure on social protection and pensions due to ageing.

Figure 12: **Change in population numbers by decade***



Source: SURS (the population simulation is made using a microsimulation model by IER); calculations by IMAD.

Figure 13: **Scenario of the change in different population categories aged 20–64**



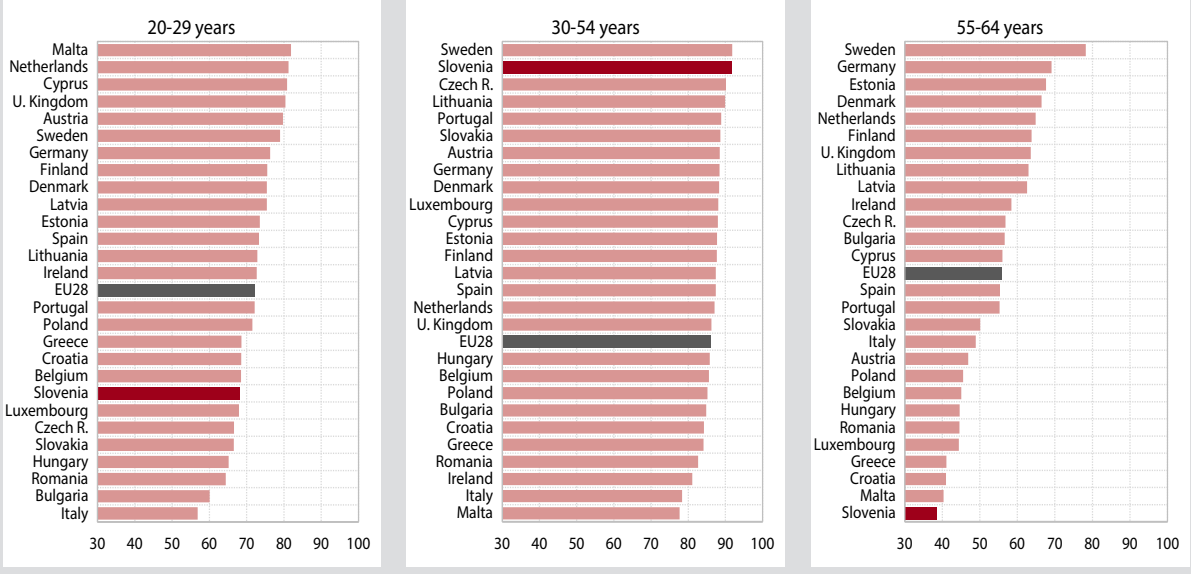
Source: Eurostat, SURS (the simulation of the population is made using a microsimulation model by IER); calculations and forecast by IMAD.

Note: *As net migration in recent years has been smaller than according to the EUROPOP2013 population projections, we made our own projection assuming: 1) the fertility rate remains at the level of 2014 (because of a declining number of women of childbearing age, the fertility rate is not expected to increase); 2) life expectancy at the level of the EUROPOP2013 projection; 3) a gradual increase in net migration from the current 0 to 4,000 by 2025. These growth rates were then applied to the number of people according to the Labour Force Survey. ** The scenario of activity growth includes: 1) a continuation in the rising trend in highly educated people; 2) equalisation of the activity rates for women and men by 2030; 3) a 20 percentage point increase in the activity rate for older people by 2030. The figure for 2015 is calculated on the basis of year-on-year growth in the first three quarters.

[11] This is due to the sizes of the generations entering and exiting this population group, taking into account current migration trends and projections (IMAD's projection).
[12] EUROPOP 2013.
[13] Data for the year as a whole.

As evident from the projections, the decline in the working-age population will increasingly restrict employment growth in the coming years. Demographic developments have, through the decline in the working-age population, already influenced labour force supply over the past years; however, during the crisis, the negative effects were not directly visible because of the large number of unemployed people and modest levels of recruitment. The adverse effects can however become more noticeable with a further strengthening in economic activity and the need for increased hiring. We estimate that, in the absence of larger positive net migration flows, employment growth in the coming years will arise mainly from increased transitions from inactivity to the labour market and higher activity and employment rates, particularly for young and older people. More specifically, the activity rate for young people is below the EU average, while the activity of older people is the lowest in the EU. This should be addressed by appropriate economic and social policies that encourage these population groups to enter and remain on the labour market. The activity of older people will otherwise also be affected by the pension reform implemented in 2012. In our view, the possibilities to further increase the activity of adults in the most active age (30–54 years) are limited as it is already among the highest in the EU.

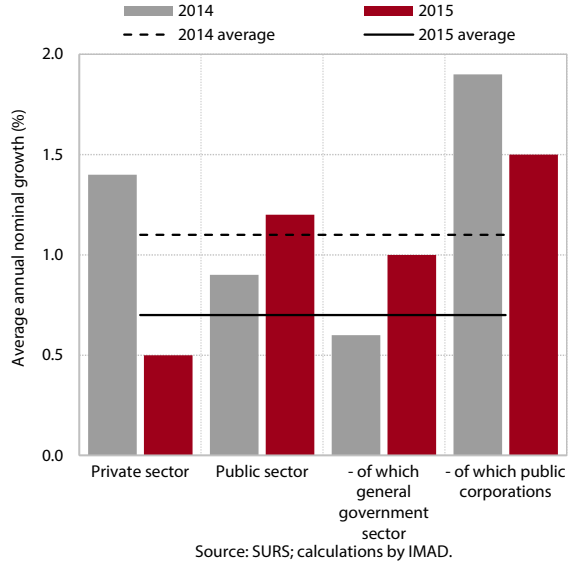
Figure 14: **Activity rate across EU Member States in 2014, by age group**



2.4. Earnings

After slowing in 2015, the nominal growth of average gross earnings is expected to strengthen this year (1.7%) but only owing to the significantly higher growth in the public sector. Despite the highest 13th month payments and Christmas bonuses in seven years, the growth in private sector earnings slowed last year, which is attributable not only to companies' efforts to maintain competitiveness but also to the absence of price pressures and changes in the employment structure.[14] Wage growth slowed last year in most private sector activities, including manufacturing, where it had been the strongest. In market services, earnings remained almost unchanged in 2015 (0.2%), mainly owing to a rising share of employed people with relatively low wages. With a further strengthening of economic activity, the absence of inflationary pressures and companies' efforts to maintain a competitive position, average gross earnings in the private sector will see similar nominal growth (0.6%) to last year. In the public sector, average gross earnings will rise markedly this year (3.5%) as a result

Figure 15: **Average gross earnings per employee**



Source: SURS; calculations by IMAD.

[14] At the beginning of the crisis, the increase in dismissals of low-wage earners contributed to higher growth in the average gross wage, while in 2014 and in 2015, this trend reversed, and the increase in the number of workers with relatively low wages reduced the average gross wage level by 0.1 and 0.4 percentage points, respectively.

Table 5: **Forecasts for growth in average gross earnings per employee**

Growth rates, (%)	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
Gross earnings per employee – nominal	0.7	2.2	1.7	2.2	2.0	2.0
- private sector	0.5	1.3	0.6	2.3	1.8	2.2
- public sector	1.2	3.6	3.5	2.1	2.4	1.9
Gross earnings per employee – real	1.2	1.4	2.0	0.8	0.7	0.7
- private sector	1.0	0.5	0.9	0.9	0.5	0.9
- public sector	1.7	2.8	3.8	0.7	1.1	0.6

Source: SURS; 2010–2018 forecasts by IMAD.

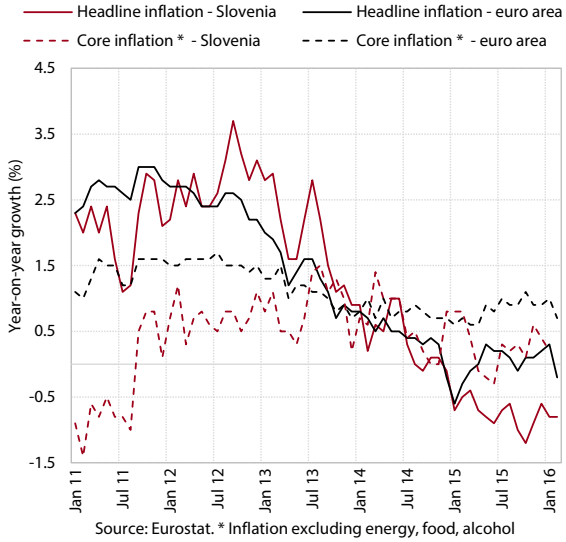
of two wage agreements and further growth in public corporations. Their growth will be primarily underpinned by the payment of public servants' promotion pay rises[15] which, according to the Ministry of Public Administration, are slightly lower than when the autumn forecast was made. Growth will also reflect the increase in pay scale in September 2016.

In 2017–2018, the nominal growth of average gross earnings is expected to accelerate: growth in the private sector will strengthen, while growth in the public sector will slow down. The acceleration in the private sector will be gradual, arising not only from the expected further strengthening of economic activity, but also from higher inflation. After several years of cost competitiveness gains, wage growth will match productivity growth. In the public sector, the growth of average gross earnings will slow over the next two years. In the general government, the growth recorded in 2017 will reflect the already agreed payment of promotion raises and increase in the pay scale, whereas for 2018 we assume a further moderation of growth. Growth in public corporations will increase steadily over the forecast horizon. With the expected price rises in 2017 and 2018, the real increase in average gross earnings in these two years will be somewhat more modest than in 2016.

2.5. Inflation

In 2016 prices will on average remain roughly unchanged, primarily owing to the lower price of oil; over the next two years, a modest increase is expected, taking into account the assumed commodity price movements and further growth in economic activity. Price movements in 2016 will continue to be significantly affected by energy prices, which given the assumed price of oil will be lower for the year as a whole. The decline will otherwise gradually slow this year due to the base effect, while in the last quarter prices will be up year-on-year, taking futures oil prices into account. Considering the assumptions for oil and other commodity prices, price pressures from abroad will gradually strengthen over the next two years, and higher energy prices will make a significant contribution to the expected modest inflation. Core inflation will increase modestly over the forecast horizon. An increase in the contributions of all drivers of core inflation (see Box 2) with regard to the long-term average has been suggested since the second half of 2015. The gradual growth in core inflation will be

Figure 16: **Headline and core inflation in Slovenia and the euro area (HICP)**



Source: Eurostat. * Inflation excluding energy, food, alcohol and tobacco.

Table 6: **Inflation forecast**

(%)	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
Inflation – Dec/Dec	-0.5	1.2	0.6	1.6	1.2	1.4
Inflation – annual average	-0.5	0.8	-0.3	1.4	1.3	1.3

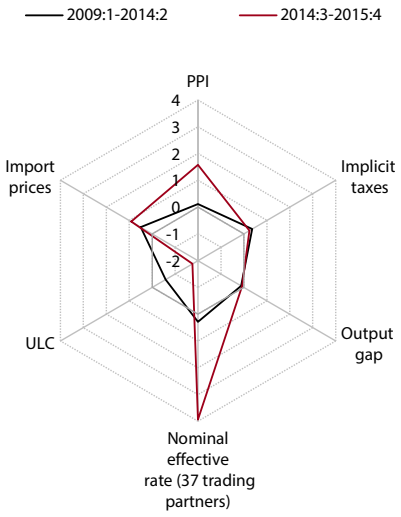
Source: SURS; 2010–2018 forecasts by IMAD.

[15] All measures relating to wage growth were extended from 2014 into 2015, except for promotion pay rises for public servants, which will first be paid in December for 2015 (the same applies to 2016); see the Agreement on Measures in the Field of Salaries and Other Labour Costs in the Public Sector Aiming to Balance Public Finances for 2015, Official Gazette No. 95/2014).

Box 2: **Drivers of core inflation in Slovenia**

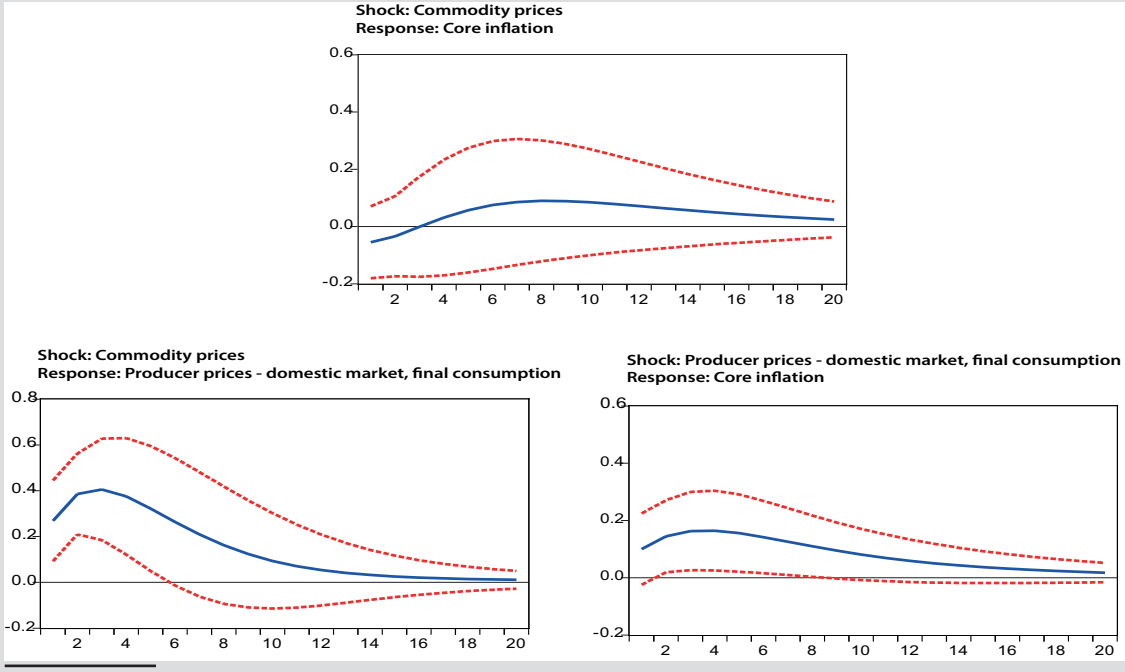
The decline in core inflation and its persistent low level in the recent period has mainly been a consequence of weak domestic demand, a reduction in unit labour costs because of the need to improve competitiveness and, indirectly, a decline in commodity prices. Analysis of the contributions[16] of individual variables to the decline in core inflation after the second quarter of 2014 indicates that the main reason for the decline with regard to the long-term average was weak domestic demand, which is reflected in a significantly negative output gap, and lower taxes. These are estimated to be mainly a consequence of the base effect: as the VAT rate was raised in the middle of 2013, the contribution of taxes to core inflation was above the long-term average for one year. The reason why core inflation also remained low in 2015, when spending started to increase more notably, was largely because of a decline in unit labour costs and lower commodity prices. The movement of unit labour costs explains changes in the prices of non-energy goods and services to a similar extent despite a relatively large share of labour costs in service activities. The reduction in unit labour costs to ensure cost competitiveness is, in our estimation, also the main reason for the discrepancy between core inflation movements in Slovenia and the whole euro area in the recent period. In Slovenia, the contribution of producer prices to the decline in core inflation was less than the euro area average; in circumstances where there is limited access to sources of finance, this can also reflect the need for companies to generate profit. We estimate that commodity price shocks pass through to core inflation through producer prices;[17] it is only the transmission of commodity price shocks into the prices of non-energy goods that is statistically significant (not into the prices of services).

Figure 18: **Discrepancy between core inflation drivers in Slovenia and the euro area**



Source: Eurostat, own calculations. Note: The figure shows discrepancies in the growth rates (except for the output gap, where discrepancies in the levels are shown) of core inflation factors between Slovenia and the euro area in the given periods. The boundary between the two periods is set at the second quarter of 2014. Based on the regression analysis and statistical insignificance, we estimate that the movement of the effective rate had no impact on the gap between core inflation in Slovenia and the euro area.

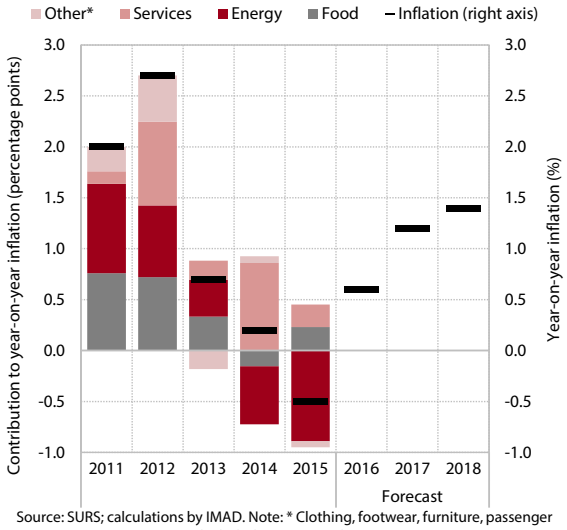
Figure 17: **Selected response functions in the VAR model**



[16] A regression analysis of core inflation (i.e. HICP excluding energy and food) on the basis of different specifications of explanatory variables and different lags. The non-weighted averages of the contributions of individual components were determined only on the basis of regression estimates with the expected signs of explanatory variables.

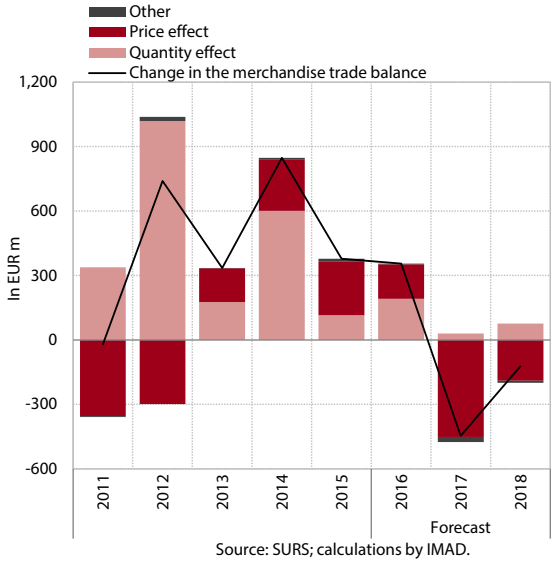
[17] The pass-through of commodity price shocks was analysed by a VAR model, composed of euro area commodity prices, producer prices for goods for final consumption on the domestic market, and core inflation, with the output gap as an exogenous variable, calculated using a HP filter on an extended series of real GDP.

Figure 19: **Contribution of selected groups to year-on-year inflation in Slovenia**



Source: SURS; calculations by IMAD. Note: * Clothing, footwear, furniture, passenger cars, alcoholic beverages, tobacco, etc.

Figure 20: **Decomposition of changes in the nominal balance of merchandise trade**



Source: SURS; calculations by IMAD.

mainly attributable to a further narrowing of the output gap against the background of recovering domestic consumption. However, we estimate that a larger increase in the income of employed people and thus demand will be limited by the need of companies to preserve cost competitiveness, despite their current relatively high profitability. Sufficient internal resources also play a role in maintaining competitiveness in addition to limiting labour cost growth and ensuring appropriate long-term profitability. This holds particularly true in the case of constraints on the supply side of lending, although these apply to a lesser extent to the tradable part of the economy. Unit labour costs in the tradable sector are thus likely to continue to increase only gradually, meaning that their direct and indirect contributions to core inflation will remain modest. The total price growth over the forecast horizon is expected to be relatively low, lower than the ECB's medium-term inflation goal, which is below or close to 2%.

2.6. Current account of the balance of payments

The current account surplus will maintain its high level in 2016–2018. In 2016 it will widen slightly, primarily owing to the rising surplus in trade, driven to a similar extent by quantity and price factors. Exports will increase more than imports. Assuming a further decline in oil and other commodity prices, the terms of trade will improve for the fourth year in a row (0.8%). The price effect is expected to contribute around EUR 150 m to the increased merchandise trade surplus this year. Over the next two years the merchandise trade surplus will narrow gradually amid the expected similar volume growth rates of exports and imports, mainly as a consequence of the assumed growth of commodity prices. The surplus in the balance of services will increase further over the forecast horizon. Its growth will continue to be mainly driven by a larger surplus in trade in travel and transport services. The deficit in primary income will continue to widen in 2016 and 2017. The increase will be largely underpinned to the net outflow of direct investment income, with the payments of dividends and profits expected to increase owing to a larger inflow of direct investment. The costs of servicing external debt will remain similar to this year, before falling gradually in the coming years due to the lower yields required on government securities in recent years. The net inflows of labour income from daily migrants abroad are expected to remain relatively high. The deficit in secondary income, which mainly reflects absorption from the European Structural Funds, will widen this year owing to the lower absorption of EU funds upon the transition to the new financial perspective. In 2017 it will narrow substantially again, with the expected acceleration of absorption and repayment of the 5% security from the previous perspective.

Table 7: **Forecast for the current account balance – the balance of payment statistics**

	2015	2016		2017		2018
		September 2015	March 2016	September 2015	March 2016	March 2016
Current account, in EUR m	2,810	2,870	2,960	2,776	2,754	2,627
Current account, as a % of GDP	7.3	7.2	7.5	6.7	6.8	6.3

Source: BoS; 2016–2018 forecasts by IMAD.

3. Risks to the forecast

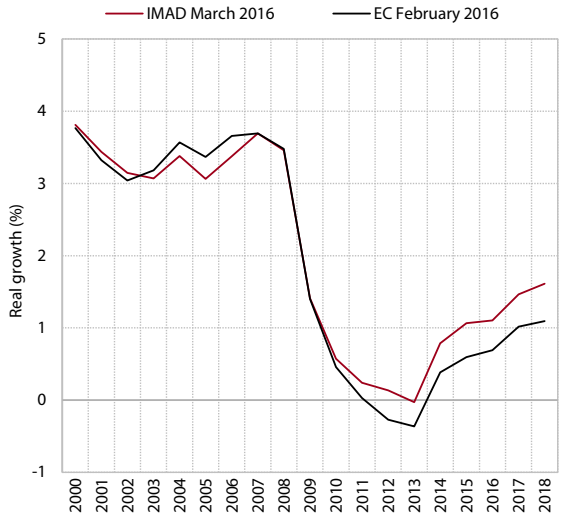
The key risks to the Spring Forecast stem from the international environment. They represent challenges to global economic growth, which although partly geopolitical in nature are mainly related to developments in emerging economies. Since the debt growth in these countries is relatively swift and they are transitioning to a model of lower, but more sustainable, domestic consumption based growth, the forecasts for their medium-term growth are being lowered. With limited room for manoeuvre of economic policy, a growing risk associated with advanced world economies is the volatility of asset prices on their mostly overvalued financial markets and the possible implications of their significant and sudden declines, which could seriously undermine the relatively fragile levels of business confidence. The main risks in a narrower international environment include uncertainties such as future migration flows, Brexit and the functioning of the Schengen area. A materialisation of these risks could directly and indirectly reduce growth in demand from Slovenia's trading partners.

The risks in the domestic environment are less pronounced than those related to international developments. Alongside export growth, the forecast for investment growth is particularly subject to risks, according to our estimates. The main downside risks to private investment growth include reduced prospects for foreign demand, a deterioration in the medium-term economic outlook and uncertainties regarding the effectiveness of Slovenia's economic policy framework. The estimates made regarding the absorption of EU funds under the new financial perspective, and therefore government investment as a result, are also uncertain. As is the case with other general government spending, there is a possibility that government investment will be restricted by the need for additional contractionary fiscal policy measures. Aggravated by unfavourable demographic factors, the prevailing downside risks related to the dynamics of economic activity could also contribute to lower employment growth than that which is projected in the baseline scenario. On the upside, Slovenia's competitive position may continue to improve in 2016, which would result in higher growth in exports and GDP.

4. Potential GDP growth and output gap

Potential GDP growth in 2016 is expected to be at the level of 2015 before gradually recovering to close to 2%.[18] Over the forecast horizon, total factor productivity will make the greatest contribution to the calculated potential growth. Its contribution will increase by over 1 percentage point, but will remain lower than before the crisis. The other two components in the calculated potential growth (labour and capital) will also be positive, but modest, in the years to come. The increase in the contribution of labour (0.4 percentage points in 2015–2018) will reflect the improvement in labour market conditions and the higher expectations regarding their future trends, which will increase the positive contribution of the participation rate. The contributions of hours worked per employee have also been positive since 2013. Taking demographic projections into account, the impact of the decline in the number of people of working age has remained negative since 2011 and in the medium term (at around −0.2 percentage points). Relative to the pre-crisis period, the contribution of capital remains the smallest of all three components. The calculations demonstrate that it will strengthen gradually over the medium term, but not to the levels witnessed before the crisis.

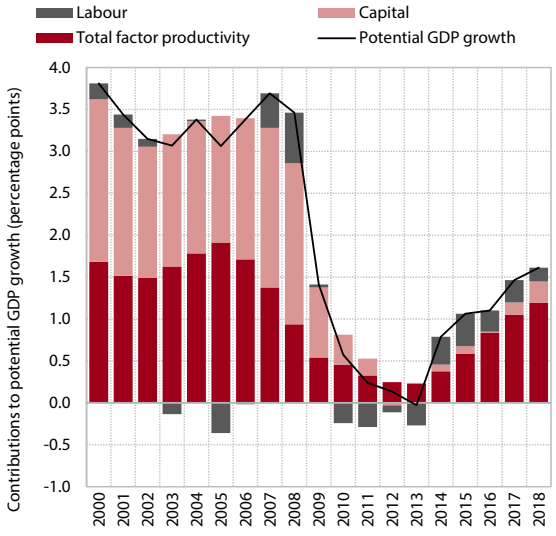
Figure 21: **Potential GDP growth, comparison of calculations by IMAD and the EC**



Source: SURS; calculations by IMAD, EC

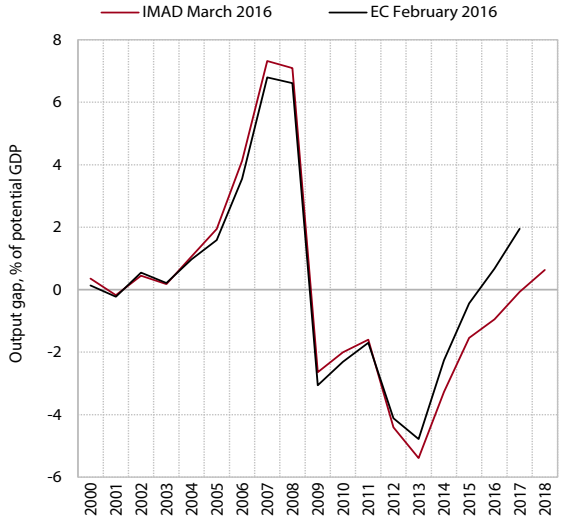
[18] Potential GDP (and its growth) from a macroeconomic perspective. Potential output is therefore the output an economy can achieve without creating inflationary pressures, and not the maximum possible output of an economy. This means that output is often higher than potential output. IMAD's calculation of potential GDP growth uses a production function method whose basic attributes do not differ from the EC's method.

Figure 22: **Contributions of individual components to potential GDP growth**



Source: SURS; calculations by IMAD, EC.

Figure 23: **Output gap, a comparison of calculations by IMAD and the European Commission (EC)**



Source: SURS; calculations by IMAD, EC

The negative output gap will narrow, largely on account of the expected higher rates of GDP growth amid the relatively modest growth of potential GDP; in 2018 it will be positive. The output gap is the difference between actual GDP and potential GDP, expressed as a percentage of potential GDP. As a result of factors that affect the calculation of potential growth, and revisions of the estimated past growth and GDP forecasts, the output gap is also a rather unreliable macroeconomic indicator. Each time a new calculation is made, its value can also change significantly for previous periods. Nevertheless it is one of the key indicators used in the framework of enhanced fiscal surveillance in the euro area (the Fiscal Compact)[19] to monitor progress and the achievement of fiscal targets in individual Member States. According to the latest forecasts, the output gap will close at a later time than that which was envisaged in the autumn forecasts.

The disparities between the output gap calculations by IMAD and the European Commission are a result of different forecasts for GDP growth and different calculations of potential GDP. The disparities in the calculations of potential GDP are mainly attributable to differences in the input data. IMAD's calculation is based on SURS data from national accounts for 2015 released in February 2016. The forecasts taken into account also differ, and IMAD's forecasts also cover a longer period. Moreover, IMAD's calculation also takes into account updated demographic projections calculated using a microsimulation model from the IER (source: SURS). In the employment series according to national accounts statistics, IMAD's calculation also takes into account a correction for a break in the data series in 2002. The difference between the calculations by IMAD and the EC is also mainly due to the contribution of the component of total factor productivity (around 0.2 percentage points in 2014–2017).

[19] Treaty on Stability, Coordination and Governance in the Economic and Monetary Union. For more on this, see Economic Issues 2014, Fiscal Developments and Fiscal Policy.

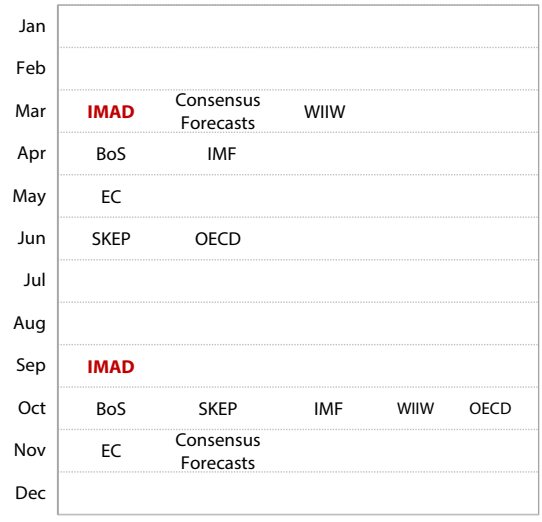
Appendix:

1. Assessing the forecasting performance

1.1. Methodology

We assess the accuracy of the forecasts for macroeconomic indicators on the basis of a number of statistical criteria[20] for evaluating forecasting performance and for various time periods. The assessment of the forecasts by two institutions (IMAD and SKEP) covers a longer horizon, from 1997 to 2015. The analysis for the 2002–2015 period captures forecasts by six institutions,[21] and for the previous year, forecasts by eight[22] institutions. All the forecasts[23] have been compared against the first statistical annual estimate, which is, for GDP growth, based on quarterly data. A systematic comparison of how the forecasts diverge from the statistical estimate over a longer time horizon reveals the accuracy of the forecasting, i.e. the mean errors made by institutions in forecasting a given aggregate. If the errors are distributed evenly, the value of this measure is close to zero.

Figure 24: **Timeline of forecasts released by individual institutions in 2015**



Source: Forecasts by institutions.

[20] The arithmetic mean, mean absolute error, root mean square error, standardised mean absolute error and standardised root mean square error. For detailed results, see Table 12 in the statistical appendix.

[21] In addition to the forecasts by the Institute of Macroeconomic Analysis and Development (IMAD), the analysis covers forecasts made by the Bank of Slovenia (BoS) and SKEP – Economic Outlook, Analysis and Forecasts of the Chamber of Commerce and Industry of Slovenia, and among international institutions, the European Commission (EC), the International Monetary Fund (IMF) and Wiener Institut fuer Internationale Wirtschaftsvergleiche (WIIW).

[22] In addition to the aforementioned six institutions, the Organisation for Economic Co-operation and Development (OECD) and Consensus.

[23] Spring forecasts for the year ahead (PNt+1), autumn forecasts for the year ahead (JNt+1), spring forecasts for the current year (PNt) and autumn forecasts for the current year (JNt).

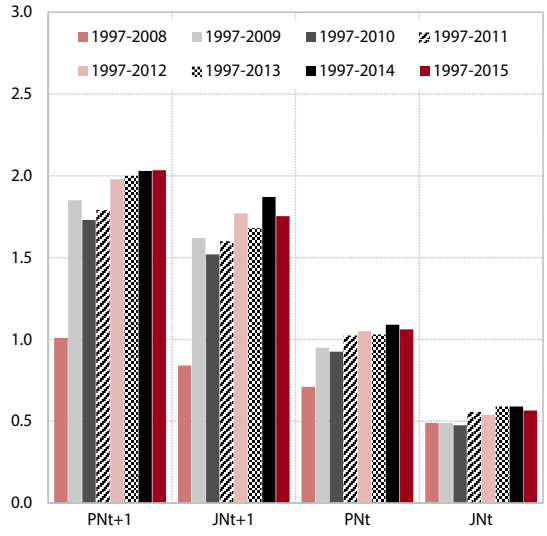
Those institutions which release their forecasts at a later time have an advantage in terms of information, which is manifested in smaller forecast errors. If the forecast is made later in the year, it may include new information that can considerably alter the economic picture. This new information can involve new data on indicator movements in a given month or quarter, revisions of previously released figures, or changes in assumptions about the international environment, which represent a strong element of uncertainty for an open economy such as Slovenia's. In recent years, fiscal policy guidelines and fiscal consolidation measures (which are usually defined after we have already completed the forecast) have also become a significant factor to consider when preparing the forecasts. All institutions included in our analysis tend to release their forecasts twice a year, most of them at a later time than IMAD.

1.2. Results

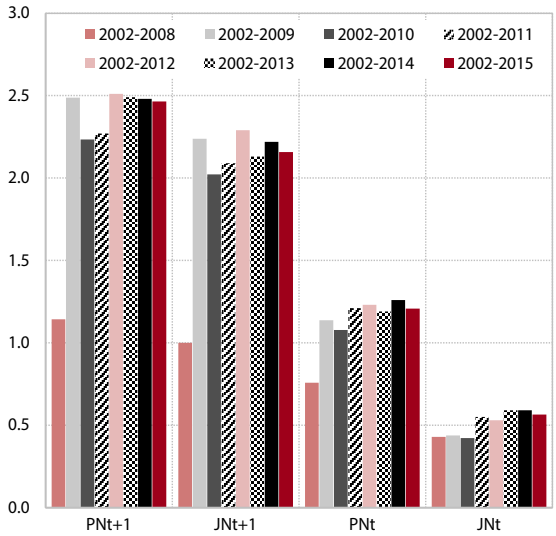
Comparisons between the forecasting performance of IMAD and other institutions show no systematic over- or under-estimation in IMAD forecasts over a longer period of time. In assessing the accuracy of forecasts it is important that their mean error over a longer time horizon is as small as possible. After the release of data for economic activity and inflation in 2015, we assessed the forecasting performance of domestic and foreign forecasting institutions. Between 1997 and 2015, the mean absolute error in IMAD forecasts for real GDP growth for the current year was 1.06 percentage points in the spring forecasts and 0.57 percentage points in the autumn forecasts; for the year ahead, it amounted to 2.03 percentage points in the spring forecasts and 1.75 percentage points in the autumn forecasts. The mean absolute error in the forecasts for inflation for the current year totals 0.46 percentage points in the spring forecasts and 0.18 percentage points in the autumn forecasts; for inflation in the year ahead, it is 1.16 percentage points in the spring forecasts and 1.02 percentage points in the autumn forecasts.

The forecasting performance over a longer time horizon was significantly affected by large errors in the forecasts for 2009, 2011 and 2014. If the time horizon analysed is relatively short, any error (either positive or negative) can significantly affect the conclusions reached in previous performance analyses. In the period up to the commencement of the global economic and financial crisis in 2009, when Slovenia's economy recorded relatively stable economic growth, the forecasting errors were relatively small. Over the next few years, however, the indicators of forecasting performance deteriorated. With a significant deterioration in the international environment, further tensions on the financial markets and significant doubts about the effectiveness of anti-crisis measures and the exit from the crisis, uncertainty increased significantly, which was particularly reflected in the forecasts for 2009, 2011 and 2014. The errors in

Figure 25: **Mean absolute error in IMAD forecasts for real GDP growth for various periods**



Source: calculations by IMAD.



Source: calculations by IMAD.

the forecasts for these three years (by IMAD, as well as by other institutions) were therefore much greater and had a significant impact on the calculation of mean errors for the entire period (the forecast error in the 2002–2015 period is greater than in the 1997–2015 period). Similarly, the forecasts for the year ahead in the 2013–2015 spring forecasts also diverged notably from GDP growth data released at a later time, which holds true for all institutions.

All the institutions significantly underestimated real GDP growth for 2015 in their forecasts for the year ahead and the current year. The spring forecast made in 2014 for the year ahead, in particular, was made in circumstances of significant uncertainty among economic agents despite the stabilisation of the banking system and the improvement of Slovenia's position on financial markets, which was reflected in the cautious tone of the forecast. The forecasts for 2015 were therefore underestimated to the greatest extent in the 2014 spring forecasts (between 1.55 and 2.6 percentage points). The autumn forecasts for the current year were already much more accurate as the errors were much smaller, i.e. between –0.2 and –0.6 percentage points. The wide range primarily mainly reflects the time at which the individual forecasts were made, i.e. whether or not there was new information available. The most accurate forecast in spring 2015 was made by IMAD (in autumn 2015, the most accurate forecast was made by IMAD and WIIW).

Inflation forecasts for 2015 were, for the most part, overestimated. All the institutions projected higher inflation for the year ahead in their spring and autumn forecasts from 2014, which was linked to the expectations about the movements of oil and other commodity prices and the general price levels in the euro area. The same factors were also reflected (albeit to a lesser extent) in the spring forecasts for the current year, while the autumn forecasts were fairly accurate. Absolute errors in the spring forecasts for the current year ranged between 0.1 and 0.6 percentage points. The most accurate forecast (of domestic institutions) was made by IMAD. Errors in the autumn forecasts were minimal (between + and -0.1 percentage points).

Table 1 : **Errors in real GDP growth forecasts for 2015, by forecasting institution**

Realised: 2.9 %	Spring forecast 2014 for 2015		Autumn forecast 2014 for 2015		Spring forecast 2015 for 2015		Autumn forecast 2015 for 2015	
	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.
IMAD	0.7	-2.2	1.6	-1.3	2.4	-0.5	2.7	-0.2
BoS	1.4	-1.5	1.3	-1.6	2.2	-0.7	2.6	-0.3
SKEP	1.2	-1.7	1.2	-1.7	2.1	-0.8	2.5	-0.4
EC	1.4	-1.5	1.7	-1.2	2.3	-0.6	2.6	-0.3
IMF	0.9	-2.0	1.4	-1.5	2.1	-0.8	2.3	-0.6
WIIW	0.5	-2.4	1.5	-1.4	1.7	-1.2	2.7	-0.2
OECD	0.3	-2.6	1.4	-1.5	2.1	-0.8	2.5	-0.4
Consensus	0.9	-2.0	1.0	-1.9	1.8	-1.1	2.4	-0.5

Source: Forecasts by individual institutions; calculations by IMAD.

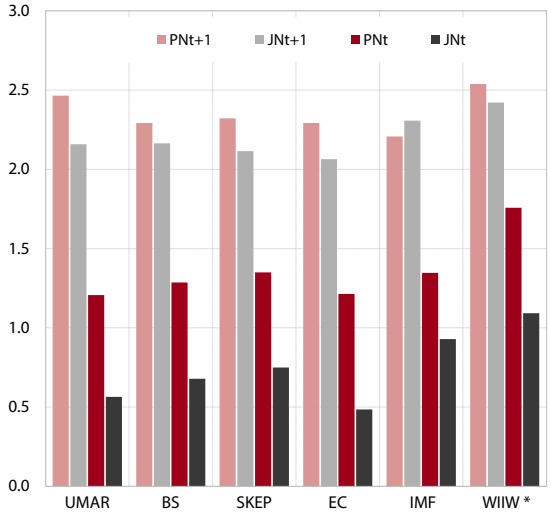
Table 2: **Errors in average annual inflation forecasts for 2015, by forecasting institution**

Realised: -0.5 %	Spring forecast 2014 for 2015		Autumn forecast 2014 for 2015		Spring forecast 2015 for 2015		Autumn forecast 2015 for 2015	
	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.
IMAD	1.1	1.6	0.6	1.1	-0.2	0.3	-0.4	0.1
BoS	1.1	1.6	0.7	1.2	-0.1	0.4	-0.6	-0.1
SKEP	1.6	2.1	1.6	2.1	0.0	0.5	-0.5	0.0
EC	1.2	1.7	1.0	1.5	0.1	0.6	-0.6	-0.1
IMF	1.6	2.1	1.0	1.5	-0.4	0.1	-0.4	0.1
WIIW	1.9	2.4	1.0	1.5	0.5	1.0	-0.4	0.1
OECD	0.7	1.2	0.6	1.1	-0.4	0.1	-0.6	-0.1
Consensus	1.8	2.3	1.5	2.0	0.5	1.0	-0.4	0.1

Source: Forecasts by individual institutions; calculations by IMAD.
Note: Negative values indicate an overestimation, whereas positive values indicate an underestimation.

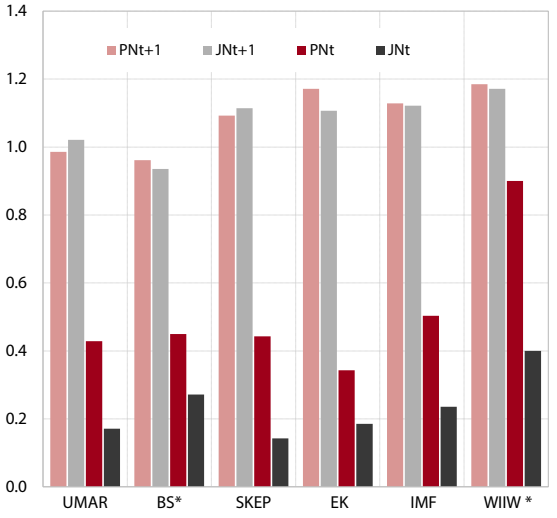
Of all the institutions that forecast Slovenia's economic growth, the European Commission makes the smallest forecast errors for economic growth over a longer horizon, whereas IMAD makes more accurate forecasts for inflation. The mean absolute errors in the forecasts for real economic growth in 2002–2015 ranged between 0.49 and 2.54 percentage points. The root mean square errors, which assign greater weight to larger errors, were much higher due to errors for 2009, 2011 and 2014. The European Commission made the most accurate forecast in this period, followed by IMAD. In the forecasts for average inflation, the mean absolute errors were smaller than in the forecasts for GDP (between 0.14 and 1.18). In this period, the forecasts by IMAD were the most accurate. Detailed results are shown in Table 12 in the statistical appendix.

Figure 26: **Mean absolute errors in real GDP growth forecasts for 2002–2015, by forecasting institution**



Source: Forecasts by individual institutions. Note: * WIIW data for PNt+1 for 2003-2015.

Figure 27: **Mean absolute errors in average annual inflation forecasts for 2002–2015, by forecasting institution**



Source: Forecasts by individual institutions. Note: * BoS and WIIW data for PNt+1 for 2003-2015.

statistical appendix

Table of contents

Table 1: **Main macroeconomic indicators of Slovenia**

Real growth rates in %, unless otherwise indicated

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
GROSS DOMESTIC PRODUCT	1.2	0.6	-2.7	-1.1	3.0	2.9	1.7	2.4	2.3
GDP in EUR m (at current prices, fixed exchange rate 2007)	36,252	36,896	35,988	35,907	37,303	38,543	39,598	40,613	41,880
GDP per capita in EUR (at current prices and at current exchange rate)	17,694	17,973	17,498	17,435	18,093	18,680	19,179	19,670	20,283
GDP per capita in USD (at current prices and at current exchange rate)	23,457	25,019	22,481	23,155	24,036	20,725	21,308	21,913	22,595
GDP per capita (PPS) [1]	21,100	21,500	21,500	21,500	22,600				
GDP per capita (PPS EU28=100) [1]	83	83	81	81	83				
EMPLOYMENT AND PRODUCTIVITY									
Employment according to National Accounts	-2.1	-1.7	-0.9	-1.4	0.6	1.4	0.9	0.9	0.7
Registered unemployed (annual average in thousand)	100.5	110.7	110.2	119.8	120.1	112.7	107.4	101.0	94.7
Rate of registered unemployment in %	10.7	11.8	12.0	13.1	13.1	12.3	11.7	11.0	10.3
Rate of unemployment by ILO in %	7.3	8.2	8.9	10.1	9.7	9.0	8.6	8.1	7.5
Labour productivity (GDP per employee)	3.4	2.4	-1.8	0.3	2.5	1.4	0.8	1.5	1.7
WAGES									
Gross wage per employee - nominal growth in %	3.9	2.0	0.1	-0.2	1.1	0.7	1.7	2.0	2.0
- Private sector activities	5.6	2.6	0.5	0.6	1.4	0.5	0.6	1.8	2.2
- Public service activities	0.8	1.0	-0.9	-1.3	0.9	1.2	3.5	2.4	1.9
Gross wage per employee - real growth in %	2.1	0.2	-2.4	-2.0	0.9	1.2	2.0	0.7	0.7
- Private sector activities	3.7	0.8	-2.0	-1.2	1.2	1.0	0.9	0.5	0.9
- Public service activities	-1.0	-0.8	-3.4	-3.0	0.7	1.7	3.8	1.1	0.6
INTERNATIONAL TRADE									
Exports of goods and services	10.2	6.9	0.6	3.1	5.8	5.2	3.7	4.8	4.9
Exports of goods	12.0	8.0	0.4	3.3	6.4	5.1	3.5	4.9	5.0
Exports of services	3.4	2.5	1.5	1.9	3.4	5.4	4.3	4.2	4.2
Imports of goods and services	6.8	5.0	-3.7	1.7	4.0	4.4	3.0	5.1	5.0
Imports of goods	7.6	6.0	-4.3	2.5	3.7	4.9	2.9	5.3	5.1
Imports of services	3.1	-0.4	0.2	-3.1	6.0	1.8	3.7	4.3	4.4

Table 1: **Main macroeconomic indicators of Slovenia -** *continue*

Real growth rates in %, unless otherwise indicated

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
BALANCE OF PAYMENTS STATISTICS									
Current account balance in EUR m	-43	68	930	2,023	2,607	2,810	2,960	2,754	2,627
As a per cent share relative to GDP	-0.1	0.2	2.6	5.6	7.0	7.3	7.5	6.8	6.3
External balance of goods and services in EUR m	462	432	1,428	2,470	2,946	3,661	4,157	3,841	3,846
As a per cent share relative to GDP	1.3	1.2	4.0	6.9	7.9	9.5	10.5	9.5	9.2
FINAL DOMESTIC DEMAND - NATIONAL ACCOUNTS STATISTICS									
Final consumption	0.8	-0.2	-2.5	-3.4	0.5	1.5	1.8	1.4	1.3
As a % of GDP	76.3	76.4	77.0	74.8	72.4	70.4	70.1	70.1	69.6
in which:									
Private consumption	1.3	0.0	-2.5	-4.1	0.7	1.7	2.1	1.7	1.7
As a % of GDP	56.0	56.0	56.7	55.0	53.3	51.9	51.3	51.4	51.2
Government consumption	-0.5	-0.7	-2.3	-1.5	-0.1	0.7	0.9	0.2	0.1
As a % of GDP	20.3	20.4	20.3	19.8	19.1	18.5	18.8	18.7	18.4
Gross fixed capital formation	-13.3	-4.9	-8.8	1.7	3.2	0.5	-3.0	6.0	5.0
As a % of GDP	21.3	20.2	19.3	19.7	19.6	19.4	18.6	19.6	20.3
EXCHANGE RATE AND PRICES									
Ratio of USD to EUR	1.327	1.392	1.286	1.328	1.329	1.110	1.111	1.114	1.114
Real effective exchange rate - deflated by CPI [2]	-2.1	-1.0	-1.2	1.3	-0.1	-3.8	-0.1	-0.4	-0.4
Inflation (end of the year) [3]	1.9	2.0	2.7	0.7	0.2	-0.5	0.6	1.2	1.4
Inflation (year average) [3]	1.8	1.8	2.6	1.8	0.2	-0.5	-0.3	1.3	1.3
Brent Crude Oil Price USD / barrel	79.6	111.3	111.7	108.6	98.9	52.4	35.0	41.5	45.1

Source: SURS, BS, Eurostat, calculations and forecasts by IMAD.
Notes: [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 at basic prices and gross domestic product**

current prices, EUR million,

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
A Agriculture, forestry and fishing	626.0	733.9	646.9	639.4	709.5	750.4	752.4	712.3	754.2
BCDE Mining and quarrying, manufacturing, electricity and water supply, waste management	7,651.0	8,041.9	8,084.5	8,345.6	8,824.8	9,363.4	9,780.7	10,084.2	10,370.1
..of which: C Manufacturing	6,367.3	6,730.0	6,753.3	6,952.6	7,442.3	7,997.4	8,473.9	8,745.9	9,028.5
F Construction	2,015.0	1,885.0	1,816.5	1,654.3	1,841.6	1,797.4	1,702.7	1,810.6	1,906.8
GHI Trade, transportation and storage, accommodation and food service activities	6,299.5	6,441.4	6,227.5	6,267.4	6,503.1	6,771.4	6,949.8	7,139.5	7,353.4
J Information and communication	1,285.8	1,313.5	1,334.8	1,300.7	1,324.6	1,368.6	1,425.5	1,464.4	1,508.3
K Financial and insurance activities	1,697.4	1,649.3	1,344.5	1,246.1	1,295.1	1,356.7	1,425.5	1,505.1	1,529.7
L Real estate activities	2,537.1	2,468.6	2,333.6	2,249.8	2,217.3	2,213.6	2,257.1	2,217.4	2,283.8
MN Professional, scientific, technical, administrative and support services	2,989.7	3,020.8	2,961.5	2,952.6	3,156.0	3,269.2	3,306.8	3,356.4	3,457.0
OPQ Public administration, education, human health and social work	5,611.2	5,666.1	5,600.8	5,456.8	5,466.7	5,491.4	5,608.9	5,776.6	5,952.6
RST Other service activities	870.1	885.0	860.8	850.1	864.6	904.5	1,009.7	1,008.8	1,068.3
1. TOTAL VALUE ADDED, basic prices	31,582.7	32,105.5	31,211.3	30,962.8	32,203.4	33,286.6	34,219.1	35,075.2	36,184.1
2. CORRECTIONS (a-b)	4,669.7	4,790.8	4,776.9	4,944.7	5,099.8	5,256.7	5,378.8	5,537.5	5,695.6
a) Taxes on products and services	4,749.7	4,819.1	4,812.1	4,978.1	5,131.2	...	...	...	...
b) Subsidies on products and services	80.0	28.3	35.1	33.5	31.4	...	...	...	...
3. GROSS DOMESTIC PRODUCT (3=1+2)	36,252.4	36,896.3	35,988.3	35,907.5	37,303.2	38,543.3	39,597.9	40,612.7	41,879.7

Source: SURS, forecasts by IMAD.

Table 2b: **Gross value added by activity at basic prices and gross domestic product**

current prices, structure in %,

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
A Agriculture, forestry and fishing	1.7	2.0	1.8	1.8	1.9	1.9	1.9	1.8	1.8
BCDE Mining and quarrying, manufacturing, electricity and water supply, waste management	21.1	21.8	22.5	23.2	23.7	24.3	24.7	24.8	24.8
..of which: C Manufacturing	17.6	18.2	18.8	19.4	20.0	20.7	21.4	21.5	21.5
F Construction	5.6	5.1	5.0	4.6	4.9	4.7	4.3	4.5	4.6
GHI Trade, transportation and storage, accommodation and food service activities	17.4	17.5	17.3	17.5	17.4	17.6	17.6	17.6	17.6
J Information and communication	3.5	3.6	3.7	3.6	3.6	3.6	3.6	3.6	3.6
K Financial and insurance activities	4.7	4.5	3.7	3.5	3.5	3.5	3.6	3.7	3.7
L Real estate activities	7.0	6.7	6.5	6.3	5.9	5.7	5.7	5.5	5.5
MN Professional, scientific, technical, administrative and support services	8.2	8.2	8.2	8.2	8.5	8.5	8.4	8.3	8.3
OPQ Public administration, education, human health and social work	15.5	15.4	15.6	15.2	14.7	14.2	14.2	14.2	14.2
RST Other service activities	2.4	2.4	2.4	2.4	2.3	2.3	2.5	2.5	2.5
1. TOTAL VALUE ADDED	87.1	87.0	86.7	86.2	86.3	86.4	86.4	86.4	86.4
2. CORRECTIONS (a-b)	12.9	13.0	13.3	13.8	13.7	13.6	13.6	13.6	13.6
a) Taxes on products and services	13.1	13.1	13.4	13.9	13.8	...	...	...	...
b) Subsidies on products and services	0.2	0.1	0.1	0.1	0.1	...	...	...	...
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
GROSS DOMESTIC PRODUCT	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
in which:									
1. Agriculture, forestry, fishing (A)	1.7	2.0	1.8	1.8	1.9	1.9	1.9	1.8	1.8
2. Industry and construction (B+C+D+E+F)	26.7	26.9	27.5	27.8	28.6	29.0	29.0	29.2	29.3
3. Services (G…T)	58.7	58.1	57.4	56.6	55.8	55.5	55.5	55.3	55.3
4. Corrections	12.9	13.0	13.3	13.8	13.7	13.6	13.6	13.6	13.6
TOTAL VALUE ADDED, basic prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
in which:									
1. Agriculture, forestry, fishing (A)	2.0	2.3	2.1	2.1	2.2	2.3	2.2	2.0	2.1
2. Industry and construction (B+C+D+E+F)	30.6	30.9	31.7	32.3	33.1	33.5	33.6	33.9	33.9
Industry (B+C+D+E)	24.2	25.0	25.9	27.0	27.4	28.1	28.6	28.8	28.7
Construction F	6.4	5.9	5.8	5.3	5.7	5.4	5.0	5.2	5.3
3. Services (G…T)	67.4	66.8	66.2	65.6	64.7	64.2	64.2	64.1	64.0

Source: SURS, calculations and forecasts by IMAD.

Table 3a: **Gross value added by activity at basic prices and gross domestic product**

EUR million

	constant previous year prices						constant 2015 prices		
	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
A Agriculture, forestry and fishing	608.4	668.3	674.0	619.4	703.6	770.2	750.4	727.5	709.3
BCDE Mining and quarrying, manufacturing, electricity and water supply, waste management	7,952.5	7,833.1	7,829.8	8,073.6	8,742.6	9,268.7	9,667.8	10,001.4	10,346.6
..of which: C Manufacturing	6,640.1	6,545.7	6,514.0	6,720.9	7,337.2	7,874.0	8,293.3	8,616.7	8,952.8
F Construction	2,015.0	1,811.9	1,739.9	1,657.5	1,811.5	1,781.3	1,589.8	1,652.6	1,701.4
GHI Trade, transportation and storage, accommodation and food service activities	6,421.3	6,408.0	6,176.4	6,224.6	6,489.7	6,779.9	6,984.8	7,169.9	7,352.8
J Information and communication	1,276.9	1,287.1	1,308.3	1,345.4	1,318.7	1,370.7	1,409.0	1,447.7	1,483.2
K Financial and insurance activities	1,664.6	1,631.7	1,570.0	1,325.2	1,230.7	1,277.9	1,376.4	1,403.2	1,437.6
L Real estate activities	2,679.2	2,527.2	2,477.4	2,345.7	2,282.2	2,244.7	2,243.5	2,276.1	2,309.1
MN Professional, scientific, technical, administrative and support services	3,033.7	3,008.6	2,974.4	2,959.0	3,180.8	3,254.7	3,334.5	3,412.9	3,493.1
OPQ Public administration, education, human health and social work	5,542.6	5,628.6	5,732.8	5,578.9	5,511.5	5,482.3	5,549.1	5,618.5	5,688.8
RST Other service activities	861.4	882.6	860.0	856.7	863.6	901.4	940.2	966.1	992.7
1. TOTAL VALUE ADDED, basic prices	32,055.7	31,687.2	31,342.9	30,986.1	32,134.9	33,131.9	33,845.5	34,676.1	35,514.7
2. CORRECTIONS (a-b)	4,558.1	4,800.6	4,550.4	4,621.6	4,867.2	5,245.4	5,359.2	5,460.9	5,561.6
a) Taxes on products and services	4,639.6	4,883.8	4,579.2	4,657.3	4,900.2	...	...	...	...
b) Subsidies on products and services	81.5	83.1	28.8	35.8	33.1	...	...	...	...
3. GROSS DOMESTIC PRODUCT (3=1+2)	36,613.9	36,487.8	35,893.3	35,607.6	37,002.0	38,377.2	39,204.7	40,136.9	41,076.3

Source: SURS, forecasts by IMAD.

Table 3b: **Gross value added by activity at basic prices and gross domestic product**

Real growth rates in %

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
A Agriculture, forestry and fishing	1.6	6.8	-8.2	-4.3	10.0	8.6	0.0	-3.0	-2.5
BCDE Mining and quarrying, manufacturing, electricity and water supply, waste management	6.5	2.4	-2.6	-0.1	4.8	5.0	3.3	3.5	3.5
..of which: C Manufacturing	7.3	2.8	-3.2	-0.5	5.5	5.8	3.7	3.9	3.9
F Construction	-18.2	-10.1	-7.7	-8.7	9.5	-3.3	-11.5	4.0	3.0
GHI Trade, transportation and storage, accommodation and food service activities	1.2	1.7	-4.1	0.0	3.5	4.3	3.2	2.7	2.6
J Information and communication	3.3	0.1	-0.4	0.8	1.4	3.5	3.0	2.8	2.5
K Financial and insurance activities	-0.5	-3.9	-4.8	-1.4	-1.2	-1.3	1.5	2.0	2.5
L Real estate activities	1.6	-0.4	0.4	0.5	1.4	1.2	1.4	1.5	1.5
MN Professional, scientific, technical, administrative and support services	5.7	0.6	-1.5	-0.1	7.7	3.1	2.0	2.4	2.4
OPQ Public administration, education, human health and social work	1.2	0.3	1.2	-0.4	1.0	0.3	1.1	1.3	1.3
RST Other service activities	-1.2	1.4	-2.8	-0.5	1.6	4.3	4.0	2.8	2.8
1. TOTAL VALUE ADDED, basic prices	1.3	0.3	-2.4	-0.7	3.8	2.9	1.7	2.5	2.4
2. CORRECTIONS (a-b)	0.7	2.8	-5.0	-3.3	-1.6	2.9	2.0	1.9	1.8
a) Taxes on products and services	0.9	2.8	-5.0	-3.2	-1.6	...	...	...	...
b) Subsidies on products and services	14.2	4.0	1.7	1.9	-1.2	...	...	...	...
3. GROSS DOMESTIC PRODUCT (3=1+2)	1.2	0.6	-2.7	-1.1	3.0	2.9	1.7	2.4	2.3

Source: SURS, forecasts by IMAD.

Table 4a: **Gross domestic product and primary incomes**

EUR million. current prices

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
1. **Compensation of employees**	19,018.3	18,921.2	18,486.5	18,063.7	18,382.4	18,773.9	19,399.9	20,039.0	20,639.0
Wages and salaries	16,336.1	16,244.7	15,816.7	15,469.6	15,767.7	16,105.5	16,651.0	17,201.3	17,718.2
Employers' social contributions	2,682.1	2,676.5	2,669.8	2,594.1	2,614.7	2,668.4	2,748.9	2,837.8	2,920.8
2. **Taxes on production and imports**	5,159.2	5,236.8	5,264.0	5,473.1	5,635.7	5,786.6	5,919.9	6,094.8	6,269.9
Taxes on products and services	4,749.7	4,819.1	4,812.1	4,978.1	5,131.2	...	...	...	...
Other taxes on production	409.5	417.6	451.9	494.9	504.5	...	...	...	...
3. **Subsidies**	927.2	625.0	606.0	673.7	581.4	519.9	610.4	660.7	644.1
Subsidies on products and services	80.0	28.3	35.1	33.5	31.4	...	...	...	...
Other subsidies on production	847.2	596.6	570.9	640.3	550.0	...	...	...	...
4. **Gross operating surplus / mixed income**	13,002.1	13,363.3	12,843.8	13,044.5	13,866.5	14,502.6	14,888.5	15,139.6	15,614.9
Consumption of fixed capital	7,212.5	7,391.0	7,611.3	7,584.4	7,607.5	...	...	...	...
Net operating surplus	5,789.7	5,972.3	5,232.5	5,460.1	6,259.0	...	...	...	...
5. **GDP (5=1+2-3+4)**	36,252.4	36,896.3	35,988.3	35,907.5	37,303.2	38,543.3	39,597.9	40,612.7	41,879.7

Source: SURS. forecasts by IMAD.

Table 4b: **Gross domestic product and primary incomes**

Structure in %, current prices

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
1. **Compensation of employees**	52.5	51.3	51.4	50.3	49.3	48.7	49.0	49.3	49.3
Wages and salaries	45.1	44.0	43.9	43.1	42.3	41.8	42.1	42.4	42.3
Employers' social contributions	7.4	7.3	7.4	7.2	7.0	6.9	6.9	7.0	7.0
2. **Taxes on production and imports**	14.2	14.2	14.6	15.2	15.1	15.0	15.0	15.0	15.0
Taxes on products and services	13.1	13.1	13.4	13.9	13.8	...	...	...	...
Other taxes on production	1.1	1.1	1.3	1.4	1.4	...	...	...	...
3. **Subsidies**	2.6	1.7	1.7	1.9	1.6	1.3	1.5	1.6	1.5
Subsidies on products and services	0.2	0.1	0.1	0.1	0.1	...	...	...	...
Other subsidies on production	2.3	1.6	1.6	1.8	1.5	...	...	...	...
4. **Gross operating surplus / mixed income**	35.9	36.2	35.7	36.3	37.2	37.6	37.6	37.3	37.3
Consumption of fixed capital	19.9	20.0	21.1	21.1	20.4	...	...	...	...
Net operating surplus	16.0	16.2	14.5	15.2	16.8	...	...	...	...
5. **GDP (5=1+2-3+4)**	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SURS, forecasts by IMAD.

Table 5a: **Gross domestic product by expenditures**

EUR million, current prices

		2010	2011	2012	2013	2014	2015	2016	2017	2018
								forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	36,252.4	36,896.3	35,988.3	35,907.5	37,303.2	38,543.3	39,597.9	40,612.7	41,879.7
2	EXPORTS OF GOODS AND SERVICES	23,306.0	25,965.4	26,380.5	27,004.9	28,546.9	30,000.4	30,874.2	32,447.1	34,217.7
3	IMPORTS OF GOODS AND SERVICES	22,785.8	25,288.1	24,858.8	24,898.9	25,610.6	26,389.5	26,770.4	28,662.3	30,430.7
4	EXTERNAL BALANCE OF GOODS AND SERVICES (4=2-3)	520.2	677.3	1,521.7	2,105.9	2,936.3	3,610.9	4,103.8	3,784.8	3,787.1
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	35,732.2	36,219.0	34,466.6	33,801.5	34,366.9	34,932.4	35,494.1	36,827.9	38,092.6
6	FINAL CONSUMPTION (6=7+8)	27,669.7	28,205.1	27,718.0	26,852.1	26,993.1	27,148.5	27,741.4	28,463.0	29,160.4
7	PRIVATE CONSUMPTION	20,316.5	20,667.8	20,422.7	19,741.1	19,876.6	19,998.7	20,305.3	20,867.1	21,444.5
	Households	19,979.6	20,337.9	20,117.2	19,436.6	19,553.3	19,667.0	19,967.3	20,518.9	21,085.8
	NPISH's	336.9	329.8	305.5	304.5	323.3	331.7	338.0	348.2	358.7
8	GOVERNMENT CONSUMPTION	7,353.3	7,537.4	7,295.4	7,111.0	7,116.5	7,149.7	7,436.1	7,596.0	7,715.9
9	GROSS CAPITAL FORMATION (9=10+11)	8,062.5	8,013.9	6,748.5	6,949.4	7,373.8	7,784.0	7,752.7	8,364.9	8,932.3
10	GROSS FIXED CAPITAL FORMATION	7,726.6	7,450.7	6,933.9	7,069.0	7,323.9	7,469.1	7,350.2	7,950.7	8,519.3
11	CHANGES IN INVENTORIES AND VALUABLES	335.9	563.2	-185.4	-119.6	49.9	314.9	402.5	414.1	413.0

Source: SURS, forecasts by IMAD.

Table 5b: **Gross domestic product by expenditures**

Structure in %, current prices

		2010	2011	2012	2013	2014	2015	2016	2017	2018
								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
2	EXPORTS OF GOODS AND SERVICES	64.3	70.4	73.3	75.2	76.5	77.8	78.0	79.9	81.7
3	IMPORTS OF GOODS AND SERVICES	62.9	68.5	69.1	69.3	68.7	68.5	67.6	70.6	72.7
4	EXTERNAL BALANCE OF GOODS AND SERVICES (4=2-3)	1.4	1.8	4.2	5.9	7.9	9.4	10.4	9.3	9.0
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	98.6	98.2	95.8	94.1	92.1	90.6	89.6	90.7	91.0
6	FINAL CONSUMPTION (6=7+8)	76.3	76.4	77.0	74.8	72.4	70.4	70.1	70.1	69.6
7	PRIVATE CONSUMPTION	56.0	56.0	56.7	55.0	53.3	51.9	51.3	51.4	51.2
	Households	55.1	55.1	55.9	54.1	52.4	51.0	50.4	50.5	50.3
	NPISH's	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9
8	GOVERNMENT CONSUMPTION	20.3	20.4	20.3	19.8	19.1	18.5	18.8	18.7	18.4
9	GROSS CAPITAL FORMATION (9=10+11)	22.2	21.7	18.8	19.4	19.8	20.2	19.6	20.6	21.3
10	GROSS FIXED CAPITAL FORMATION	21.3	20.2	19.3	19.7	19.6	19.4	18.6	19.6	20.3
11	CHANGES IN INVENTORIES AND VALUABLES	0.9	1.5	-0.5	-0.3	0.1	0.8	1.0	1.0	1.0

Source: SURS, forecasts by IMAD.

Table 6a: **Gross domestic product by expenditures**

EUR million

		constant previous year prices						constant 2015 prices		
		2010	2011	2012	2013	2014	2015	2016	2017	2018
								forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	36,613.9	36,487.8	35,893.3	35,607.6	37,002.0	38,377.2	39,204.7	40,136.9	41,076.3
2	EXPORTS OF GOODS AND SERVICES	22,804.8	24,912.6	26,117.6	27,185.6	28,571.1	30,022.2	31,098.1	32,589.9	34,182.4
3	IMPORTS OF GOODS AND SERVICES	21,395.9	23,924.3	24,351.2	25,276.8	25,898.3	26,736.6	27,186.5	28,571.6	29,986.3
4	EXTERNAL BALANCE OF GOODS AND SERVICES (4=2-3)	1,408.9	988.3	1,766.4	1,908.8	2,672.8	3,285.6	3,911.6	4,018.3	4,196.2
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	35,204.9	35,499.5	34,127.0	33,698.8	34,329.2	35,091.7	35,293.1	36,118.6	36,880.1
6	FINAL CONSUMPTION (6=7+8)	27,244.0	27,610.8	27,512.6	26,768.6	26,982.9	27,390.2	27,641.9	28,017.3	28,391.7
7	PRIVATE CONSUMPTION	20,027.3	20,311.7	20,145.6	19,585.7	19,876.5	20,221.5	20,427.9	20,785.2	21,148.8
	- Households	19,692.2	19,984.7	19,841.5	19,282.2	19,555.0	19,888.8	20,087.9	20,438.4	20,795.1
	- NPISH's	335.1	327.0	304.1	303.5	321.5	332.7	340.0	346.8	353.7
8	GOVERNMENT CONSUMPTION	7,216.6	7,299.1	7,367.0	7,182.9	7,106.4	7,168.6	7,214.0	7,232.1	7,242.9
9	GROSS CAPITAL FORMATION (9=10+11)	7,961.0	7,888.8	6,614.4	6,930.2	7,346.3	7,701.5	7,651.2	8,101.4	8,488.4
10	GROSS FIXED CAPITAL FORMATION	7,634.2	7,345.7	6,792.4	7,049.0	7,293.1	7,362.6	7,248.7	7,687.2	8,075.4
11	CHANGES IN INVENTORIES AND VALUABLES	326.7	543.1	-178.1	-118.8	53.3	338.9	402.5	414.1	413.0

Source: SURS, forecasts by IMAD.

Table 6b: **Gross domestic product by expenditures**

Real growth rates in %

		2010	2011	2012	2013	2014	2015	2016	2017	2018
								forecast		
1	**GROSS DOMESTIC PRODUCT (1=4+5)**	1.2	0.6	-2.7	-1.1	3.0	2.9	1.7	2.4	2.3
2	EXPORTS OF GOODS AND SERVICES	10.2	6.9	0.6	3.1	5.8	5.2	3.7	4.8	4.9
3	IMPORTS OF GOODS AND SERVICES	6.8	5.0	-3.7	1.7	4.0	4.4	3.0	5.1	5.0
4	*EXTERNAL BALANCE OF GOODS AND SERVICES [1] (4=2-3)*	*2.0*	*1.3*	*3.0*	*1.1*	*1.6*	*0.9*	*0.8*	*0.3*	*0.4*
5	TOTAL DOMESTIC CONSUMPTION (5=6+9)	-0.8	-0.7	-5.8	-2.2	1.6	2.1	1.0	2.3	2.1
6	FINAL CONSUMPTION (6=7+8)	0.8	-0.2	-2.5	-3.4	0.5	1.5	1.8	1.4	1.3
7	PRIVATE CONSUMPTION	1.3	0.0	-2.5	-4.1	0.7	1.7	2.1	1.7	1.7
	- Households	1.1	0.0	-2.4	-4.2	0.6	1.7	2.1	1.7	1.7
	- NPISH's	12.6	-2.9	-7.8	-0.6	5.6	2.9	2.5	2.0	2.0
8	GOVERNMENT CONSUMPTION	-0.5	-0.7	-2.3	-1.5	-0.1	0.7	0.9	0.2	0.1
9	GROSS CAPITAL FORMATION (9=10+11)	-5.9	-2.2	-17.5	2.7	5.7	4.4	-1.7	5.9	4.8
10	GROSS FIXED CAPITAL FORMATION	-13.3	-4.9	-8.8	1.7	3.2	0.5	-3.0	6.0	5.0
11	*CHANGES IN INVENTORIES AND VALUABLES [1]*	*1.9*	*0.6*	*-2.0*	*0.2*	*0.5*	*0.8*	*0.2*	*0.0*	*0.0*

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

Table 7: **Labour market**

	2010	2011	2012	2013	2014	2015 estimate [1]	2016	2017	2018
							forecast		
LABOUR SUPPLY									
Activity rate (20-64 years, in %)	75.8	74.5	74.9	74.9	75.1	75.8	76.2	76.9	77.5
Active population (ILO definition)	1.041	1.020	1.013	1.008	1.015	1.008	1.009	1.012	1.013
- yearly growth (in %)	0.0	-2.1	-0.6	-0.6	0.7	-0.6	0.1	0.3	0.1
EMPLOYMENT AND UNEMPLOYMENT									
Employment (National accounts concept, in thousands)	962.1	946.0	937.2	924.3	929.6	942.9	951.3	959.8	966.1
- yearly growth (in %)	-2.1	-1.7	-0.9	-1.4	0.6	1.4	0.9	0.9	0.7
Employment (ILO concept, in thousands)	966.0	936.2	923.7	906.0	916.8	917.5	922.1	930.4	936.9
- yearly growth (in %)	-1.5	-3.1	-1.3	-1.9	1.2	0.1	0.5	0.9	0.7
Employment rate (15-64 yeras, in %)	70.3	68.4	68.3	67.2	67.8	68.9	69.6	70.6	71.6
Formal employment (statistical register, in thousands) *	835.0	824.0	810.0	793.6	797.8	804.6	812.5	820.6	826.8
- yearly growth (in %)	-2.7	-1.3	-1.7	-2.0	0.5	0.9	1.0	1.0	0.7
- Paid employment (in thousands)	747.2	729.1	717.0	698.7	703.0	713.1	722.1	729.9	735.8
- yearly growth (in %)	-2.6	-2.4	-1.6	-2.6	0.6	1.4	1.3	1.1	0.8
- Self employed (in thousands)	87.8	94.9	93.0	94.9	94.8	91.6	90.4	90.7	90.9
- yearly growth (in %)	-3.3	8.1	-2.1	2.1	-0.1	-3.4	-1.3	0.4	0.3
Unemployment (ILO concept, in thousands)	75.2	83.3	89.7	101.8	98.0	90.8	86.7	81.7	75.9
- yearly growth (in %)	23.7	10.8	7.7	13.5	-3.7	-7.3	-4.5	-5.8	-7.0
Unemployment (registered, in thousands)	100.5	110.7	110.2	119.8	120.1	112.7	107.4	101.0	94.7
- yearly growth (in %)	16.4	10.1	-0.5	8.8	0.2	-6.1	-4.7	-6.0	-6.2
Unemployment rate (ILO concept, in %)	7.3	8.2	8.9	10.1	9.7	9.0	8.6	8.1	7.5
Unemployment rate (registered, in %)	10.7	11.8	12.0	13.1	13.1	12.3	11.7	11.0	10.3

Source: SURS, ESS, Eurostat; estimate and forcasts by IMAD and Eurostat.
Note: * According to the Statistical Register of Employment, including the estimate of self-employed farmers.
[1] The figures for 2015 are IMAD estimate; at the time of the forecast, detailed data were not yet available. The annual figure is calculated as the average of the figures for the four quarters in the year.

Table 8: **Balance of payments - balance of payments statistics**

EUR million

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							forecast		
I. CURRENT ACCOUNT	-43	68	930	2,023	2,607	2,810	2,960	2,754	2,627
1. GOODS	-748	-974	-81	708	1,210	1,613	1,967	1,521	1,398
1.1. Exports of goods	18,631	21,042	21,256	21,692	22,989	24,035	24,578	25,794	27,178
1.2. Imports of goods	19,379	22,016	21,337	20,984	21,780	22,422	22,611	24,274	25,780
2. SERVICES	1,210	1,406	1,509	1,761	1,736	2,048	2,190	2,320	2,448
2.1. Exports	4,655	4,906	5,106	5,314	5,555	5,965	6,297	6,653	7,040
Transport	1,210	1,309	1,346	1,398	1,529	1,652	1,738	1,833	1,939
Travel	1,925	1,975	2,008	2,039	2,057	2,237	2,366	2,483	2,608
Other	1,520	1,622	1,752	1,877	1,970	2,077	2,193	2,337	2,493
2.2. Imports	3,444	3,500	3,597	3,553	3,819	3,917	4,107	4,333	4,591
Transport	716	725	713	738	802	829	859	900	946
Travel	923	817	730	695	732	808	858	894	935
Other	1,805	1,958	2,153	2,120	2,284	2,280	2,390	2,539	2,710
1., 2. EXTERNAL BALANCE OF GOODS AND SERVICES	462	432	1,428	2,470	2,946	3,661	4,157	3,841	3,846
Exports of goods and services	23,285	25,948	26,362	27,006	28,545	30,000	30,874	32,447	34,218
Imports of goods and services	22,823	25,516	24,934	24,536	25,599	26,339	26,717	28,606	30,371
3. PRIMARY INCOME	-373	-279	-271	-172	-87	-365	-518	-684	-667
3.1. Receipts	895	1,318	1,159	1,078	1,403	1,510	1,538	1,463	1,482
Compensation of employees	240	327	474	491	540	653	650	640	635
Investment	287	580	207	48	368	345	365	366	378
Other primary income	367	411	478	539	495	511	523	457	469
3.2. Expenditure	1,268	1,598	1,430	1,249	1,491	1,875	2,056	2,147	2,149
Compensation of employees	89	93	98	106	119	119	140	155	170
Investment	1,031	1,328	1,097	915	1,086	1,390	1,541	1,592	1,551
Other primary income	147	176	235	229	286	366	375	401	428
4. SECONDARY INCOME	-132	-84	-227	-275	-252	-486	-679	-403	-552
4.1.Receipts	864	993	931	925	942	833	725	1,008	889
4.2. Expenditure	996	1,077	1,157	1,201	1,193	1,320	1,403	1,411	1,442
II. CAPITAL ACCOUNT	54	-85	41	71	-176	23			
1. Non-produced non-financial assets	-3	-12	-4	-10	-24	-36			
2. Capital transfers	57	-73	45	81	-152	59			
III. FINANCIAL ACCOUNT	-1,460	-754	-142	1,350	2,339	1,978			
1. Direct investment	-93	-640	-466	-47	-600	-885			
Assets	138	-3	-439	24	146	52			
Liabilities	231	636	27	71	746	937			
2. Portfolio investment	-1,961	-1,844	220	-3,967	-3,968	2,866			
3. Financial derivatives	117	155	89	32	-3	28			
4. Other investment	497	1,646	45	5,327	6,821	82			
4.1. Assets	-1,807	425	456	732	4,800	-740			
4.2. Liabilities	-2,303	-1,221	411	-4,595	-2,021	-822			
5. Reserve assets	-19	-72	-31	5	89	-113			
IV. NET ERRORS AND OMISSIONS	-1,470	-737	-1,113	-743	-92	-855			

Source: BS, forecasts by IMAD.
Note: 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 9: **Indicators of international competitiveness**

Annual growth rates in %

	2010	2011	2012	2013	2014	2015	2016	2017
							forecast	
Effective exchange rate [1]								
Nominal	-2.3	0.0	-1.4	1.0	0.3	-2.8	1.1	0.0
Real - based on consumer prices	-2.1	-1.0	-1.2	1.3	-0.1	-3.8	-0.1	-0.4
Real - based on ULC in economy as a whole	-1.7	-1.9	-3.2	-0.2	-1.8	-4.3	0.9	-0.6
Unit labour costs components								
Nominal unit labour costs	0.6	-0.8	0.8	0.2	-1.3	-0.6	1.2	0.6
Compensation of employees per employee	4.0	1.5	-1.0	0.6	1.1	0.8	2.0	2.1
Labour productivity, real [2]	3.4	2.4	-1.8	0.3	2.5	1.4	0.8	1.5
Real unit labour costs	1.6	-1.9	0.6	-0.6	-2.1	-1.0	-0.1	0.1
Labour productivity, nominal [3]	2.4	3.5	-1.5	1.2	3.3	1.9	2.1	2.0

Source: SURS national accounts statistics, BS, ECB, OECD, Consensus Forecasts February 2016, 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	2010	2011	2012	2013	2014	2015
I. **TOTAL GENERAL GOVERNMENT REVENUES**	14,794	14,982	14,999	14,728	15,494	15,714
TAX REVENUES	12,848	13,209	13,118	12,648	13,193	13,746
TAXES ON INCOME AND PROFIT	2,491	2,724	2,657	2,137	2,386	2,585
Personal income tax	2,039	2,054	2,077	1,868	1,916	1,986
Corporate income tax	449	668	577	265	468	595
SOCIAL SECURITY CONTRIBUTIONS	5,234	5,268	5,244	5,127	5,272	5,474
TAXSES ON PAYROLL AND WORKFORCE	28	29	26	23	20	20
TAXES ON PROPERTY	220	215	234	254	245	237
DOMESTIC TAXES ON GOODS AND SERVICES	4,781	4,856	4,876	5,027	5,191	5,347
Value added tax	2,941	2,992	2,905	3,029	3,153	3,229
Excise duties	1,439	1,462	1,560	1,491	1,491	1,515
TAXES ON INTERN. TRADE AND TRANSACTIONS	91	100	83	77	78	82
OTHER TAXES	4	17	-1	1	0	1
NON-TAX REVENUES	923	829	912	989	1,184	957
CAPITAL REVENUES	176	65	63	67	53	96
DONATIONS RECEIVED	13	10	9	33	19	12
TRANSFERED REVENUES	110	54	52	53	5	20
RECEIPTS FROM THE EU BUDGET	725	815	845	938	1,040	882

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

Table 10b: **Consolidated general government revenues; GFS - IMF Methodology**

Per cent share relative to GDP

CONSOLIDATED GENERAL GOVERNMENT REVENUES	2010	2011	2012	2013	2014	2015
I. **TOTAL GENERAL GOVERNMENT REVENUES**	40.8	40.6	41.7	41.0	41.5	40.8
TAX REVENUES	35.4	35.8	36.5	35.2	35.4	35.7
TAXES ON INCOME AND PROFIT	6.9	7.4	7.4	6.0	6.4	6.7
Personal income tax	5.6	5.6	5.8	5.2	5.1	5.2
Corporate income tax	1.2	1.8	1.6	0.7	1.3	1.5
SOCIAL SECURITY CONTRIBUTIONS	14.4	14.3	14.6	14.3	14.1	14.2
TAXSES ON PAYROLL AND WORKFORCE	0.1	0.1	0.1	0.1	0.1	0.1
TAXES ON PROPERTY	0.6	0.6	0.7	0.7	0.7	0.6
DOMESTIC TAXES ON GOODS AND SERVICES	13.2	13.2	13.5	14.0	13.9	13.9
Value added tax	8.1	8.1	8.1	8.4	8.5	8.4
Excise duties	4.0	4.0	4.3	4.2	4.0	3.9
TAXES ON INTERN. TRADE AND TRANSACTIONS	0.3	0.3	0.2	0.2	0.2	0.2
OTHER TAXES	0.0	0.0	0.0	0.0	0.0	0.0
NON-TAX REVENUES	2.5	2.2	2.5	2.8	3.2	2.5
CAPITAL REVENUES	0.5	0.2	0.2	0.2	0.1	0.2
DONATIONS RECEIVED	0.0	0.0	0.0	0.1	0.1	0.0
TRANSFERED REVENUES	0.3	0.1	0.1	0.1	0.0	0.1
RECEIPTS FROM THE EU BUDGET	2.0	2.2	2.3	2.6	2.8	2.3

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

Table 11a: **Consolidated general government expenditure; GFS - IMF Methodology**

EUR million, current prices

	CONSOLIDATED GENERAL GOVERNMENT EXPENDITURE	2010	2011	2012	2013	2014	2015
II.	**TOTAL EXPENDITURES**	16,693	16,546	16,126	16,286	16,755	16,957
	CURRENT EXPENDITURE	6,960	6,927	6,814	6,838	7,043	7,168
	WAGES AND OTHER PERSONNEL EXPENDITURE	3,359	3,330	3,185	3,114	3,116	3,124
	EMPLOYER'S SOCIAL SECURITY CONTRIBUTIONS	553	553	543	503	494	486
	PURCHASES OF GOODS AND SERVICES	2,512	2,443	2,373	2,239	2,233	2,311
	INTEREST PAYMENTS	488	527	648	840	1,097	1,043
	RESERVES	47	74	65	143	103	204
	CURRENT TRANSFERS	7,629	7,819	7,687	7,671	7,592	7,539
	SUBSIDIES	582	496	503	520	467	399
	TRANSFERS TO INDIVIDUALS AND HOUSEHOLDS	6,278	6,533	6,384	6,343	6,335	6,370
	OTHER CURRENT DOMESTIC TRANSFERS	769	789	800	809	789	769
	CAPITAL EXPENDITURE TOTAL	1,707	1,396	1,235	1,351	1,717	1,817
	CAPITAL EXPENDITURE	1,311	1,024	915	1,032	1,451	1,515
	CAPITAL TRANSFERS	396	372	320	319	266	302
	PAYMENTS TO THE EU BUDGET	397	405	390	425	403	433
III.	**GENERAL GOVERNMENT BUDGETARY SURPLUS / DEFICIT (I. - II.)**	-1,899	-1,564	-1,127	-1,558	-1,261	-1,243

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

Table 11b: **Consolidated general government expenditure; GFS - IMF Methodology**

Per cent share relative to GDP

	CONSOLIDATED GENERAL GOVERNMENT EXPENDITURE	2010	2011	2012	2013	2014	2015
II.	**TOTAL EXPENDITURES**	46.0	44.8	44.8	45.4	44.9	44.0
	CURRENT EXPENDITURE	19.2	18.8	18.9	19.0	18.9	18.6
	WAGES AND OTHER PERSONNEL EXPENDITURE	9.3	9.0	8.8	8.7	8.4	8.1
	EMPLOYER'S SOCIAL SECURITY CONTRIBUTIONS	1.5	1.5	1.5	1.4	1.3	1.3
	PURCHASES OF GOODS AND SERVICES	6.9	6.6	6.6	6.2	6.0	6.0
	INTEREST PAYMENTS	1.3	1.4	1.8	2.3	2.9	2.7
	RESERVES	0.1	0.2	0.2	0.4	0.3	0.5
	CURRENT TRANSFERS	21.0	21.2	21.4	21.4	20.4	19.6
	SUBSIDIES	1.6	1.3	1.4	1.4	1.3	1.0
	TRANSFERS TO INDIVIDUALS AND HOUSEHOLDS	17.3	17.7	17.7	17.7	17.0	16.5
	OTHER CURRENT DOMESTIC TRANSFERS	2.1	2.1	2.2	2.3	2.1	2.0
	CAPITAL EXPENDITURE TOTAL	4.7	3.8	3.4	3.8	4.6	4.7
	CAPITAL EXPENDITURE	3.6	2.8	2.5	2.9	3.9	3.9
	CAPITAL TRANSFERS	1.1	1.0	0.9	0.9	0.7	0.8
	PAYMENTS TO THE EU BUDGET	1.1	1.1	1.1	1.2	1.1	1.1
III.	**GENERAL GOVERNMENT BUDGETARY SURPLUS / DEFICIT (I. - II.)**	-5.2	-4.2	-3.1	-4.3	-3.4	-3.2

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

Table 12: **Comparison of the performance of forecasts for economic growth and inflation of individual institutions***

1. ME ... Mean Error		Gross domestic product, real				Inflation, year average			
		PNt+1	JNt+1	PNt	JNt	PNt+1	JNt+1	PNt	JNt
IMAD	2002-2008	-0.03	-0.17	-0.24	0.03	-0.76	-0.36	-0.47	0.11
	2002-2009	1.46	1.21	0.26	0.09	-0.38	0.06	-0.48	0.11
	2002-2010	1.28	1.04	0.17	0.04	-0.36	0.02	-0.48	0.13
	2002-2011	1.41	1.21	0.39	0.21	-0.34	0.11	-0.39	0.10
	2002-2012	1.73	1.49	0.48	0.22	-0.27	0.03	-0.41	0.11
	2002-2013	1.78	1.34	0.38	0.09	-0.25	0.06	-0.35	0.12
	2002-2014	1.45	0.98	0.18	0.04	-0.12	0.18	-0.32	0.12
	2002-2015	1.19	0.81	0.14	0.02	0.00	0.25	-0.27	0.11
BS	2002-2008	-0.11	-0.43	-0.39	-0.10	-0.88	-0.81	-0.46	-0.03
	2002-2009	1.36	1.04	0.39	0.05	-0.39	-0.39	-0.46	0.00
	2002-2010	1.29	0.97	0.36	0.03	-0.34	-0.38	-0.43	0.06
	2002-2011	1.36	1.08	0.52	0.18	-0.34	-0.31	-0.30	0.07
	2002-2012	1.69	1.35	0.57	0.21	-0.34	-0.37	-0.30	0.09
	2002-2013	1.69	1.27	0.46	0.07	-0.32	-0.30	-0.23	0.12
	2002-2014	1.40	0.92	0.27	-0.02	-0.19	-0.16	-0.19	0.13
	2002-2015	1.19	0.74	0.20	-0.04	-0.05	-0.06	-0.15	0.11
SKEP	2002-2008	-0.14	-0.24	-0.33	0.04	-0.63	-0.43	-0.24	0.06
	2002-2009	1.38	1.19	0.38	0.14	-0.23	-0.04	-0.20	0.04
	2002-2010	1.27	1.00	0.28	0.08	-0.20	-0.09	-0.18	0.04
	2002-2011	1.36	1.11	0.44	0.19	-0.16	-0.03	-0.08	0.02
	2002-2012	1.66	1.29	0.50	0.24	-0.16	-0.11	-0.12	0.00
	2002-2013	1.68	1.13	0.33	0.09	-0.14	-0.03	-0.07	0.01
	2002-2014	1.35	0.75	0.13	0.01	0.00	0.10	0.01	0.06
	2002-2015	1.14	0.57	0.06	-0.02	0.15	0.24	0.04	0.06
EC	2002-2008	-0.23	-0.34	-0.37	-0.16	-0.36	-0.10	-0.13	0.17
	2002-2009	1.25	1.04	0.23	-0.09	-0.01	0.26	-0.14	0.15
	2002-2010	1.06	0.93	0.19	-0.09	0.01	0.22	-0.12	0.17
	2002-2011	1.15	1.05	0.38	0.05	0.03	0.22	-0.03	0.16
	2002-2012	1.48	1.25	0.43	0.05	-0.02	0.08	-0.06	0.16
	2002-2013	1.51	1.11	0.32	-0.09	-0.03	0.11	-0.02	0.18
	2002-2014	1.18	0.75	0.15	-0.10	0.07	0.23	0.02	0.18
	2002-2015	0.99	0.61	0.10	-0.11	0.19	0.32	0.06	0.16
IMF	2002-2008	-0.19	-0.39	-0.42	-0.34	-0.66	-0.63	-0.58	0.07
	2002-2009	1.25	1.10	0.27	0.09	-0.39	-0.25	-0.56	0.01
	2002-2010	1.13	0.91	0.23	0.03	-0.38	-0.26	-0.53	-0.02
	2002-2011	1.24	1.08	0.43	0.24	-0.29	-0.18	-0.44	-0.02
	2002-2012	1.55	1.37	0.50	0.23	-0.22	-0.21	-0.43	-0.05
	2002-2013	1.63	1.32	0.39	0.08	-0.20	-0.22	-0.40	-0.01
	2002-2014	1.42	0.91	0.18	-0.02	-0.05	-0.08	-0.29	0.02
	2002-2015	1.18	0.74	0.11	-0.06	0.10	0.04	-0.26	0.02
WIIW	2002-2008	-0.32	-0.29	-0.23	-0.43	-0.53	-0.90	-0.44	-0.01
	2002-2009	1.49	1.26	0.78	0.10	-0.09	-0.28	-0.19	0.06
	2002-2010	1.40	1.10	0.67	0.01	0.01	-0.22	-0.20	0.02
	2002-2011	1.49	1.21	0.82	0.23	0.03	-0.18	-0.08	0.09
	2002-2012	1.82	1.54	0.86	0.28	0.02	-0.17	-0.13	0.03
	2002-2013	1.62	1.54	0.61	0.11	0.04	-0.14	-0.06	0.08
	2002-2014	1.23	1.15	0.32	0.04	0.18	0.01	0.08	0.12
	2002-2015	0.95	0.96	0.21	0.02	0.35	0.11	0.14	0.11

Table 12: **Comparison of the performance of forecasts for economic growth and inflation of individual institutions*** - *continue*

2. MAE ... Mean Absolute Error		**Gross domestic product, real**				**Inflation, year average**			
		PNt+1	JNt+1	PNt	JNt	PNt+1	JNt+1	PNt	JNt
IMAD	2002-2008	1.14	1.00	0.76	0.43	1.10	0.87	0.47	0.17
	2002-2009	2.49	2.24	1.14	0.44	1.25	1.14	0.48	0.16
	2002-2010	2.23	2.02	1.08	0.42	1.13	1.04	0.48	0.18
	2002-2011	2.27	2.09	1.21	0.55	1.04	1.03	0.47	0.18
	2002-2012	2.51	2.29	1.23	0.53	0.98	1.01	0.48	0.18
	2002-2013	2.49	2.13	1.19	0.59	0.90	0.96	0.47	0.18
	2002-2014	2.48	2.22	1.26	0.59	0.94	1.02	0.44	0.18
	2002-2015	2.46	2.16	1.21	0.56	0.99	1.02	0.43	0.17
BS	2002-2008	1.06	1.03	0.79	0.50	1.05	0.81	0.46	0.26
	2002-2009	2.39	2.31	1.41	0.58	1.27	1.04	0.46	0.25
	2002-2010	2.20	2.10	1.27	0.52	1.11	0.96	0.43	0.28
	2002-2011	2.18	2.10	1.34	0.62	1.03	0.89	0.48	0.27
	2002-2012	2.44	2.27	1.32	0.61	0.96	0.90	0.46	0.27
	2002-2013	2.38	2.12	1.28	0.68	0.88	0.87	0.47	0.28
	2002-2014	2.35	2.21	1.33	0.71	0.91	0.92	0.45	0.28
	2002-2015	2.29	2.16	1.29	0.68	0.96	0.94	0.45	0.27
SKEP	2002-2008	1.03	0.93	0.79	0.59	1.20	0.91	0.41	0.09
	2002-2009	2.40	2.21	1.35	0.61	1.38	1.14	0.38	0.09
	2002-2010	2.18	2.02	1.26	0.59	1.22	1.07	0.33	0.09
	2002-2011	2.18	2.03	1.32	0.65	1.12	1.01	0.38	0.10
	2002-2012	2.41	2.13	1.30	0.69	1.04	1.00	0.39	0.11
	2002-2013	2.36	2.00	1.32	0.76	0.96	0.98	0.40	0.11
	2002-2014	2.37	2.15	1.39	0.78	1.02	1.04	0.44	0.15
	2002-2015	2.32	2.11	1.35	0.75	1.09	1.11	0.44	0.14
EC	2002-2008	1.03	1.06	0.89	0.41	1.44	1.07	0.27	0.20
	2002-2009	2.35	2.26	1.33	0.41	1.56	1.29	0.26	0.18
	2002-2010	2.14	2.02	1.19	0.38	1.41	1.16	0.23	0.19
	2002-2011	2.13	2.03	1.28	0.47	1.29	1.06	0.29	0.18
	2002-2012	2.37	2.15	1.25	0.43	1.22	1.08	0.30	0.18
	2002-2013	2.33	2.01	1.22	0.53	1.13	1.03	0.31	0.19
	2002-2014	2.35	2.13	1.26	0.50	1.13	1.08	0.32	0.19
	2002-2015	2.29	2.06	1.21	0.49	1.17	1.11	0.34	0.19
IMF	2002-2008	0.99	1.01	0.88	0.57	1.31	1.23	0.64	0.19
	2002-2009	2.28	2.33	1.41	0.89	1.34	1.38	0.61	0.21
	2002-2010	2.04	2.13	1.26	0.83	1.22	1.26	0.57	0.22
	2002-2011	2.06	2.18	1.36	0.96	1.15	1.18	0.56	0.20
	2002-2012	2.30	2.37	1.35	0.88	1.09	1.12	0.54	0.22
	2002-2013	2.32	2.23	1.31	0.93	1.00	1.05	0.50	0.24
	2002-2014	2.22	2.37	1.39	0.95	1.05	1.09	0.53	0.25
	2002-2015	2.21	2.31	1.35	0.93	1.13	1.12	0.50	0.24
WIIW	2002-2008	1.18	1.14	0.94	0.71	1.23	1.19	0.81	0.30
	2002-2009	2.77	2.51	1.80	1.10	1.43	1.55	0.91	0.34
	2002-2010	2.53	2.26	1.62	1.06	1.34	1.40	0.84	0.33
	2002-2011	2.49	2.25	1.68	1.17	1.21	1.28	0.86	0.37
	2002-2012	2.72	2.48	1.65	1.14	1.10	1.17	0.84	0.39
	2002-2013	2.51	2.41	1.69	1.19	1.02	1.09	0.83	0.42
	2002-2014	2.55	2.50	1.80	1.16	1.08	1.15	0.89	0.42
	2002-2015	2.54	2.42	1.76	1.09	1.18	1.17	0.90	0.40

Table 12: **Comparison of the performance of forecasts for economic growth and inflation of individual institutions*** - *continue*

3. RMSE ... Root Mean Square Error		Gross domestic product, real				Inflation, year average			
		PNt+1	JNt+1	PNt	JNt	PNt+1	JNt+1	PNt	JNt
IMAD	2002-2008	1.31	1.14	0.88	0.60	1.45	1.12	0.64	0.23
	2002-2009	4.38	4.00	1.58	0.58	1.58	1.49	0.62	0.22
	2002-2010	4.13	3.77	1.50	0.56	1.49	1.41	0.61	0.23
	2002-2011	4.00	3.68	1.61	0.76	1.42	1.37	0.59	0.23
	2002-2012	4.09	3.74	1.59	0.73	1.36	1.33	0.59	0.23
	2002-2013	3.98	3.58	1.54	0.79	1.30	1.28	0.57	0.22
	2002-2014	3.88	3.57	1.59	0.78	1.31	1.31	0.55	0.22
	2002-2015	3.88	3.57	1.59	0.78	1.31	1.31	0.55	0.22
BS	2002-2008	1.19	1.19	0.96	0.59	1.47	1.18	0.53	0.32
	2002-2009	4.28	4.15	2.24	0.67	1.68	1.44	0.53	0.31
	2002-2010	4.05	3.91	2.11	0.64	1.57	1.36	0.50	0.33
	2002-2011	3.89	3.77	2.10	0.77	1.49	1.29	0.55	0.32
	2002-2012	4.00	3.79	2.03	0.75	1.42	1.27	0.54	0.32
	2002-2013	3.86	3.63	1.96	0.84	1.35	1.22	0.53	0.33
	2002-2014	3.76	3.61	1.96	0.85	1.34	1.25	0.52	0.33
	2002-2015	3.64	3.50	1.90	0.82	1.36	1.24	0.51	0.32
SKEP	2002-2008	1.17	1.08	0.94	0.70	1.53	1.14	0.53	0.11
	2002-2009	4.38	4.09	2.07	0.71	1.70	1.43	0.49	0.11
	2002-2010	4.13	3.86	1.96	0.68	1.60	1.36	0.46	0.11
	2002-2011	3.98	3.72	1.95	0.75	1.52	1.30	0.51	0.12
	2002-2012	4.05	3.67	1.89	0.89	1.45	1.27	0.51	0.13
	2002-2013	3.91	3.51	1.86	0.95	1.39	1.24	0.51	0.13
	2002-2014	3.82	3.55	1.90	0.96	1.42	1.28	0.55	0.23
	2002-2015	3.71	3.45	1.84	0.93	1.48	1.35	0.54	0.22
EC	2002-2008	1.19	1.21	1.05	0.50	1.71	1.22	0.43	0.26
	2002-2009	4.25	3.95	1.84	0.49	1.81	1.51	0.40	0.24
	2002-2010	4.01	3.72	1.74	0.46	1.71	1.42	0.38	0.25
	2002-2011	3.86	3.59	1.78	0.60	1.62	1.35	0.44	0.24
	2002-2012	3.95	3.57	1.71	0.57	1.55	1.35	0.44	0.23
	2002-2013	3.82	3.42	1.66	0.72	1.49	1.30	0.43	0.24
	2002-2014	3.74	3.43	1.67	0.69	1.47	1.33	0.44	0.24
	2002-2015	3.63	3.32	1.62	0.67	1.48	1.34	0.45	0.23
IMF	2002-2008	1.14	1.19	0.99	0.67	1.58	1.57	0.89	0.22
	2002-2009	4.14	4.22	2.03	1.26	1.57	1.69	0.85	0.25
	2002-2010	3.90	3.98	1.91	1.20	1.48	1.60	0.81	0.26
	2002-2011	3.76	3.86	1.94	1.32	1.42	1.53	0.77	0.24
	2002-2012	3.86	3.91	1.89	1.25	1.36	1.46	0.75	0.26
	2002-2013	3.76	3.75	1.83	1.28	1.30	1.40	0.72	0.29
	2002-2014	3.63	3.77	1.87	1.27	1.34	1.42	0.74	0.29
	2002-2015	3.54	3.65	1.81	1.24	1.40	1.42	0.72	0.28
WIIW	2002-2008	1.34	1.31	1.08	0.79	1.61	1.58	1.00	0.43
	2002-2009	4.81	4.45	2.94	1.53	1.78	2.07	1.10	0.46
	2002-2010	4.51	4.20	2.77	1.46	1.68	1.95	1.04	0.44
	2002-2011	4.31	4.04	2.72	1.55	1.59	1.85	1.04	0.47
	2002-2012	4.37	4.12	2.62	1.50	1.51	1.77	1.00	0.49
	2002-2013	4.16	3.97	2.59	1.53	1.44	1.69	0.98	0.51
	2002-2014	4.08	3.94	2.63	1.49	1.47	1.70	1.05	0.51
	2002-2015	3.98	3.82	2.56	1.43	1.56	1.69	1.05	0.49

Table 12: **Comparison of the performance of forecasts for economic growth and inflation of individual institutions*** - *continue*

4. stdMAE ... Standardised Mean Absolute Error		**Gross domestic product, real**				**Inflation, year average**			
		PNt+1	JNt+1	PNt	JNt	PNt+1	JNt+1	PNt	JNt
IMAD	2002-2008	0.89	0.78	0.59	0.33	0.58	0.46	0.25	0.09
	2002-2009	0.57	0.51	0.26	0.10	0.58	0.53	0.22	0.08
	2002-2010	0.54	0.49	0.26	0.10	0.53	0.49	0.22	0.08
	2002-2011	0.57	0.53	0.30	0.14	0.49	0.49	0.22	0.09
	2002-2012	0.63	0.57	0.31	0.13	0.49	0.50	0.24	0.09
	2002-2013	0.64	0.54	0.30	0.15	0.45	0.48	0.24	0.09
	2002-2014	0.66	0.59	0.34	0.16	0.45	0.49	0.21	0.08
	2002-2015	0.68	0.59	0.33	0.16	0.27	0.28	0.12	0.05
BS	2002-2008	0.82	0.80	0.61	0.39	0.73	0.43	0.24	0.14
	2002-2009	0.55	0.53	0.32	0.13	0.73	0.48	0.22	0.12
	2002-2010	0.53	0.51	0.31	0.13	0.65	0.45	0.20	0.13
	2002-2011	0.55	0.53	0.34	0.16	0.62	0.42	0.23	0.13
	2002-2012	0.61	0.57	0.33	0.15	0.60	0.45	0.23	0.14
	2002-2013	0.61	0.54	0.33	0.17	0.57	0.44	0.24	0.14
	2002-2014	0.63	0.59	0.35	0.19	0.54	0.44	0.22	0.14
	2002-2015	0.63	0.60	0.35	0.19	0.52	0.42	0.20	0.12
SKEP	2002-2008	0.80	0.72	0.61	0.46	0.64	0.49	0.22	0.05
	2002-2009	0.55	0.51	0.31	0.14	0.64	0.53	0.18	0.04
	2002-2010	0.53	0.49	0.30	0.14	0.57	0.50	0.16	0.04
	2002-2011	0.55	0.51	0.33	0.16	0.53	0.48	0.18	0.05
	2002-2012	0.60	0.53	0.32	0.17	0.51	0.50	0.19	0.05
	2002-2013	0.60	0.51	0.34	0.19	0.48	0.50	0.20	0.05
	2002-2014	0.63	0.57	0.37	0.21	0.49	0.50	0.21	0.07
	2002-2015	0.64	0.58	0.37	0.21	0.49	0.50	0.20	0.06
EC	2002-2008	0.80	0.82	0.69	0.32	0.77	0.57	0.14	0.11
	2002-2009	0.54	0.52	0.30	0.09	0.73	0.60	0.12	0.08
	2002-2010	0.52	0.49	0.29	0.09	0.66	0.54	0.11	0.09
	2002-2011	0.54	0.51	0.32	0.12	0.61	0.50	0.14	0.09
	2002-2012	0.59	0.54	0.31	0.11	0.60	0.54	0.15	0.09
	2002-2013	0.59	0.51	0.31	0.13	0.57	0.52	0.16	0.10
	2002-2014	0.63	0.57	0.34	0.13	0.54	0.52	0.15	0.09
	2002-2015	0.63	0.57	0.33	0.13	0.53	0.50	0.15	0.08
IMF	2002-2008	0.77	0.79	0.68	0.44	0.70	0.65	0.34	0.10
	2002-2009	0.52	0.53	0.32	0.20	0.62	0.64	0.28	0.10
	2002-2010	0.50	0.52	0.31	0.20	0.57	0.59	0.27	0.10
	2002-2011	0.52	0.55	0.34	0.24	0.55	0.56	0.26	0.10
	2002-2012	0.57	0.59	0.34	0.22	0.54	0.55	0.27	0.11
	2002-2013	0.59	0.57	0.34	0.24	0.50	0.53	0.25	0.12
	2002-2014	0.59	0.63	0.37	0.25	0.51	0.52	0.26	0.12
	2002-2015	0.61	0.64	0.37	0.26	0.51	0.51	0.23	0.11
WIIW	2002-2008	0.89	0.89	0.73	0.56	0.86	0.63	0.43	0.16
	2002-2009	0.89	0.57	0.41	0.25	0.82	0.72	0.43	0.16
	2002-2010	0.57	0.55	0.39	0.26	0.78	0.66	0.40	0.16
	2002-2011	0.59	0.57	0.42	0.29	0.72	0.61	0.41	0.18
	2002-2012	0.56	0.62	0.41	0.28	0.69	0.58	0.42	0.19
	2002-2013	0.62	0.62	0.43	0.30	0.66	0.55	0.42	0.21
	2002-2014	0.65	0.67	0.48	0.31	0.64	0.55	0.43	0.20
	2002-2015	0.68	0.67	0.48	0.30	0.64	0.53	0.41	0.18

Table 12: **Comparison of the performance of forecasts for economic growth and inflation of individual institutions* -** *continue*

5. stdRMSE ... Standardised Root Mean Square Error		**Gross domestic product, real**				**Inflation, year average**			
		PNt+1	JNt+1	PNt	JNt	PNt+1	JNt+1	PNt	JNt
IMAD	2002-2008	1.02	0.88	0.69	0.46	0.77	0.60	0.34	0.12
	2002-2009	1.00	0.91	0.36	0.13	0.74	0.70	0.29	0.10
	2002-2010	1.00	0.91	0.36	0.14	0.70	0.66	0.29	0.11
	2002-2011	1.01	0.92	0.41	0.19	0.67	0.65	0.28	0.11
	2002-2012	1.02	0.93	0.40	0.18	0.67	0.66	0.29	0.11
	2002-2013	1.02	0.91	0.39	0.20	0.66	0.64	0.29	0.11
	2002-2014	1.03	0.95	0.42	0.21	0.63	0.63	0.26	0.10
	2002-2015	1.07	0.98	0.44	0.21	0.59	0.59	0.25	0.10
BS	2002-2008	0.93	0.92	0.75	0.46	1.03	0.63	0.28	0.17
	2002-2009	0.98	0.95	0.51	0.15	0.97	0.67	0.25	0.14
	2002-2010	0.98	0.95	0.51	0.15	0.92	0.64	0.23	0.16
	2002-2011	0.98	0.95	0.53	0.19	0.89	0.62	0.26	0.15
	2002-2012	1.00	0.95	0.51	0.19	0.89	0.63	0.27	0.16
	2002-2013	0.99	0.93	0.50	0.21	0.87	0.62	0.27	0.17
	2002-2014	1.00	0.96	0.52	0.23	0.80	0.60	0.25	0.16
	2002-2015	1.00	0.97	0.52	0.23	0.74	0.56	0.23	0.14
SKEP	2002-2008	0.91	0.84	0.74	0.54	0.81	0.61	0.28	0.06
	2002-2009	1.00	0.93	0.47	0.16	0.79	0.67	0.23	0.05
	2002-2010	1.00	0.94	0.48	0.17	0.75	0.64	0.22	0.05
	2002-2011	1.00	0.94	0.49	0.19	0.72	0.62	0.24	0.06
	2002-2012	1.01	0.91	0.47	0.22	0.72	0.63	0.25	0.06
	2002-2013	1.00	0.90	0.48	0.24	0.70	0.62	0.26	0.06
	2002-2014	1.02	0.94	0.51	0.25	0.68	0.61	0.26	0.11
	2002-2015	1.02	0.95	0.51	0.26	0.66	0.61	0.24	0.10
EC	2002-2008	0.92	0.94	0.82	0.39	0.91	0.65	0.23	0.14
	2002-2009	0.97	0.90	0.42	0.11	0.84	0.70	0.19	0.11
	2002-2010	0.97	0.90	0.42	0.11	0.80	0.67	0.18	0.12
	2002-2011	0.97	0.90	0.45	0.15	0.77	0.64	0.21	0.11
	2002-2012	0.99	0.89	0.43	0.14	0.77	0.67	0.22	0.12
	2002-2013	0.98	0.87	0.42	0.18	0.75	0.65	0.22	0.12
	2002-2014	1.00	0.91	0.45	0.18	0.70	0.64	0.21	0.11
	2002-2015	1.00	0.92	0.45	0.19	0.67	0.61	0.20	0.10
IMF	2002-2008	0.89	0.93	0.77	0.52	0.84	0.83	0.48	0.12
	2002-2009	0.94	0.96	0.46	0.29	0.73	0.79	0.40	0.12
	2002-2010	0.95	0.97	0.46	0.29	0.70	0.75	0.38	0.12
	2002-2011	0.95	0.97	0.49	0.33	0.67	0.73	0.37	0.12
	2002-2012	0.96	0.97	0.47	0.31	0.67	0.73	0.37	0.13
	2002-2013	0.96	0.96	0.47	0.33	0.66	0.71	0.36	0.15
	2002-2014	0.97	1.00	0.50	0.34	0.64	0.68	0.36	0.14
	2002-2015	0.98	1.01	0.50	0.34	0.63	0.64	0.32	0.13
WIIW	2002-2008	1.00	1.02	0.84	0.62	1.12	0.84	0.53	0.23
	2002-2009	1.02	1.02	0.67	0.35	1.03	0.97	0.51	0.21
	2002-2010	1.03	1.02	0.67	0.36	0.98	0.92	0.49	0.21
	2002-2011	1.03	1.02	0.68	0.39	0.95	0.88	0.49	0.23
	2002-2012	1.04	1.03	0.65	0.37	0.95	0.88	0.50	0.24
	2002-2013	1.02	1.01	0.66	0.39	0.93	0.86	0.50	0.26
	2002-2014	1.05	1.05	0.70	0.40	0.88	0.82	0.51	0.24
	2002-2015	1.06	1.05	0.71	0.39	0.85	0.76	0.47	0.22

Table 12: **Comparison of the performance of forecasts for economic growth and inflation of individual institutions*** - *notes*

Signs:
*This is the assessment of forecast accuracy that was published in the Spring Forecast of Economic Trends 2016.
Negative values indicate an overestimation, while positive values indicate an underestimation.
The BS and WIIW data for inflation forecast PNt+1 cover the period since 2003; the WIIW data for GDP PNt+1 cover the period since 2003.
PNt+1 - Spring Forecast for the year ahead;
JNt+1 - Autumn Forecast for the year ahead;
PNt - Spring Forecast for the current year;
JNt - Autumn Forecast for the current year.
Source of data:
Spring Forecast of economic trends, Autumn Forecast of economic trends (March, September), Ljubljana, Institute of Macroeconomic Analysis and Development (IMAD).
Price Stability Report (April, October), Ljubljana, Bank of Slovenia (BS).
Current Economic Trends and Indicators, (June, October), Ljubljana, (SKEP)- Economic Outlook, Analysis and Forecasts of the Chamber of Commerce and Industry of Slovenia, Spring Economic Forecast, Autumn Economic Forecast (May, November), European Commission (EC)
World Economic Outlook (April, October), Washington, International Monetary Fund (IMF).
Current Analyses and Forecasts (March, October), WIIW

Acronyms

Acronyms in the text

BoS – Bank of Slovenia, **CME** – Chicago Mercantile Exchange, **ECB** – European Central Bank, **EIA** – Energy Information Administration, **EK** – European Commission, **ESS** – Employment Service of Slovenia, **EU** – European union, **GDP** – Gross domestic product, **GZS** - Chamber of Commerce and Industry of Slovenia, **HICP** - Harmonised Index of Consumer Prices, **IER** – Institute for Economic Research, **IMAD** – Institute of Macroeconomic Analysis and Development, **IMF** – International Monetary Fund, **LFS**- Labour Force Survey, **MF** – Ministry of Finance, **MPA** – Ministry of Public Administration, **NAWRU** – Non-Accelerating Wage Rate of Unemployment, **NFI** – Non-monetary Financial Institutions, **OECD** – Organization for Economic Co-operation and Development, **RS** – Republic of Slovenia, **SEF** – Slovene Enterprise Fund, **SID** – Slovene Export and Development Bank Inc., Ljubljana, **SURS** – Statistical Office of the Republic of Slovenia, **SVRK** – Government Office for Development and European Cohesion Policy, **VAT** – value added tax, **WIIW** - The Wienna Institute for International Economic Studies.

spring forecast of economic trends 2016