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# ECONOMIC AND FINANCIAL DEVELOPMENTS

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# Executive Summary

*Global economic growth is strengthening, which the OECD has continued to highlight in its latest forecasts. The euro area economy is also strengthening, which is evidenced by the favourable indicators of economic sentiment. The latest weighted forecasts based on the Consensus forecasts suggest that aggregate GDP growth in Slovenia's main trading partners will strengthen further in 2017 and 2018, which will maintain high growth in Slovenian exports. The monetary policies of the ECB and the Fed remain divergent. Despite this, the euro has strengthened against the US dollar this year. The price of a barrel of Brent crude rose significantly in recent months to reach USD 59 at the end of September, its highest level of the last two years, although the impact on inflation in the euro area has been partly neutralised by the rise in the euro.*

*Economic growth in Slovenia remains high and balanced. In the second quarter of this year, the economy moved from the recovery phase into the expansion phase. GDP in the second quarter was up 1% on its pre-crisis peak, albeit with a significantly different structure and certain unexploited growth potentials. These primarily relate to the ratio of investment to GDP, which is notably below the euro area average, which is unusual for an economy in the phase of catch-up with more advanced competitors. From a developmental perspective, the most problematic issue is slow growth in investment in R&D. High growth in industrial production, high capacity utilisation in the export sector, and strengthening economies in the international environment are all indicative of the additional need to invest in production capacity. At the same time demand for construction work is gradually strengthening, but has not yet been fully reflected in construction activity itself. Growth in private consumption has slowed this year, in the wake of slightly lower real growth in the wage bill. While exports remained competitive, the slowdown in growth in domestic demand aggregates was reflected in net trade, which accounted for 1.1 percentage points of the GDP growth of 4.4% in the second quarter. According to various survey indicators, economic growth will remain rapid in the months ahead.*

*Employment growth remains high in the majority of sectors in the wake of a rapid fall in unemployment and increasing structural imbalances on the labour market. Firms are increasingly addressing the issue of the shortage of workers by recruiting agency staff and foreign nationals. The number of registered unemployed stood at 80,990 in September, down 14.9% in year-on-year terms. Structural unemployment is also falling, albeit slowly, as the number of long-term unemployed gradually declines. The registered and surveyed unemployment rates have both been declining since 2014, and according to current figures are now only 2 percentage points above their levels in the period of the overheating in 2007 and 2008. In the wake of the rapid decline in the excess labour supply, the first signs are perhaps being seen of slightly faster growth in wages. In the context of high employment growth, year-on-year growth in the wage bill averaged 5.6% in nominal terms over the first seven months of the year, and 3.9% in real terms. Developments on the labour market are nevertheless not yet hindering external competitiveness: growth in unit labour costs is less than the average across the euro area. A shortage of labour will however be one of the main challenges to the maintenance of high economic growth. A sharp rise in labour productivity and value-added by means of investment targeting high-tech sectors is necessary.*

*The surplus of trade in merchandise and services has been increasing again this year, as export growth outpaces import growth despite negative terms of trade and the strengthening of the domestic market. There has also been a slight narrowing of the deficit in income, largely because of a decline in interest payments on long-term securities brought by the restructuring of government debt and the implementation of monetary policy via purchases of Slovenian government bonds. The 12-month current account surplus reached 5.7% of GDP in June. The large surplus is the result of the decline in investment in the first wave of the crisis, and later in final consumption after the introduction of government aus-*

*terity measures, which in the breakdown of GDP were compensated for by the trade surplus. In this surplus there is potential space for a further increase in domestic final consumption and in investment, which should be limited by export growth if the economy wishes to maintain a positive external position over the long term. A trade surplus will be required for covering the deficit in income, on which the increase in foreign ownership of the economy will have a strong impact via reinvested earnings and dividends.*

*After declining for several years, bank lending to the corporate segment is reviving in 2017. Firms are primarily raising long-term loans, which are favourable from the perspective of the financing of investment, although the total stock of loans raised remains small for now. The banks are increasingly encouraging household lending through favourable terms, consumer loans in particular. Otherwise the banks are increasingly returning to their basic business of lending to the non-banking sector, which in conjunction with rising portfolio quality is producing a good outlook for the financing of future economic activity.*

*The general government deficit is continuing to narrow, which is attributable to the favourable economic situation and the maintenance of certain austerity measures. The Ministry of Finance is forecasting a general government deficit of 0.8% of GDP for this year, and a further improvement in fiscal performance within the framework of the drafting of the state budgets for 2018 and 2019. A surplus of 0.4% of GDP is being planned for next year. Because Slovenia is moving into the territory of a positive output gap, and the general government debt is relatively high (it stood at almost 80% of GDP in the second quarter of this year), it is vital to generate budget surpluses. Cyclical revenues should be directed into generating savings and reducing debt.*

*This year's developments in inflation as measured by the HICP have reflected external price shocks on international markets, although some have also been the result of one-off developments on the domestic market. After rising sharply at the beginning of the year, inflation fell and has stabilised at 1.4% in recent months. Core inflation remains low, despite strengthening domestic consumption. It is close to but below the euro area average. This is primarily attributable to prices of non-energy industrial goods, which have been falling for nine years now. The positive economic developments in recent years and the improvement in the situation on the labour market have been rapidly reflected in services prices, growth in which has been close to 2% for more than a year now. The resumption of growth in global oil prices and other commodity prices on the global market has brought a renewed increase in price pressures from imports since July, while according to SORS survey data both firms and households are anticipating price growth over the short term.*

**Main macroeconomic Indicators**

| | 2014 | 2015 | 2016 | 16Q4 | 17Q1 | 17Q2 | 2014 | 2015 | 2016 | 16Q4 | 17Q1 | 17Q2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *Slovenia* | | | | | | *euro area* | | |
| **Economic developments** | | | | | *y-o-y growth rates in %* | | | | | | | |
| GDP | 3.0 | 2.3 | 3.1 | 3.5 | 5.1 | 4.4 | 1.3 | 2.0 | 1.8 | 1.6 | 2.6 | 1.7 |
| *- industry* | 4.6 | 1.4 | 4.4 | 4.1 | 7.0 | 6.6 | 2.7 | 4.2 | 1.8 | 1.8 | 3.6 | 0.9 |
| *- construction* | 10.5 | -1.6 | -4.4 | 1.4 | 13.0 | 11.3 | -0.9 | 0.2 | 1.7 | 1.0 | 3.9 | 2.5 |
| *- mainly public sector services* | -0.1 | 1.4 | 2.9 | 3.4 | 2.5 | 2.1 | 0.5 | 0.9 | 1.2 | 1.2 | 1.5 | 1.1 |
| *- mainly private sector services* | 4.6 | 2.4 | 3.2 | 3.9 | 6.1 | 5.4 | 1.5 | 2.1 | 1.8 | 1.6 | 2.8 | 1.7 |
| Domestic expenditure | 1.7 | 1.8 | 2.9 | 4.7 | 5.6 | 3.7 | 1.3 | 1.9 | 2.3 | 2.0 | 2.4 | 2.0 |
| *- general government* | -1.2 | 2.7 | 2.5 | 1.1 | 0.9 | 1.2 | 0.7 | 1.3 | 1.7 | 1.6 | 1.1 | 1.3 |
| *- households and NPISH* | 1.9 | 2.1 | 4.2 | 6.4 | 4.1 | 3.2 | 0.8 | 1.7 | 2.1 | 1.9 | 1.6 | 1.7 |
| *- gross capital formation* | 3.8 | 0.2 | -0.1 | 3.8 | 14.1 | 7.4 | 3.2 | 3.2 | 3.6 | 2.8 | 6.0 | 3.4 |
| *- gross fixed capital formation* | 1.1 | -1.6 | -3.6 | 0.7 | 12.8 | 7.9 | 1.7 | 3.1 | 4.4 | 3.7 | 5.3 | 2.8 |
| *- inventories and valuables, contr. to GDP growth in pp* | 0.5 | 0.3 | 0.7 | 0.5 | 0.5 | 0.0 | 0.3 | 0.0 | -0.1 | -0.2 | 0.2 | 0.1 |
| **Labour market** | | | | | | | | | | | | |
| Employment | 0.4 | 1.2 | 1.9 | 2.4 | 2.9 | 2.8 | 0.6 | 1.0 | 1.4 | 1.4 | 1.6 | 1.6 |
| *- mainly private sector services* | 0.4 | 1.4 | 1.9 | 2.3 | 2.9 | 2.9 | 0.5 | 1.0 | 1.4 | 1.4 | 1.6 | 1.7 |
| *- mainly public sector services* | 0.4 | 0.8 | 2.2 | 2.7 | 3.0 | 2.5 | 0.9 | 1.0 | 1.3 | 1.2 | 1.4 | 1.3 |
| Labour costs per employee | 1.3 | 1.4 | 2.8 | 2.1 | 1.7 | 2.5 | 1.4 | 1.3 | 1.2 | 1.3 | 1.5 | 1.5 |
| *- mainly private sector services* | 2.4 | 1.6 | 2.2 | 1.7 | 1.9 | 2.4 | 1.5 | 1.3 | 1.2 | 1.2 | 1.5 | 1.6 |
| *- mainly public sector services* | -2.1 | 0.7 | 5.2 | 5.2 | 4.2 | 3.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 |
| Unit labour costs | -1.9 | 0.4 | 1.6 | 0.7 | -0.7 | 0.5 | 0.6 | 0.4 | 0.9 | 1.1 | 0.5 | 1.5 |
| *- industry* | -0.9 | 1.3 | 0.7 | 1.1 | -1.6 | -0.3 | -0.9 | -2.2 | 0.1 | 0.2 | -1.0 | 1.9 |
| | | | | | | *in %* | | | | | | |
| LFS unemployment rate | 9.8 | 9.0 | 8.0 | 8.1 | 7.8 | 6.4 | 11.7 | 10.9 | 10.0 | 9.8 | 9.9 | 9.0 |
| **Foreign trade** | | | | | *y-o-y growth rates in %* | | | | | | | |
| Current account balance as % of GDP | 5.8 | 4.4 | 5.2 | 4.3 | 4.5 | 6.4 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| External trade balance as contr. to GDP growth in pp | 1.4 | 0.6 | 0.5 | -0.9 | 0.1 | 1.1 | 0.1 | 0.1 | -0.4 | -0.4 | 0.3 | -0.2 |
| Real export of goods and services | 5.7 | 5.0 | 6.4 | 5.6 | 9.5 | 8.3 | 4.6 | 6.6 | 3.2 | 2.9 | 5.9 | 3.2 |
| Real import of goods and services | 4.1 | 4.7 | 6.6 | 7.5 | 10.7 | 7.9 | 4.7 | 6.8 | 4.6 | 4.2 | 5.9 | 4.1 |
| **Financing** | | | | | | *in % of GDP* | | | | | | |
| Banking system's balance sheet | 115.7 | 107.0 | 99.2 | 99.2 | 99.0 | 96.2 | 297.5 | 282.3 | 276.7 | 276.7 | 278.3 | 273.3 |
| Loans to NFCs | 31.2 | 26.3 | 22.5 | 22.5 | 22.8 | 22.5 | 40.2 | 38.9 | 38.0 | 38.0 | 37.9 | 37.7 |
| Loans to households | 21.3 | 21.1 | 21.1 | 21.1 | 21.2 | 21.3 | 50.5 | 49.9 | 49.5 | 49.5 | 49.4 | 49.4 |
| **Inflation** | | | | | | *in %* | | | | | | |
| HICP | 0.4 | -0.8 | -0.2 | 0.7 | 2.0 | 1.4 | 0.4 | 0.0 | 0.2 | 0.7 | 1.8 | 1.5 |
| HICP excl. energy, food, alcohol and tobacco | 0.6 | 0.3 | 0.7 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 | 1.1 |
| **Public finance** | | | | | | *in % of GDP* | | | | | | |
| Debt of the general government | 80.3 | 82.6 | 78.5 | 78.5 | 80.2 | 79.8 | 91.9 | 90.1 | 89.0 | 89.0 | 89.3 | ... |
| One year net lending/net borrowing of the general government | -5.3 | -2.9 | -1.9 | -1.9 | -1.5 | -1.2 | -2.6 | -2.1 | -1.5 | -1.5 | -1.3 | ... |
| *- interest payment* | 3.2 | 3.2 | 3.0 | 3.0 | 3.0 | 2.9 | 2.7 | 2.4 | 2.2 | 2.2 | 2.2 | ... |
| *balancedeficit* | -2.1 | 0.3 | 1.1 | 1.1 | 1.5 | 1.7 | 0.1 | 0.3 | 0.7 | 0.7 | 0.9 | ... |
| *- balance excl. bank recapitalisations* | -4.4 | -2.9 | -1.9 | -1.9 | -1.5 | -1.2 | | | | | | |
| *- primary balance excl. bank recapitalisations* | -1.1 | 0.3 | 1.1 | 1.1 | 1.5 | 1.7 | | | | | | |

*Source: SORS, Eurostat, ECB, Ministry of Finance, Bank of Slovenia calculations.*

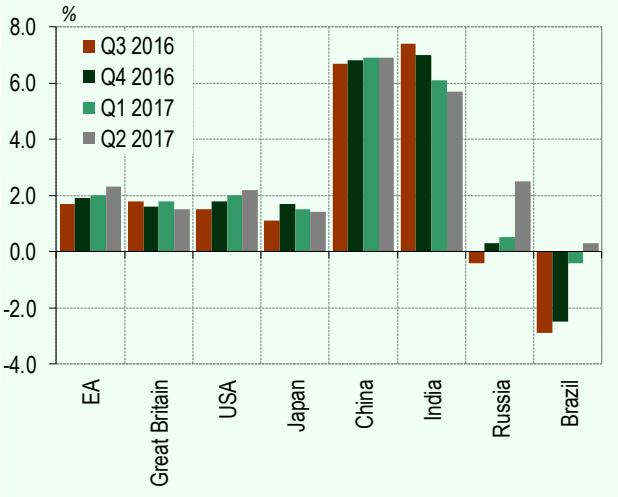
# 1 International Environment

*Global economic growth forecasts were again strengthened slightly at the end of the second quarter. The economic situation in the euro area is continuing to improve, as confidence in the economy strengthens. The latest weighted forecasts based on the Consensus forecasts suggest that aggregate growth in Slovenia's main trading partners will be slightly higher in 2017 and 2018, which is maintaining the already favourable outlook for growth in Slovenian exports. The monetary policies of the ECB and the Fed remain divergent, although the euro has strengthened against the US dollar this year. The price of Brent oil rose significantly in recent months to reach USD 59 a barrel at the end of September, its highest level of the last two years, although the impact on inflation in the euro area has been partly limited by the rise in the euro.*

## Global economy

**After a slowdown in certain major economies in the early part of this year, GDP growth strengthened again.** Growth in the US increased in the second quarter, and was supported by the revival of domestic demand. The largest factors in this were private consumption and a moderate increase in private investment. Growth also strengthened in Japan, primarily as a result of an increase in private consumption and an increase in public investment. Growth in the UK was relatively low in the second quarter, growth in private consumption and private investment having slowed, while public consumption and public investment strengthened. Of the BRIC countries, growth in China in the second quarter was higher than expected, and remains high, while growth in India slowed to below the expected rate. The upward reversal continued in Brazil. Russia is also continuing to recover: growth in the second quarter was higher than expected.

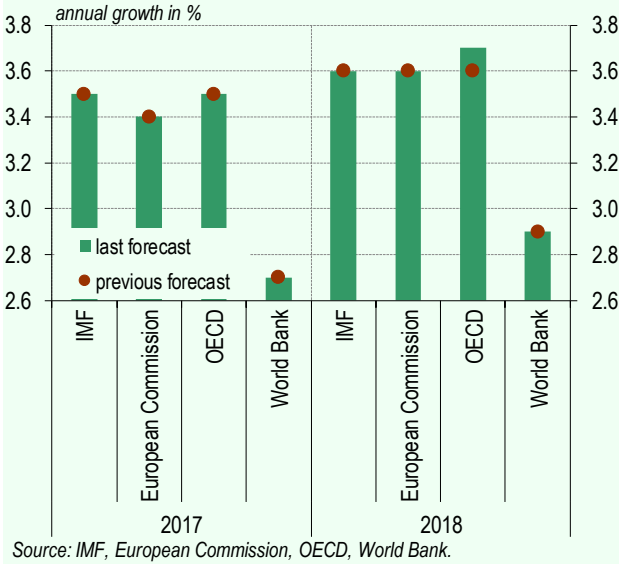
**Figure 1.1: Year-on-year economic growth in BRIC and major developed countries outside the euro area**




*Source: Tradingeconomics.*

**The latest forecasts by international institutions suggest that global economic growth will gradually increase.** Current forecasts for global GDP growth range from 2.7% to 3.5% for 2017, and from 2.9% to 3.7% for 2018. In September the OECD slightly raised its forecast for global economic growth in 2018. It raised its forecasts of economic growth for the euro area and Japan in 2017 and 2018, to 2.1% and 1.9%, and 1.6% and 1.2% respectively. The OECD slightly raised its growth forecasts for China to 6.8% in 2017 and 6.6% in 2018, and is forecasting positive growth in Brazil in 2017, and a rate of 1.6% in 2018. It also raised its forecasts for Russia, to 2% in 2017 and 2.1% in 2018. The OECD is forecasting economic growth of 2.1% in 2017 and 2.4% in 2018 for the US, while the IMF has revised its growth forecast for the US

**Figure 1.2: Growth of global GDP in 2017 and 2018**




*Source: IMF, European Commission, OECD, World Bank.*

downwards, from 2.5% to 2.1% in 2018. This was attributed to the expected effects of the announced tax reform, and a reduction in expenditure.

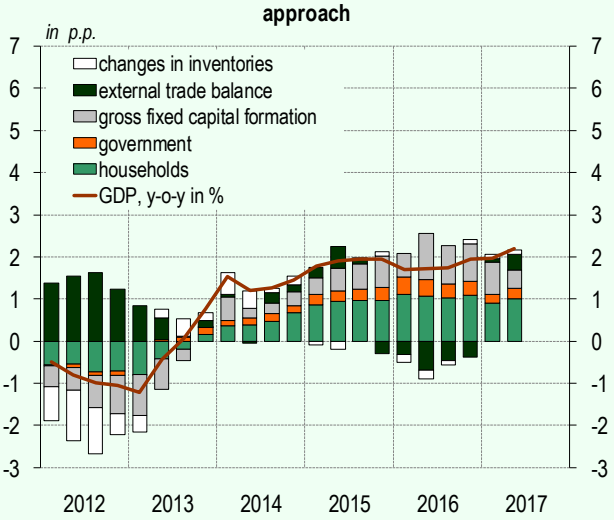
**The prevailing risks to the economic outlook remain on the downside in the medium term.** They are related to geopolitical tensions, increased trade protectionism, the uncertainty of future US economic and trade policy, and the tightening of global financial conditions as a result of the normalisation of monetary policy by the Fed. The latter entails the risk of slower growth in emerging market economies, which face internal imbalances and have large US dollar exposures. The potential downside risks entailed by the economic adjustments in China, the health of the banking sector in Europe and the Brexit negotiations also remain. Geopolitical tensions and political uncertainties remain the key risks to global growth. The geopolitical risks are particularly high in the Korean peninsula and the Middle East, while relations between Turkey and the EU remain tense. The upside risks include an improvement in the global economic climate and the strengthening of trade flows.

## Euro area

**The economic situation in the euro area is continuing to improve.** Quarterly economic growth reached 0.6% in the second quarter of 2017, while the year-on-year rate stood at 2.3%. The largest contribution to year-on-year growth adjusted for the season and the number of working days came from private consumption, at 1.0 percentage points. Gross fixed capital formation accounted for 0.4 percentage points of year-on-year GDP growth, while the contribution made by net exports was also 0.4 percentage points. The contribution made by government consumption was 0.3 percentage points. In terms of sector, the largest contribution to growth was made by private-sector services, at 1.1 percentage points, followed by industry (excluding construction), which contributed 0.5 percentage points, and public services and construction, which each contributed 0.2 percentage points.

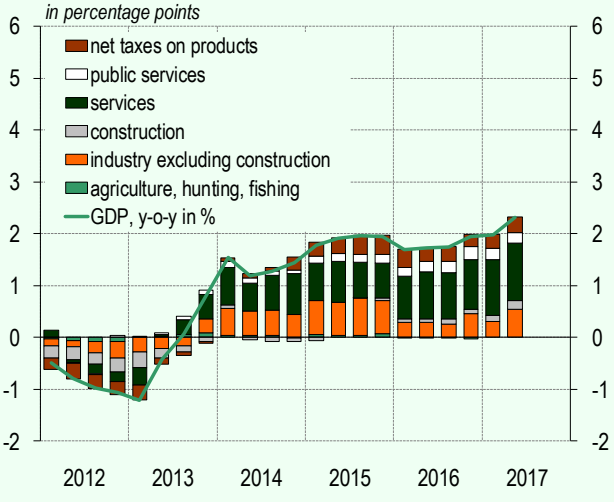
**The economic sentiment in the euro area is continuing to strengthen.** In September it reached its level of

**Figure 1.3: Structure of GDP growth in the euro area, expenditure approach**



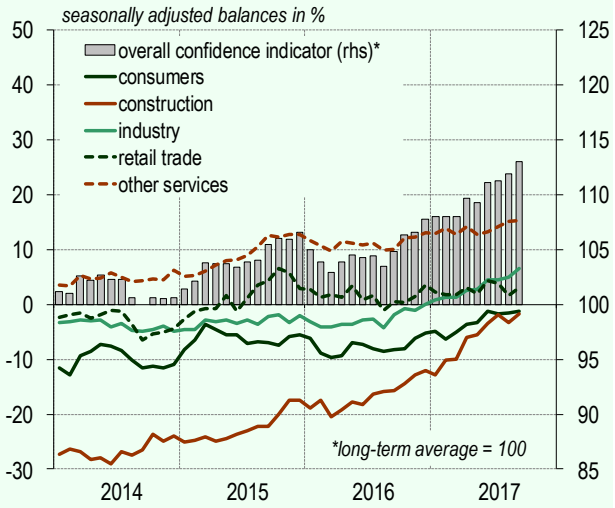

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 1.4: Structure of GDP growth in the euro area, output approach**



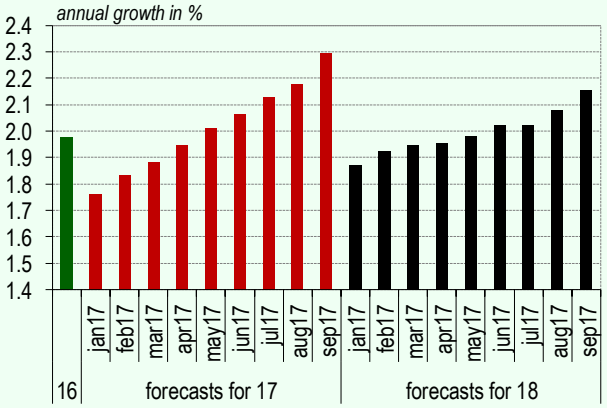

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 1.5: Confidence indicators – euro area**




*Source: European Commission.*

**Figure 1.6: Weighted monthly forecasts for Slovenia's major trading partners in 2017 and 2018**




*Note: Trade partners with at least 1 % of the total goods exports of Slovenia in the last 12 months with available data are included (more than 20 trading partners with a total share of about 90%. The growth forecasts for the years 2017 and 2018 are weighted with the share of each country in total exports of goods).*
*Source: Consensus, Bank of Slovenia calculations.*

the summer of 2007. Confidence is notably strengthening in industry, while in retail trade and other private-sector services, in construction and among consumers it has remained at high levels in recent months.

## Slovenia's trading partners

**The weighted average economic growth forecast for Slovenia's main trading partners was raised again at the end of the third quarter, for both 2017 and 2018.** In September Consensus raised its economic growth forecasts for 2017 for Germany and France, to 1.9% and 1.6% respectively, and for Italy and Austria, to 1.3% and 2.3% respectively. Consensus also slightly raised its economic growth forecasts for 2018 for Germany and France, to 1.9% and 1.6% respectively, and for Italy and Austria, to 1.1% and 1.9% respectively. Slovenia's main trading partners in eastern and southern Europe are also expected to record solid economic growth, with the exception of Serbia and Bosnia and Herzegovina, where growth is expected to slow slightly. The economic recovery will continue in Russia: GDP growth is forecast to reach 1.7% in 2017, while the forecast for 2018 was raised slightly to 1.8%. Consensus remains more circumspect about the Russian economy than the OECD. In September Consensus left its economic growth forecast for Croatia for 2017 unchanged at 2.9%, but raised its forecast for 2018 slightly to 2.7%. The favourable forecasts generally remain attributable to growth in household consumption, while the main factors acting to slow further economic growth in individual countries are internal political risks and geopolitical risks.

## Euro exchange rate and commodity prices

**The divergence between the monetary policies of the ECB and the Fed remains unchanged: the Fed did not raise its key interest rate at its September meeting.** The target range remains 1.00% to 1.25%. The ECB also left its key interest rates unchanged: the rates on the main refinancing operations, 0.00%, the marginal lending facility and the deposit facility are zero, 0.25% and

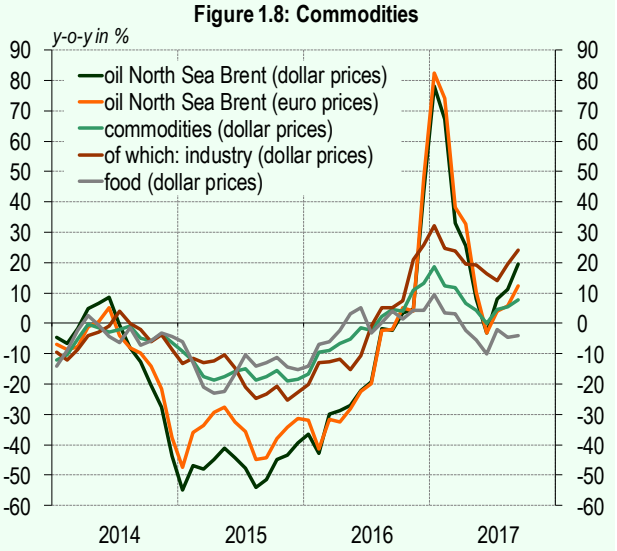
**Figure 1.7: EUR/USD exchange rate and central banks' interest rates**


*Source: ECB, Federal Reserve.*

-0.40% respectively. In its September monetary policy meeting the ECB reiterated its commitment to continue monthly asset purchases in the amount of EUR 60 billion until at least the end of December 2017, or longer until sustained adjustment in the path of inflation consistent with its inflation aim is seen.. The euro is continuing to strengthen, despite the divergence in monetary policies. It averaged USD 1.06 in January, but had strengthened to USD 1.19 by September. This is still down significantly on 2014, when it averaged USD 1.33.

**Oil prices have risen significantly since June, while the majority of other commodity prices are also rising.** The rise in oil prices is attributable to an agreement to cut output between Opec members, Russia and other producers. Certain countries actually cut output by more than agreed. There is also relatively strong demand for oil, while the unrest in the Middle East has also been a factor in the rising prices. The price of oil stood at USD 59 a barrel at the end of September, its highest level of the last two years, primarily on the basis of information showing a decline in stocks and a forecast that demand for oil would be higher than expected. The price of a Brent oil averaged USD 55.2 a barrel in September, up almost 20% in year-on-year terms. Other commodity prices are continuing to rise, with the exception of food prices. Metals recorded particularly notable year-on-year growth of 32% in September.

**Figure 1.8: Commodities**




*Source: The Economist, Bloomberg, Bank of Slovenia calcuations.*

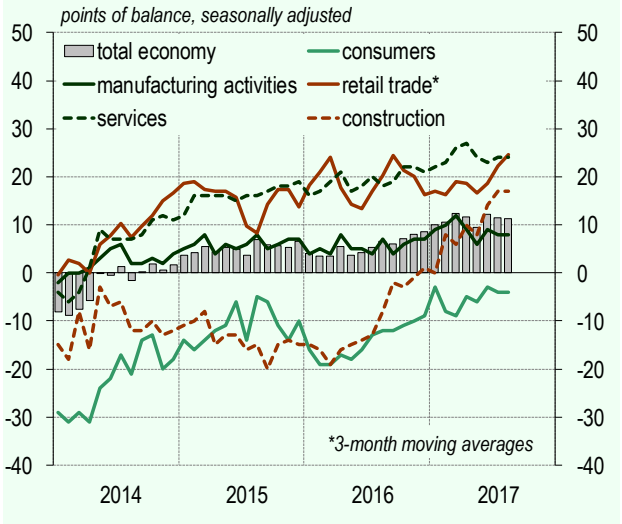
# 2 Economic Developments

*Economic growth in Slovenia remains high and balanced: in the second quarter of this year the economy moved from the recovery phase into the expansion phase. After a decade at lower levels, GDP in the second quarter was up 1% on its pre-crisis peak, albeit with a significantly different structure and certain unexploited growth potentials. These primarily relate to the ratio of investment to GDP, which is notably below the euro area average, which is unusual for an economy in the phase of catch-up with more advanced competitors. From a developmental perspective, the most problematic issue is slow growth in investment in R&D. High growth in industrial production, high capacity utilisation in the export sector, and strengthening economies in the international environment are all indicative of the additional need to invest in production capacity. At the same time demand for construction work is gradually strengthening, but has not yet been fully reflected in construction activity itself. Growth in private consumption has slowed this year, in the wake of slightly lower real growth in the wage bill. While exports remained competitive, the slowdown in growth in domestic demand aggregates was reflected in net trade, which accounted for 1.1 percentage points of the GDP growth of 4.4% in the second quarter. According to various survey indicators, economic growth will remain rapid in the months ahead.*

## Confidence indicators

**Economic sentiment has stabilised at a relatively high level this year.** Confidence is high in all groups of sectors and among consumers, while numerous forward-looking indicators suggest economic growth will remain high at least until the end of the year. According to SORS survey, in September manufacturing firms were anticipating an additional increase in exports and total demand over the next three months, and consequently in output too, while sales prices are expected to rise. Construction firms are also expecting a rise in prices, and in September were optimistic with regard to growth in orders in the final quarter of this year. Although the value of survey indicators in retail fluctuates sharply, the trend suggests high growth in sales until the end of the year, while prices are expected to gradually rise. In other private-sector services, expected growth in sales was more moderate in September, as was the expected growth in prices. Consumer confidence is high, as a result of the optimism regarding the future economic situation in the country, unemployment and their own financial position.

**Figure 2.1: Confidence indicators**



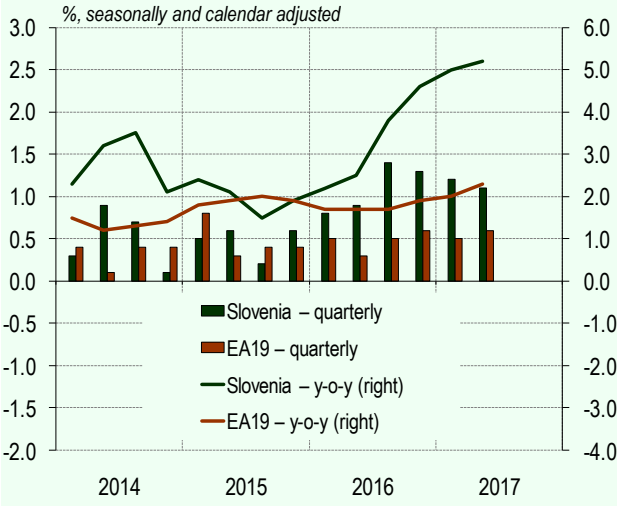

*Source: SORS, Bank of Slovenia calculations.*

## GDP

**Economic growth in Slovenia remains among the highest in the euro area.** Quarterly growth has been slowing since the sharp increase in the third quarter of last year, but nevertheless exceeded 1% in the second quarter of this year. The year-on-year rate remained high in the second quarter, at 4.4%, although there was a pronounced effect caused by the number of working days. Year-on-year growth in GDP according to seasonally adjusted and calendar-adjusted figures strengthened again, to 5.2%. This was one of the highest rates in the euro area, exceeding the average by 3 percentage points. The high economic growth has moved Slovenia from the recovery phase to the expansion phase, although GDP in the second quarter was merely 1% up on its pre-crisis peak from the second quarter of 2008.

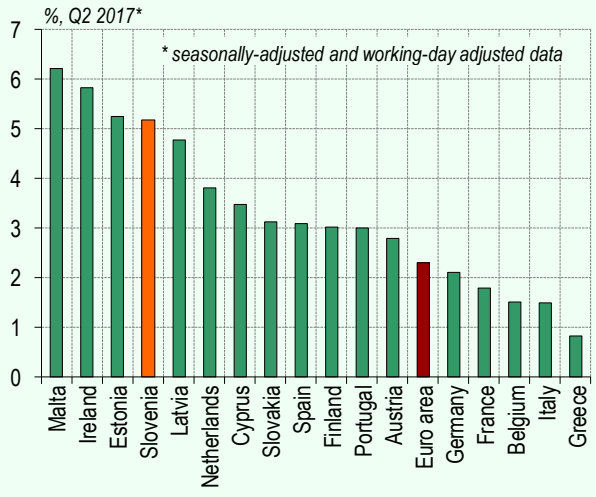
**The improvement in the economic situation in the international environment is continuing to strengthen industrial production.** Quarterly growth in value-added in industry in the second quarter strengthened to 2.2% according to seasonally adjusted and calendar-adjusted figures, taking the year-on-year rate to 7.3%. The high growth is primarily attributable to rising foreign demand, which is geographically diversified, as it is strengthening both inside and outside the euro area. Overall growth in output has mostly been driven this year by sectors of medium-low and medium-high technological complexity. The most notable growth in the former segment in the

**Figure 2.2: GDP growth rate - comparison between Slovenia and euro area**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 2.3: Year-on-year GDP growth in the euro area countries**

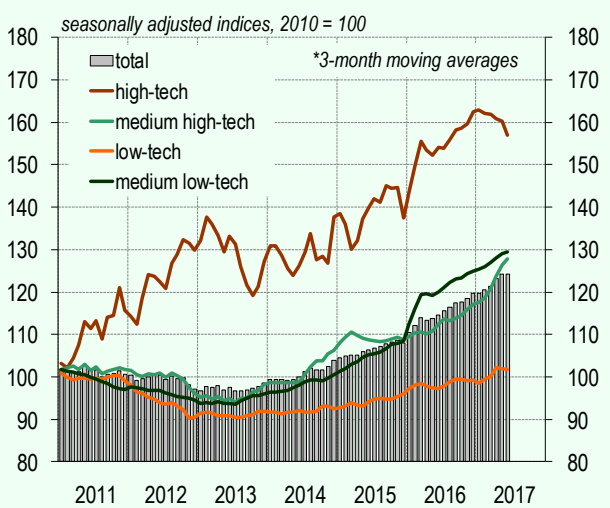



*Note: Until 4th October the information for Luxembourg was not yet available.*
*Source: Eurostat.*

**Figure 2.4: Real turnover in industry**


*Source: SORS, Bank of Slovenia calculations.*

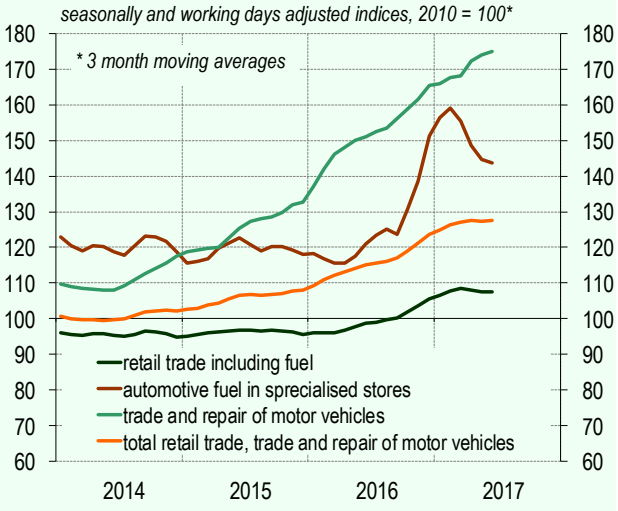
**Figure 2.5: Manufacturing output by technological complexity**




*Source: SORS, Bank of Slovenia calculations.*

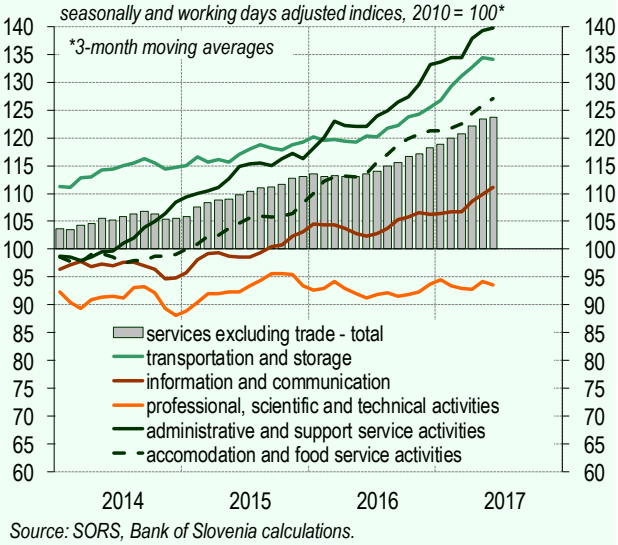
second quarter was recorded by the manufacture of basic metals and the installation of machinery, while the most notable growth in the latter was recorded by the automotive industry and the machinery industry. Output of low-tech products is also increasing, albeit slower than average: the most notable growth was recorded by the manufacture of furniture and leather goods. Year-on-year growth in output of high-tech products is slowing. It stood at just 1.9% in the second quarter. This is attributable solely to a contraction in the manufacture of computer, electronic and optical products, which was largely the result of a base effect, growth having reached almost 45% last year.

**Figure 2.6: Real turnover in wholesale and retail trade**




Source: SORS, Bank of Slovenia calculations.

**Figure 2.7: Nominal turnover in services other than wholesale and retail trade**




Source: SORS, Bank of Slovenia calculations.

**Year-on-year growth in total value-added in services exceeded 4% in the second quarter, as growth continued on the domestic market and foreign demand strengthened, while employment in public services also increased again.** In terms of year-on-year growth in value-added adjusted for the season and the calendar, the most notable rates were recorded by the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities. Although monthly growth in turnover in wholesale and retail trade ceased as a result of volatility in turnover in motor fuels, turnover remains up significantly on the same period of last year in the majority of segments. Turnover in durables remains notable: year-on-year growth in turnover in motor vehicles is still in excess of 15%. Despite the monthly volatility, year-on-year growth in turnover in motor fuels also remains notably high, which is partly related to an increase in transit traffic and high growth in transport activities. Turnover in accommodation and food service activities increased sharply, as private consumption has strengthened, while arrivals by foreign visitors strengthened even more notably: they were up 21% in year-on-year terms in the second quarter. Growth in value-added in financial and insurance activities remains high, which is at least partly related to loan support for economic growth by the domestic banking system. Activity in administrative and support service activities is continuing to increase, while growth in value-added in the information and communication sector also remains high. Public services are also continuing to contribute to economic growth. Value-added in real estate activities has been stagnating for several years, in contrast to the high number of transactions in residential properties. Aggregate turnover in professional, scientific and technical activities remains low, but the dynamic varies greatly between individual types of service.[1]

**Construction activity is increasing in all segments, albeit from a very low level, and with significant monthly fluctuations.** Value-added in construction in the second quarter was up 3.7% on the first quarter according to seasonally adjusted and calendar-adjusted figures, taking year-on-year growth to more than 11%. Year-on-

[1] Turnover in architectural and engineering activities, technical testing and analysis in the first half of the year was down more than 5% in year-on-year terms, while turnover in other professional, scientific and technical activities was up almost a fifth.

**Box 2.1: Comparison of selected macroeconomic indicators between Slovenia and the euro area**

The economic sentiment in Slovenia has mostly been better than that in the euro area overall since mid-2014. Confidence is higher at firms in manufacturing, construction, retail trade and other private-sector services. The sole exception is households, which are traditionally less optimistic, although the confidence level has again approached the euro area average this year. Confidence in the economy thus remains high for now, and offers good prospects of the ongoing restoration of convergence with wealthier euro area countries.

It was only in the second quarter of this year that the Slovenian economy finally made up the loss in GDP brought by the double-dip recession, while the gap behind the euro area remains clear, despite the lead in economic growth. Slovenia's GDP in the second quarter of this year was up just 1% on the second quarter of 2008, compared with an equivalent figure of 4.4% for the euro area overall.[1] The majority of domestic demand aggregates are contributing to this year's faster growth. The largest difference is in investment, which is recovering after a sharp decline in 2016 caused by the loss of public investment at that time. Nevertheless, the gap with the euro area is most pronounced in investment: its level in the second quarter of this year was down more than 40% on the second quarter of 2008 in Slovenia, compared with 6.3% in the euro area overall. However it should be noted that the level of investment in Slovenia was unsustainably high before the crisis. Private consumption is also growing more quickly, as the situation on the labour market is better than in the euro area overall, and the increase in private consumption since the second quarter of 2008 was larger than in the euro area overall. Since the refugee wave came to an end, growth in final government consumption has slowed to the euro area average, and is down comparatively on the second quarter of 2008 owing to austerity measures during the crisis. In the second quarter of this year it was up 2.9% on the second quarter of 2008, compared with an equivalent figure of 8% for the euro area overall.

The depth of the crisis means that the dynamic in the wage bill also remains behind the euro area average, although the gap is closing as a result of the recent faster growth in employment. The relaxation of austerity measures in the public sector also saw the beginnings of slightly faster growth in wages in 2016. However, developments in unit labour costs in Slovenia are more favourable than in the euro area overall. This is maintaining cost competitiveness, which approached the euro area average as a result of an internal devaluation during the crisis. The wage bill in Slovenia in the second quarter of this year was up 11% on the second quarter of 2008, compared with an equivalent figure of 17.3% for the euro area overall.

The economic recovery between 2014 and 2016 took place without the support of the domestic banking system, but the banks are participating in this year's expansion phase.[2] Owing to corporate over-leveraging and the banking crisis, loans to the private sector declined significantly more in previous years than in the euro area overall. The significant transfer of non-performing claims to the BAMC was also a statistical factor in this. The gradual reversal in lending began in mid-2016, with growth in consumer loans to households, and this year has gradually spread to non-financial corporations. Growth in loans to the private sector overtook the average rate across the euro area. Interest rates on corporate loans are higher than the average across the euro area, while there are no major differences in the interest rates on consumer loans and housing loans. Year-on-year growth in gross loans to corporates and households reached almost 4% in Slovenia in July of this year, compared with 1.2% in the euro area overall.

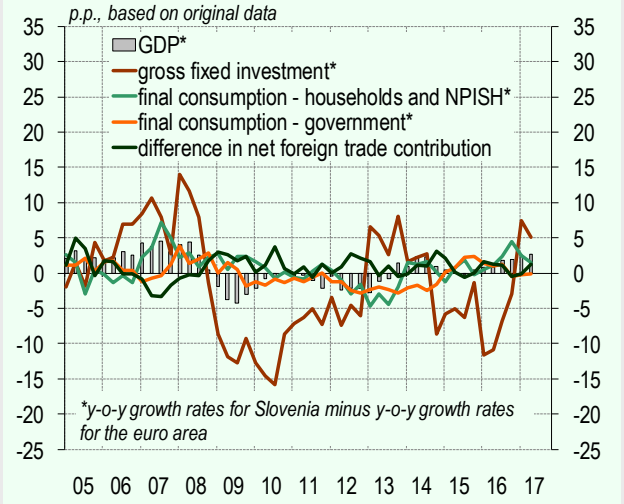
The depth of the economic and banking crisis meant that the government fiscal position in Slovenia deteriorated significantly more over the last decade than in the euro area overall. The government was not generating budget surpluses even in the most favourable economic situation before the crisis. Economic growth has brought a significant improvement in the position in recent years, and general government debt has long been below the average across the euro area. The general government debt in Slovenia stood at 22.1% of GDP in the second quarter of 2008, compared with 79.8% of GDP in the second quarter of this year. Debt across the euro area increased from 66.2% of GDP to 89.5% of GDP over the same period.[3] Despite the highly favourable current financing conditions, the almost fourfold increase in the debt has brought a significant increase in interest expenses, which are significantly higher than the average across the euro area, and are thus squeezing other expenditure.

During the crisis and the subsequent restoration of economic growth, headline inflation and later core inflation were relatively synchronised with the euro area average. A significant part of the deviation in headline inflation is usually explained by the greater impact of changes in energy prices on inflation in Slovenia as a result of their higher weighting in the HICP basket. In core inflation there has recently been a trend of faster growth in services prices, while prices of non-energy

**Figure 1: Economic sentiment indicator**

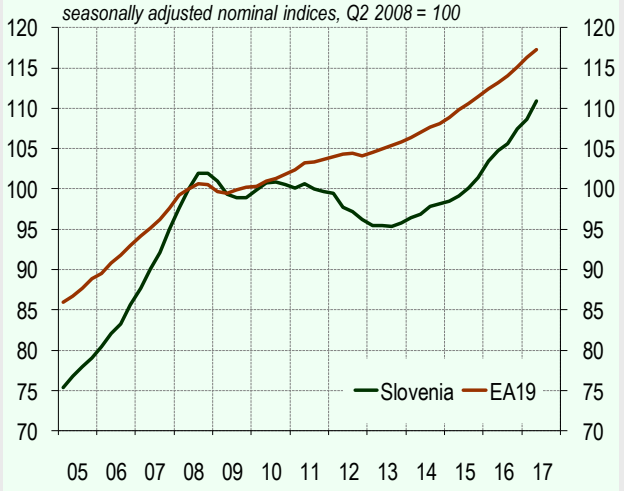

Source: European Commission.

**Figure 2: Differences in y-o-y growth rates of GDP components between Slovenia and the euro area – expenditure side***



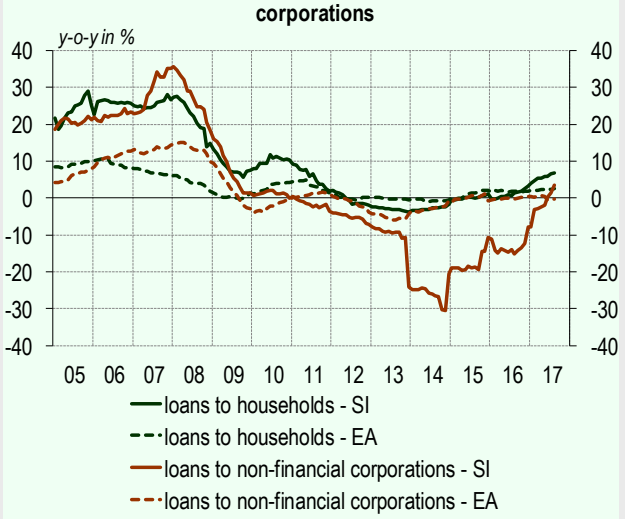

Soures: Eurostat, ECB, Bank of Slovenia calculations.

**Figure 3: Wage bill in Slovenia and EA**



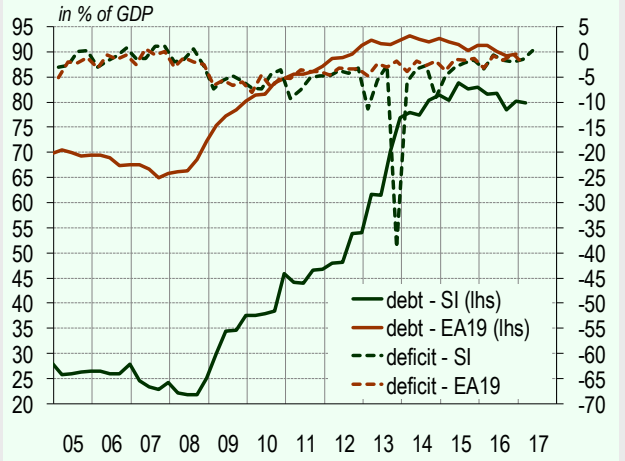

Source: Eurostat, Bank of Slovenia calculations.

**Figure 4: MFI loans to households and non-financial corporations**



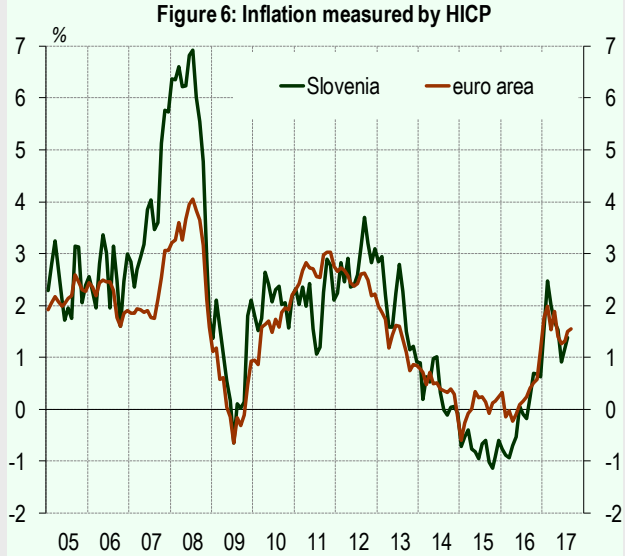

Note: Loans on a gross basis – statistical definition.
Source: ECB.

**Figure 5: General government's fiscal position**




Source: Eurostat.
Note: Widening of the quarterly deficit in Slovenia in Q1 2011, Q1 2013 and Q4 2013 was due to bank recapitalisations.

**Figure 6: Inflation measured by HICP**




Source: Eurostat, Bank of Slovenia calculations.

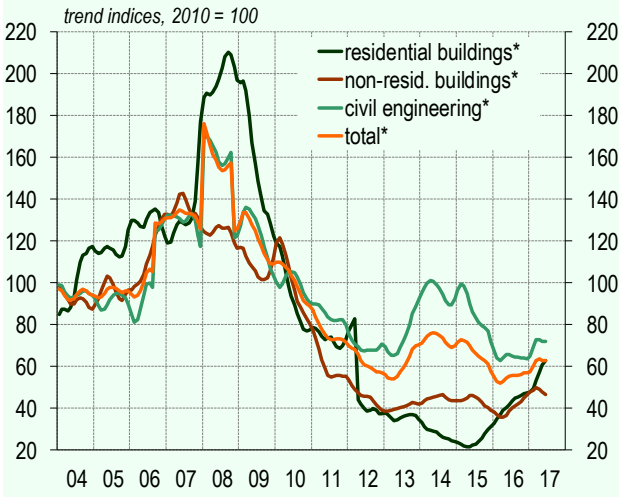
industrial goods have continued to fall. Price developments in Slovenia and across the euro area remain outpaced by growth in domestic final consumption aggregates. Inflation stood at 1.4% in Slovenia and 1.5% in the euro area in September.

[1] The second quarter was chosen for the purposes of comparison because it saw the pre-crisis peak in GDP in Slovenia.

[2] The expansion phase is defined as the period when GDP exceeds its pre-crisis level.

[3] Figures for the first quarter of this year.

**Figure 2.8: Construction**

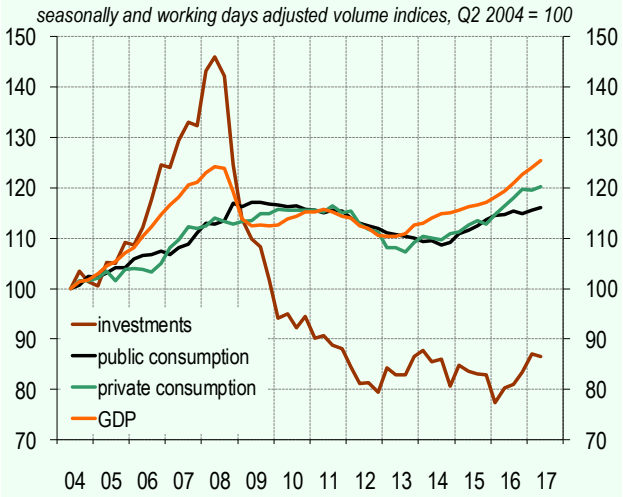



*Source: SORS.*
*Note: *Real value of construction put in place.*

**Figure 2.9: Real value of new contracts in construction**


*Source: SORS, Bank of Slovenia calculations.*

**Figure 2.10: Consumption and GDP in Slovenia**




*Source: Eurostat, Bank of Slovenia calculations.*

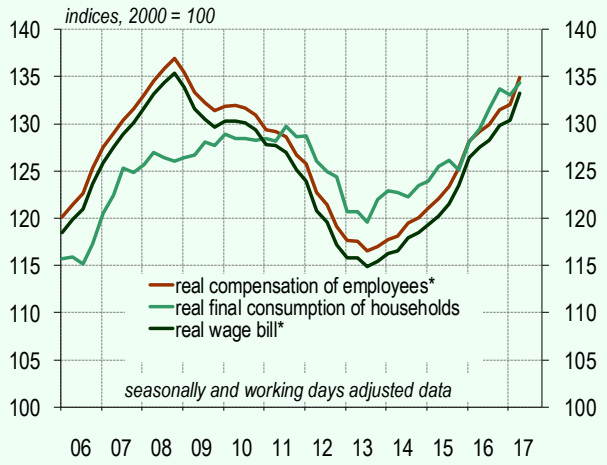
year growth in the amount of construction put in place remains highest in the construction of residential and non-residential buildings, although the level in both segments is very low, and in residential construction does not suffice to cover increased demand. This is already being reflected in growth in residential real estate prices, which are up 14% on their low of 2014. The amount of construction put in place is also increasing in year-on-year terms in the civil engineering segment, although for now the contribution made by the government remains relatively low. This segment has also seen sharp monthly fluctuations in activity. Demand for construction work will strengthen further, at least according to growth in the value of new contracts for civil engineering work. This is already being reflected in projects that will be co-financed by European funding.[2] However, the value of contracts remains low for now, and is not yet suggesting the formation of a new construction bubble.

## Aggregate demand

**Year-on-year growth in domestic demand slowed in the second quarter, as a result of a lower growth in investment.** Domestic demand recorded year-on-year growth of 3.7% in the second quarter according to seasonally adjusted and calendar-adjusted figures, down 1.8 percentage points on the first quarter. The decline was mostly attributable to slower growth in gross fixed capital formation. The rate was still high at 7.8% in the second quarter, but was down 4.7 percentage points on the first quarter. Growth in private consumption according to adjusted figures remained almost unchanged, and was

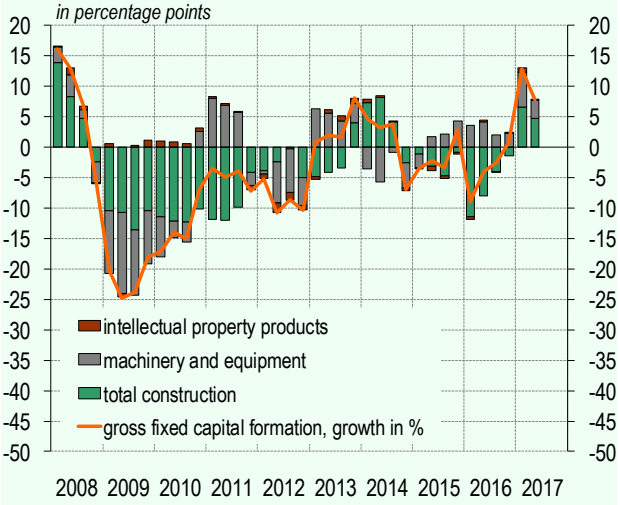
[2] EUR 1.2 billion of European projects and tenders had been confirmed by 27 July 2017 (of the EUR 3.2 billion available to Slovenia).

**Figure 2.11: Real wage bill, employee compensation and household consumption**



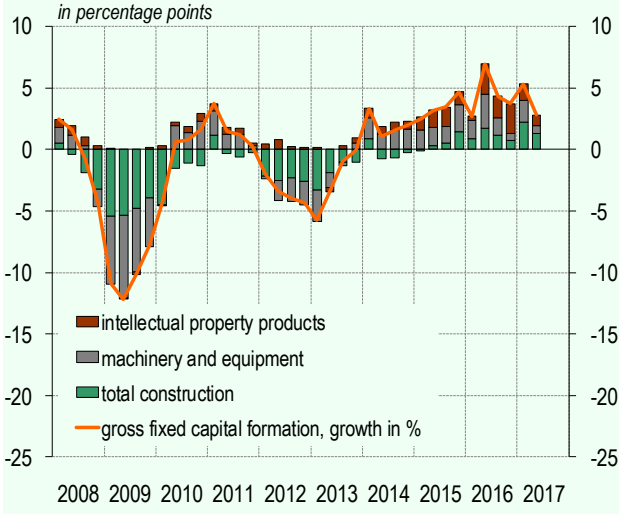

*Note: * Deflated by seasonally adjusted HICP index.*
*Sources: SORS - national accounts, ECB, Bank of Slovenia calculations.*

**Figure 2.12: Contributions to real year-on-year growth in gross fixed capital formation: Slovenia**



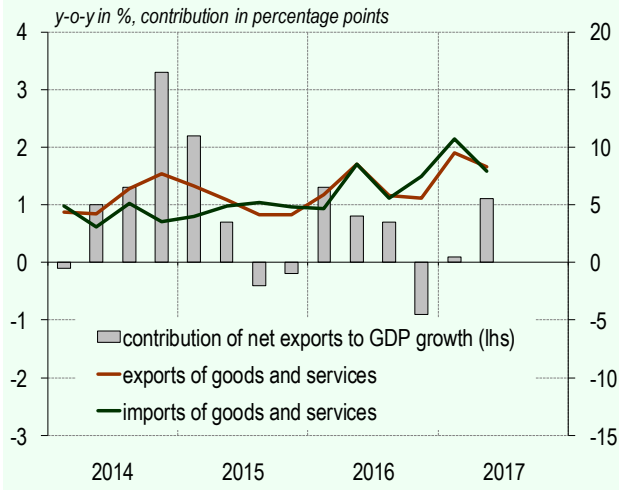

*Source: SORS, Bank of Slovenia calculations.*

**Figure 2.13: Contributions to real year-on-year growth in gross fixed capital formation: euro area**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 2.14: Foreign trade**



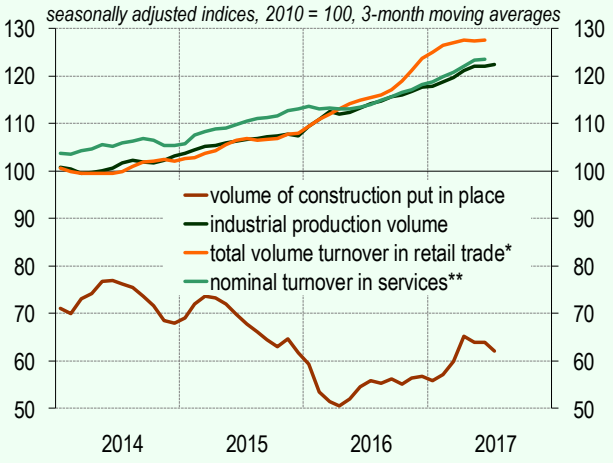

*Source: SORS – national accounts.*

down on the second half of last year, while there were no major changes in government consumption. After declining as the refugee crisis eased, government consumption has been growing at low year-on-year rates of just over 1% since the final quarter of last year.

**The reduced growth in private consumption in the first half of the year coincided with lower real growth in the wage bill.** According to adjusted figures, year-on-year growth in private consumption in the first half of the year was still almost 4%, which is comparable to real growth in the wage bill in this period. Purchases of durables are increasing for the fourth consecutive year, growth again exceeding 10% this year. Purchases of vehicles are continuing to increase rapidly, while households are also earmarking more money for housing equipment in line with the high number of transactions on the residential real estate market. The majority of private consumption, approximately 90%, consists of other forms of final household consumption. Year-on-year growth in the latter stood at 3% in the second quarter, as households earmarked more money for purchasing a wide spectrum of semi-durables and non-durables. Spending on free time is increasing in particular, as the number of arrivals by domestic visitors and the number of overnight stays by the same are rising for the third consecutive year. Despite the relatively high growth since 2014, private consumption in the second quarter of this year was merely 3.5% up on its previous peak in 2011.

**Investment remains at an extremely low level, while the structure of growth in investment remains well behind the euro area overall in developmental terms.** Year-on-year growth in investment slowed in the second quarter in all segments. The most notable slowdown was in investment in construction, where growth declined from 20% in the first quarter to 12% in the second quarter, which was probably merely temporary in nature, as the government is yet to begin making discernible use of the funding from the new European financial framework. Construction investment expressed as a percentage of GDP was also at an extremely low level. Growth in investment in machinery and equipment also declined, to 6.8% However, the need for investment remains high, as capacity utilisation in manufacturing remains above the euro area average, and domestic demand and foreign demand are both expected to strengthen further, with which the economy will find it hard to keep pace without additional investment. Investment has been growing faster this year than in the euro area overall, although its structure remains weak from the perspective of development. Investment in research and development is practically stagnating, while in the euro area overall it is increasing significantly. Gross fixed capital formation in the first half of the year stood at just 18.4% of GDP, almost 2 percentage points less than the average across the euro area.

**Figure 2.15: Monthly economic activity indicators**




*Source: SORS.*
*Notes: *Retail trade and trade and repair of motor vehicles. **Private sector services excluding trade and financial services.*

**High growth in exports means that the contribution made to GDP growth by net trade remains positive.** Real year-on-year growth in exports exceeded 8% in the second quarter, and stood at fully 10% after adjustment for the season and the calendar. This was slightly in excess of growth in imports, which remained high as a re-

**Table 2.1: Economic activity**

| Economic Activity | 12 m. to Jul.16 | 12 m. to Jul.17 | 2017 May.17 | 2017 Jun.17 | 2017 Jul.17 | 2017 Apr.17 | 2017 Jul.17 |
|---|---|---|---|---|---|---|---|
| | | | y-o-y in % | | | monthly ++ | |
| **Industrial production: - total *** | 6.1 | 7.8 | 8.8 | 6.9 | 6.5 | **2.9** | 1.1 |
| - manufacturing | 7.0 | 8.4 | 9.6 | 8.0 | 6.7 | **3.1** | 1.4 |
| **Construction: - total **** | -17.3 | 3.0 | 4.8 | 21.7 | 10.5 | **16.6** | -4.5 |
| - buildings | -6.1 | 24.0 | 33.8 | 34.7 | 13.4 | **9.8** | -3.5 |
| - civil engineering | -21.3 | -4.6 | -5.0 | 16.1 | 9.9 | **23.3** | -7.4 |
| **Trade (volume turnover)** | | | | | | | |
| Total retail trade | 1.0 | 9.4 | 9.1 | 9.1 | 9.6 | **1.3** | 0.2 |
| Retail trade except automotive fuel | 2.2 | 3.9 | 4.6 | 5.4 | 2.7 | **1.6** | 0.5 |
| - food, beverages, tobacco | -0.9 | 0.5 | 0.0 | 4.4 | 0.8 | **1.7** | -0.6 |
| - non-food (except automotive fuel) | 5.0 | 7.0 | 8.5 | 6.5 | 4.7 | **1.7** | 1.0 |
| Retail trade and repair of motor vehicles | 18.1 | 18.0 | 14.0 | 15.1 | 10.1 | **3.7** | 0.9 |
| **Private sector services *** +** | 4.8 | 6.8 | 11.0 | 8.4 | 10.0 | **2.7** | 2.1 |
| Transport and storage + | 2.8 | 8.8 | 16.1 | 8.8 | 14.4 | **4.7** | 2.2 |

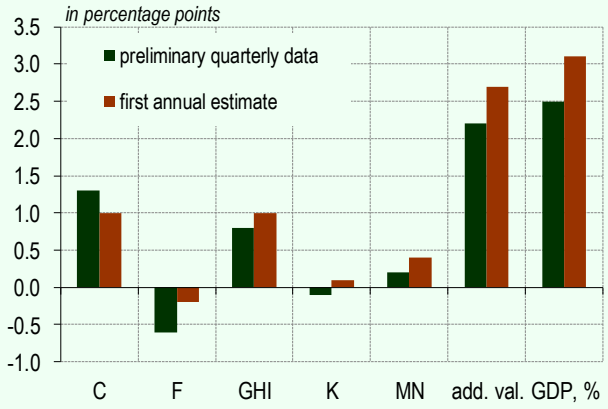
*Notes: Data are working days adjusted.*
** Volume of industrial production. ** Real value of construction put in place. *** Excluding trade and financial services. + Nominal turnover. ++: 3-month moving average compared to the corresponding average 3 months earlier. Data are seasonally and working days adjusted (except forconstruction where data are seasonally adjusted).*
*Sources: SORS, Bank of Slovenia calculations.*

## Box 2.2: Illustration of the first annual estimate of GDP for 2016

In its first annual estimate of GDP the SORS significantly revised the figures for the pace and structure of economic growth in 2016. According to the previously released quarterly figures, growth of the Slovenian economy stood at 2.5% in 2016, but in the first annual estimate the rate was increased to 3.1%. There have been notable changes in the growth of value-added in numerous sectors, the most important of which from the perspective of GDP was the decline in the negative contribution made by construction. Most notable in the expenditure breakdown of GDP is the upward revision in estimated growth of final consumption owing to increased household consumption. The contribution made by net trade was also revised upwards.

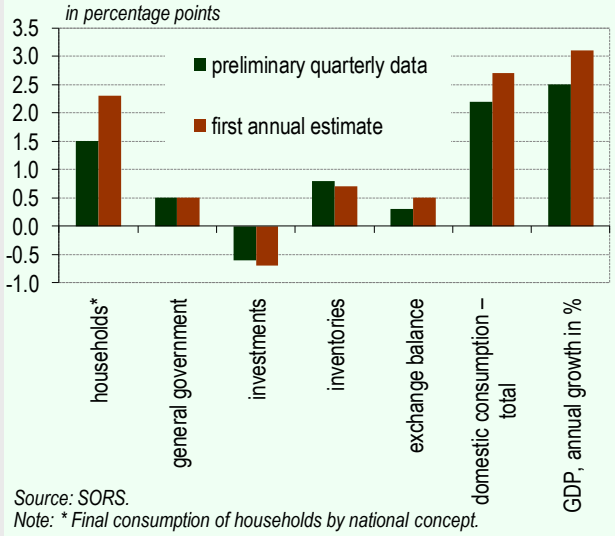
There are major differences in growth in value-added in manufacturing and construction, and in industrial production and the amount of construction put in place. Growth in value-added in manufacturing was reduced from 6.4% under the previously released quarterly figures to just 4.9% under the first annual estimate of GDP, and its contribution to GDP was reduced from 1.3 percentage points to 1.0 percentage points. For the second consecutive year the estimated growth sharply deviated from the growth measured by the monthly indices of industrial production, which amounted to 8.2% in 2016, and there was again a discrepancy with growth in merchandise exports. Growth in value-added in construction was raised from -12.5% under the previously released quarterly figures to -4.7% under the first annual estimate of GDP, and its nega-

**Figure 1: Changes in contributions to real GDP growth after the first annual estimate of SORS – production side, 2016**



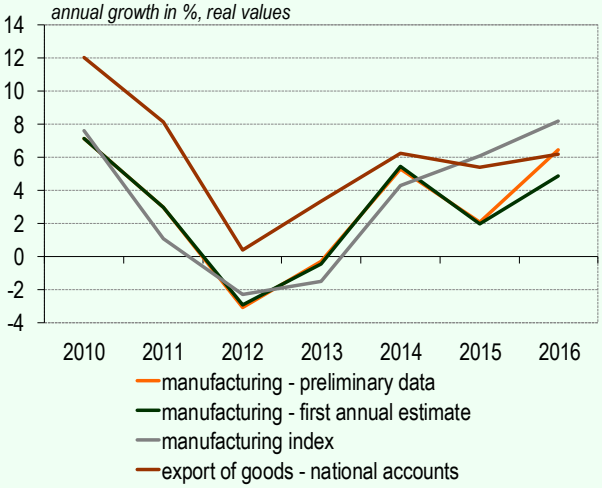

*Note: C – manufacturing, F – construction, GHI – trade, transportation and storage, accommodation and food service activities, K – financial and insurance activities, MN professional, scientific, technical, administrative and support services.*
*Source: SORS.*

**Figure 2: Changes in contributions to real GDP growth after the first annual estimate of SORS – expenditure side, 2016**



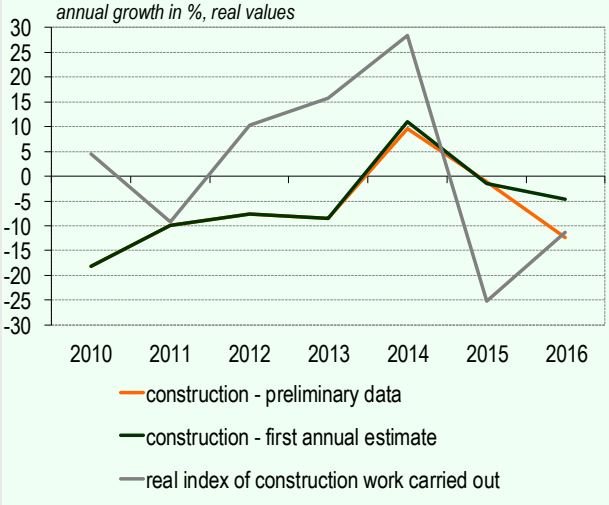

*Source: SORS.*
*Note: * Final consumption of households by national concept.*

**Figure 3: Changes in year-on-year growth in value added in manufacturing following the first annual estimate of SORS, 2016**



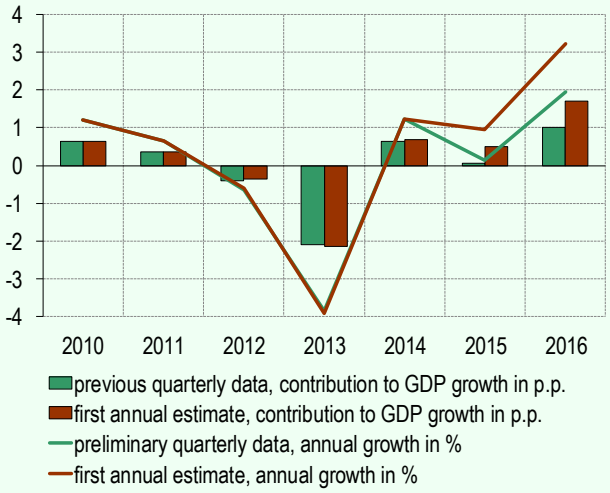

*Source: SORS, Bank of Slovenia calculations.*

**Figure 4: Changes in year-on-year growth in value added in construction after the first annual estimate of SORS, 2016**




*Source: SORS, Bank of Slovenia calculations.*

**Figure 5: Final consumption expenditure of households**




*Source: SORS.*

tive contribution to GDP was reduced from 0.6 percentage points to 0.2 percentage points. The first annual estimate of GDP thus deviated significantly from the figure for growth in the real index of the amount of construction put in place, which stood at -11.4% in 2016.

The SORS made a significant upward revision to growth in final household consumption under the first annual estimate of GDP for 2016. Growth in final household consumption according to the national concept stood at 3.2% in 2016 under the first annual estimate, 1.3 percentage points more than under the previously released quarterly figures. The contribution made to GDP growth was revised upwards from 1.0 percentage points to 1.7 percentage points. A proportion of final consumption comes from imports, but the contribution made by net trade was revised upwards at the same time. Under the regular revision of national accounts figures, growth in final household consumption in 2015 was also revised upwards by the SORS, from 0.1% to 1.0%.

sult of the increase in all domestic demand aggregates. The export sector is thus exploiting the favourable situation in the international environment, which is being reflected in strengthening economic growth in the majority of trading partners. The contribution made to GDP growth by net trade stood at 1.1 percentage points in the second quarter, the largest figure since the first quarter of 2016.

## Economic developments in the third quarter

**Economic growth remained high in the early part of the third quarter, albeit with a downward fluctuation in construction.** This was attributable to a monthly decline in the amount of construction put in place in July, while the monthly developments in April and May had been weak and at odds with the survey confidence indicators. A monthly decline in the amount of construction put in place was recorded in the construction of non-residential buildings and civil engineering, while growth in the construction of residential buildings also slowed. High volatility is typical of the indicators of the amount of construction put in place. Turnover in wholesale and retail trade has mostly been unchanged in monthly terms since March, while turnover in other private-sector services is continuing to increase rapidly. Growth in industrial production continued. It was up more than 6% in year-on-year terms in July.

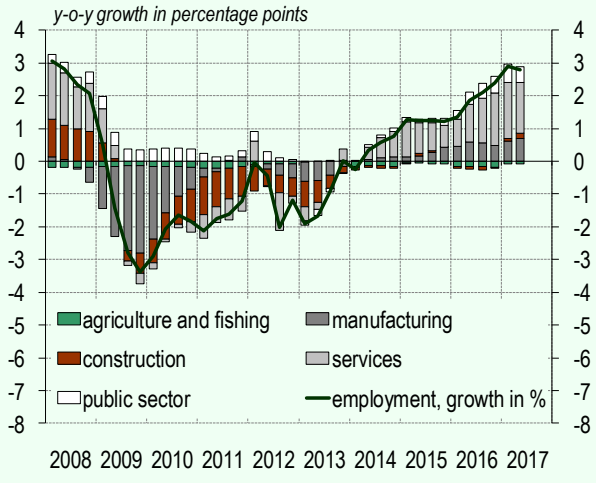
# 3 Labour Market

*Employment in the second quarter of this year was up 2.8% in year-on-year terms, with the majority of sectors recording high growth. Employment is expected to continue rising until the end of the year in all sectors, despite the rapid fall in the number of unemployed and the increasing structural imbalances on the labour market. Firms are increasingly addressing the issue of the shortage of workers by recruiting agency staff and foreign nationals. The number of registered unemployed stood at 80,990 in September, down 14.9% in year-on-year terms. Structural unemployment is also falling, albeit slowly, as the number of long-term unemployed gradually declines. The registered and surveyed unemployment rates have both been declining since 2014, and according to latest figures are now only 2 percentage points off their pre-crisis levels. In the wake of the rapid decline in the excess labour supply, the first signs are perhaps being seen of slightly faster wage growth. In the context of high employment growth, year-on-year growth in the wage bill averaged 5.6% in nominal terms over the first seven months of the year, and 3.9% in real terms after adjustment for inflation.*

## Employment

**Average year-on-year growth in employment in the first half of the year was higher than in 2008, while the rate in the private sector was actually the highest since data collection began.** Employment in the second quarter of this year was up 2.8% in year-on-year terms, comparable to the rate in the first quarter.[1] The number of employees rose more quickly in year-on-year terms than the number of self-employed, while year-on-year growth in permanent new hires sharply outpaced year-on-year growth in temporary new hires. These developments are indicative of firms' increased confidence in the sustainability of economic growth. Year-on-year growth in employment in mostly public services[2] was down on the first quarter at 2.5%, while in the private sector it was un-

**Figure 3.1: Contributions to employment by sector**




*Source: SORS – national accounts, Eurostat; Bank of Slovenia calculations.*

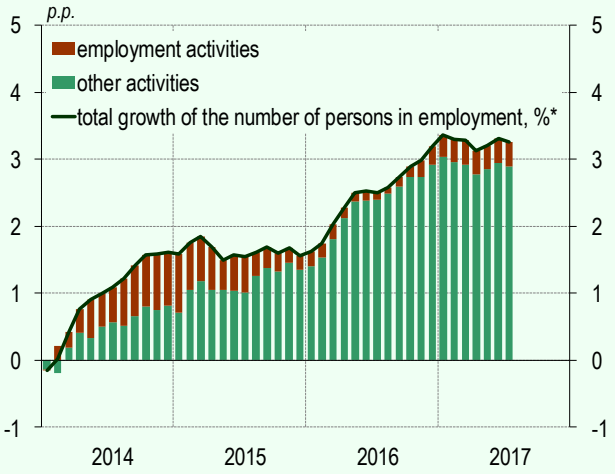
[1] The employment analysis uses quarterly national accounts figures. According to the monthly SORS statistics, the average workforce in employment in the second quarter was up 3.6% in year-on-year terms. The discrepancy is the product of the different methodologies used to monitor employment. The national accounts figures for employment include permanent employees, self-employed and assisting family members in private farming, self-employed in other household activities, student work and other forms of temporary employment, employment in sea and coastal transport on Slovenian vessels, and employment at Slovenian diplomatic and consular offices in the rest of the world. The monthly figures only count employees with employment contracts and the self-employed in the workforce in employment.

[2] Public administration and defence, education, human health and social work activities (Sectors O, P and Q under the SKD 2008).

changed from the first quarter at 2.9%, which is also the highest rate since data collection began. The majority of sectors contributed to employment growth; the largest contributions came from industry, the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food services, and the combined sector of professional, scientific and technical activities, and administrative and support service activities. The contribution made by construction also increased significantly.

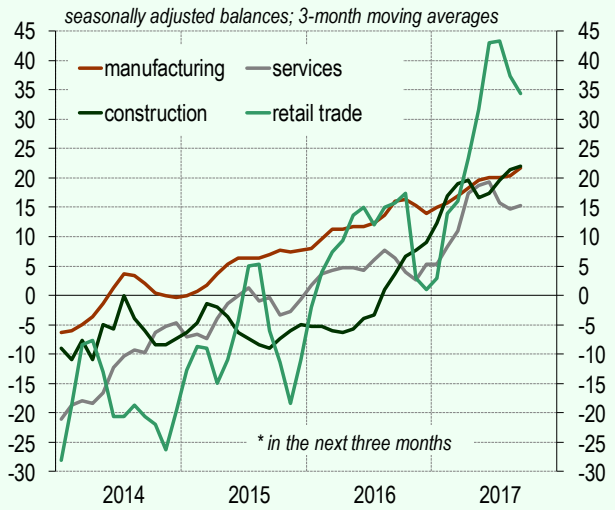
**Employment growth is also revealed by the figures for the workforce in employment, which show strengthened growth in the employment of agency workers and foreign nationals.** According to the monthly figures for the workforce in employment, which are not entirely comparable to the national accounts figures, growth in the workforce in employment stood at 3.6% in July, while growth in the workforce in employment excluding self-employed farmers was 0.3 percentage points lower. The largest contributions to growth came from manufacturing, administrative and support service activities, transportation and storage, and wholesale and retail trade and repair of motor vehicles and motorcycles. The highest year-on-year growth was recorded by administrative and support service activities, which includes agency work. The number of agency workers has been rising since the end of 2016: the year-on-year rise averaged 18.4% over the first seven months of the year. In contrast to 2014 and 2015, this year's notable increase in agency work is no longer a reflection of uncertainty in the economy, but is mainly a reflection of a shortage of labour force and increasing structural imbalances on the labour market.[3] The shortage of domestic labour force is increasingly being compensated for by recruitment of foreign nationals. The proportion of the workforce in employment excluding self-employed farmers accounted for by foreign nationals has been increasing since 2014, and has averaged 8% this year. Foreign nationals accounted for 1 percentage point of the year-on-year growth in the workforce in employment excluding self-employed farmers in July, or just under a third.[4]

**Figure 3.2: Contribution year-on-year growth in the workforce in employment by employment activities**




*Source: SORS, Bank of Slovenia calculations.*
*Note: * No self-employed farmers.*

**Figure 3.3: Employment expectations***



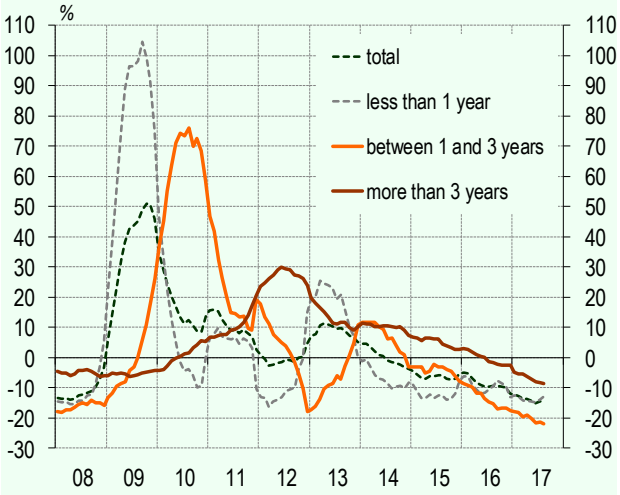

*Source: SORS, Bank of Slovenia calculations.*

**Employers notified more than 17,000 vacancies in the second quarter of this year.** According to seasonally unadjusted SORS survey figures, employers were actively seeking approximately 1,800 more people in the second quarter than in the first quarter of this year, while the

[3] In addition to uncertainty at firms, the increase in the workforce in employment in employment activities in 2014 was also the result of a change in the Labour Market Regulation Act. Act Amending the Labour Market Regulation Act entered into force in March 2014, according to which every staffing agency was required to register temporary employment agency activities as its principal business activity. Before the amendment, a proportion of staffing agencies (and thus agency workers) were registered under other service activities, but under the amendment they were reassigned to Sector N. The increase in 2014 is therefore attributable to a break in the time series.

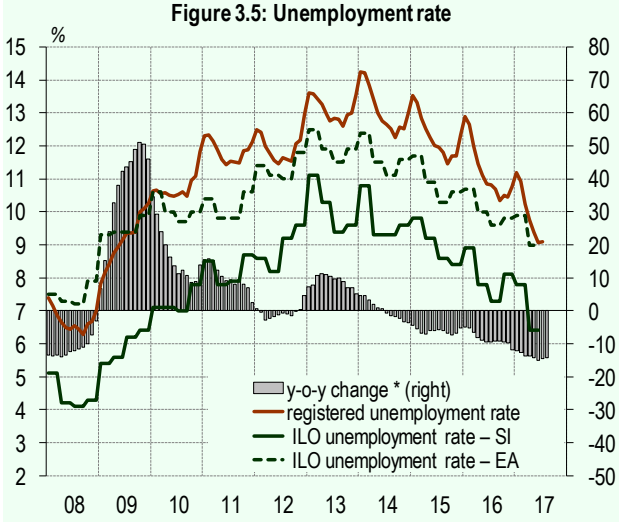
[4] An increase in the employment of foreign nationals is also evident from work permits issued for foreign nationals. In July of this year the number of valid work permits was down 5% in year-on-year terms, but the number of issued permits rose by 106%.

**Figure 3.4: Year-on-year change in the number of unemployed with regard to duration of unemployment**



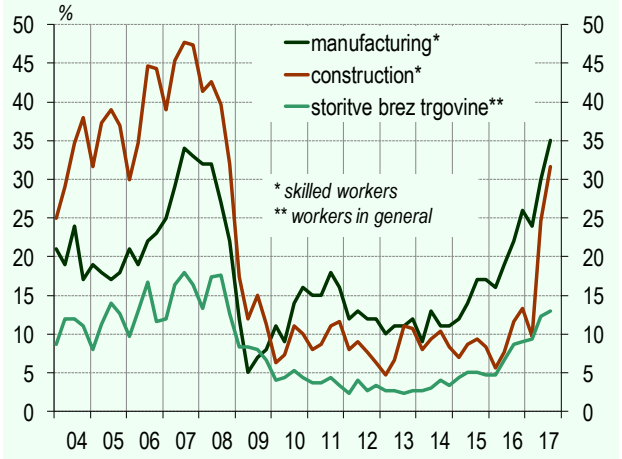

*Source: Employment Service of Slovenia, Bank of Slovenia calculations.*

**Figure 3.5: Unemployment rate**




*Note: * Yearly change in the number of registered unemployed.*
*Source: Employment Service of Slovenia, SORS, Bank of Slovenia calculations.*

**Figure 3.6: Shortage of workers as limiting factor**




*Source: SORS, Bank of Slovenia calculations.*
*Note: The figure shows the percentage of enterprises in a certain activity, which have indicated in the survey the lack of workers as a limiting factor.*

number of vacancies was up almost 37% in year-on-year terms.[5] As a result of the relatively slower rise in the number of occupied positions, the vacancy rate also increased in the second quarter. The manufacturing sector notified the largest number of vacancies, while the highest vacancy rates were recorded by construction, accommodation and food service activities, and administrative and support service activities. The increased demand for labour in the aforementioned sectors is primarily related to the seasonal nature of work, and also to the recent recovery in the case of construction. An increase in vacancies was also recorded by the Employment Service. Employers notified almost 89,000 vacancies at the Employment Service over the first eight months of the year, up 23.7% on the same period last year. In August the greatest demand from employers came for elementary occupations in manufacturing, cleaners, servers and domestic helpers.

**In light of the positive outlook for economic growth, employment is also expected to rise in the coming months.** According to the seasonally adjusted SORS survey figures, firms in all of the sectors covered by the survey expect an increase in employment over the next three months. Retail firms reported the best outlook. Manpower, an HR firm, is also forecasting rapid employment growth in the final quarter of 2017. Employment growth is expected to be particularly strong in the southeast region, while expected employment in the central region is lower than in the same period of last year. Employment growth is also expected in all sectors of the economy, most notably manufacturing and construction.

## Unemployment

**The number of unemployed has continued to fall, as there was a year-on-year fall in the number of both short-term and long-term unemployed.** Registered

[5] In April 2013 the Labour Market Regulation Act abolished the mandatory notification of vacancies at the Employment Service for all employers other than the public sector and firms under majority government ownership. Between April 2013 and the end of 2014 the figures were no longer complete, for which reason SORS has conducted independent surveying of vacancies since the first quarter of 2015. The sample framework includes all business entities with at least one employee whose primary registered business activity was in one of Sectors B to S.

unemployment stood at 80,990 in September, down 14.9% in year-on-year terms. The unemployment rates were also down in year-on-year terms. The surveyed unemployment rate in the second quarter reached 6.4%, down 1.4 percentage points in year-on-year terms, while the registered unemployment rate in July was down 1.7 percentage points in year-on-year terms at 9.1%. The two unemployment rates have been falling since 2014, and are now only around 2 percentage points off their pre-crisis levels. The economic recovery saw the number of people unemployed for up to three years begin to fall in 2014, while the number of people unemployed for more than three years did not begin falling in year-on-year terms until the middle of last year. The proportion of total unemployment that the latter account for consequently increased, reaching 27.9% in August. The number of unemployed also fell in all education groups. The number of unemployed people with a secondary education is falling fastest in year-on-year terms, while the slowest fall is being recorded by the number of unemployed people with a tertiary education, which is again increasing the proportion of the total that they account for. Unemployment is also falling in year-on-year terms in all age groups except those aged 60 and over.

**Table 3.1: Unemployment and employment**

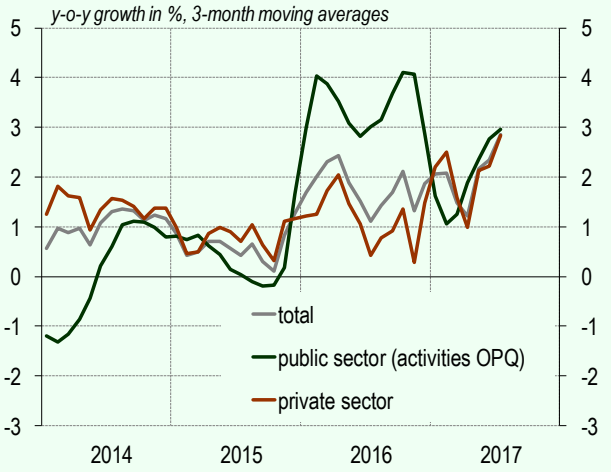
| | 2012 | 2013 | 2014 | 2015 | 2016 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *in 1,000* | | | | | |
| **Registered unemployed persons** | 110.2 | *119.8* | 120.1 | 112.7 | 103.2 | 102.5 | 97.4 | 97.9 | 100.1 | 87.8 |
| **Unemployment rate** | | | | | *in %* | | | | | |
| - LFS | 8.9 | 10.1 | 9.8 | 9.0 | 8.0 | 7.8 | 7.3 | 8.1 | 7.8 | 6.4 |
| - registered | 12.0 | 13.1 | 13.1 | 12.3 | 11.2 | 11.1 | 10.6 | 10.6 | 10.8 | 9.4 |
| **Probability of transition between employ. and unemployment** | | | | | *in %* | | | | | |
| - probability to find a job[1] | 13.2 | 13.6 | 15.4 | 15.7 | 18.0 | 20.1 | 16.5 | 14.8 | 22.3 | 21.0 |
| - probability to lose a job[2] | 2.8 | 2.8 | 2.6 | 2.5 | 2.3 | 1.9 | 2.0 | 2.4 | 2.7 | 1.6 |
| | | | | | *in 1,000* | | | | | |
| **Total employment[3]** | 937.3 | 926.7 | 930.0 | 941.6 | 959.8 | 956.8 | 965.6 | 975.1 | 968.7 | 983.5 |
| | | | | | *year-on-year growth in %* | | | | | |
| Persons in paid employment | -1.3 | -2.7 | 0.5 | 1.3 | 2.4 | 2.4 | 2.6 | 3.0 | 3.2 | 3.2 |
| Self-employed | 0.8 | 5.8 | -0.3 | 1.1 | 0.0 | -0.2 | -0.1 | 0.1 | 1.5 | 1.2 |
| **By sectors** | | | | | | | | | | |
| A Agriculture, forestry and fishing | -1.0 | 0.0 | -1.7 | -0.9 | -2.1 | -2.0 | -2.1 | -2.3 | -1.1 | -1.1 |
| BCDE Manufacturing, mining and quarrying and other industry | -1.1 | -1.9 | 0.3 | 1.1 | 2.3 | 2.6 | 2.5 | 2.2 | 2.7 | 3.0 |
| F Construction | -7.5 | -7.0 | -1.1 | 0.4 | -1.0 | -1.1 | -1.4 | -0.6 | 1.5 | 2.4 |
| GHI Trade, accommodation, transport | -1.2 | -1.2 | -0.3 | 1.8 | 2.4 | 2.2 | 2.7 | 3.3 | 3.6 | 3.1 |
| J Information and communication services | 2.1 | 2.3 | 2.6 | 3.2 | 3.6 | 2.9 | 4.3 | 5.0 | 5.0 | 4.6 |
| K Financial and insurance activities | -1.7 | -2.8 | -2.1 | -1.2 | -1.7 | -1.8 | -1.3 | -1.8 | -1.3 | -1.8 |
| L Real estate activities | -1.4 | 0.5 | 0.9 | 1.4 | 4.6 | 3.6 | 5.6 | 7.4 | 5.4 | 1.8 |
| MN Professional, technical and other business activities | 0.5 | -0.1 | 3.0 | 2.5 | 4.0 | 3.9 | 4.3 | 4.7 | 4.6 | 5.0 |
| RSTU Other activities | 0.2 | 6.0 | 3.0 | 2.8 | 2.7 | 2.7 | 3.3 | 3.5 | 4.9 | 3.7 |
| - mainly private sector (without O..Q)[4] | -1.4 | -1.3 | 0.4 | 1.4 | 1.9 | 1.8 | 2.0 | 2.3 | 2.9 | 2.9 |
| - mainly public services (O..Q)[4] | 1.0 | -0.6 | 0.4 | 0.8 | 2.2 | 2.0 | 2.4 | 2.7 | 3.0 | 2.5 |
| **Total employment[3]** | -0.9 | -1.1 | 0.4 | 1.2 | 1.9 | 1.9 | 2.1 | 2.4 | 2.9 | 2.8 |

*[1] Newly employed as a share of registered unemployed persons according to Employment Service of Slovenia. The higher the indicator's value, the better chance of finding a job.*
*[2] Newly registered unemployed due to a job loss as a share of total employment. Calculation is based on Employment Service of Slovenia's data and registered data of total employment. The higher the indicator's value, the higher chance of losing a job.*
*[3] Employed and self-employed persons.*
*[4] Public administration, education, human health and social work services according to NACE rev. 2.*
*Source: SORS, Employment Service of Slovenia, Bank of Slovenia calculations.*

**The number of deregistrations over the first eight months of this year was 15,772 more than the number of people newly registering as unemployed.** The number of people newly registering at the Employment Service over the first eight months of the year was down 8.1% on the same period last year, while the number of deregistrations was down 5.6%. The largest factor in the fall in the number of people newly registering as unemployed was the fall in the number registering because of temporary employment termination, while the largest factor in the fall in the number of deregistrations was a decline in outflows to employment.

**Although employment of foreign nationals is strengthening, the structural imbalances on the labour market are increasing.** According to SORS survey figures, structural imbalances are increasing in manufacturing, construction and services other than trade. The most frequent citation of a shortage of qualified workers as a limiting factor was by manufacturing firms, where the

**Figure 3.7: Nominal gross wages**




*Note: Due to the change in source, series before 2014 were adjusted based on the growth rates of the previous series.*
*Source: SORS, Bank of Slovenia calculations.*

**Table 3.2: Labour costs**

| | 2012 | 2013 | 2014 | 2015 | 2016 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *in EUR* | | | | | |
| **Average gross wage** | 1531 | *1528* | 1545 | 1556 | 1584 | 1566 | 1560 | 1636 | 1599 | 1602 |
| | | | | | *nominal year-on-year growth, %* | | | | | |
| **Average net wage** | 0.4 | 0.6 | 0.8 | 0.4 | 1.7 | 1.3 | 1.5 | 1.8 | 1.9 | 2.5 |
| **Average gross wage** | 0.1 | -0.2 | 1.1 | 0.7 | 1.8 | 1.5 | 1.7 | 1.9 | 1.5 | 2.3 |
| - mainly private sector (excl. O..Q)[1] | 0.9 | 0.7 | 1.4 | 0.8 | 1.3 | 1.1 | 0.9 | 1.5 | ... | ... |
| - mainly public services (O..Q)[1] | -2.2 | -2.3 | 0.2 | 0.6 | 3.3 | 2.8 | 3.7 | 2.9 | ... | ... |
| **Average gross wage in manufacturing** | 2.5 | 2.8 | 3.3 | 2.1 | 2.1 | 1.7 | 1.5 | 2.8 | 2.2 | 2.7 |
| **Average real net wage[2]** | -2.3 | -1.4 | 0.5 | 1.2 | 1.8 | 1.7 | 1.5 | 1.1 | -0.1 | 1.1 |
| **Labour costs per hour worked[3]** | -0.3 | -2.1 | 2.0 | 0.9 | 3.0 | 1.4 | 3.8 | 6.0 | 2.9 | 5.2 |
| **Labour costs per hour worked in manufacturing[3]** | 3.0 | 0.5 | 3.7 | 0.5 | 3.2 | 0.7 | 3.3 | 8.0 | 3.7 | 9.1 |
| **Gross wage per unit of output[4]** | 1.9 | -0.1 | -1.5 | -0.3 | 0.6 | 0.1 | 0.4 | 0.8 | -0.7 | 0.8 |
| **Gross wage per unit of output in manufacturing[4]** | 4.2 | 1.2 | -1.9 | 1.6 | 0.2 | -1.7 | -0.1 | 1.8 | -1.8 | -0.3 |
| **Unit labour costs[4,5]** | 0.8 | 0.5 | -1.2 | 0.4 | 1.6 | 2.4 | 1.1 | 1.0 | -0.4 | 0.9 |
| **Labour costs per employee[5]** | -1.0 | 0.5 | 1.3 | 1.4 | 2.8 | 3.8 | 2.4 | 2.1 | 1.7 | 2.5 |
| **Output per employee** | -1.8 | 0.0 | 2.6 | 1.0 | 1.2 | 1.4 | 1.3 | 1.1 | 2.1 | 1.6 |
| **Output per employee - manufacturing** | -1.6 | 1.5 | 5.3 | 0.5 | 1.8 | 3.5 | 1.5 | 1.0 | 4.0 | 3.0 |
| **HICP** | 2.8 | 1.9 | 0.4 | -0.8 | -0.2 | -0.4 | 0.0 | 0.7 | 2.0 | 1.4 |
| **GDP deflator** | 0.5 | 1.6 | 0.8 | 1.0 | 0.9 | 0.7 | 0.5 | 1.0 | 1.1 | 2.3 |

*[1] Public administration, education, human health and social work services according to NACE rev. 2.*
*[2] HICP deflator.*
*[3] Labour costs according to SORS calculations.*
*[4] Unit of output for the total economy is defined as real GDP per person employed, and in manufacturing as real value added per person employed (both based on national accounts).*
*[5] Labour costs calculated on the basis of employee compensation (national accounts).*
*Source: SORS, Bank of Slovenia calculations.*

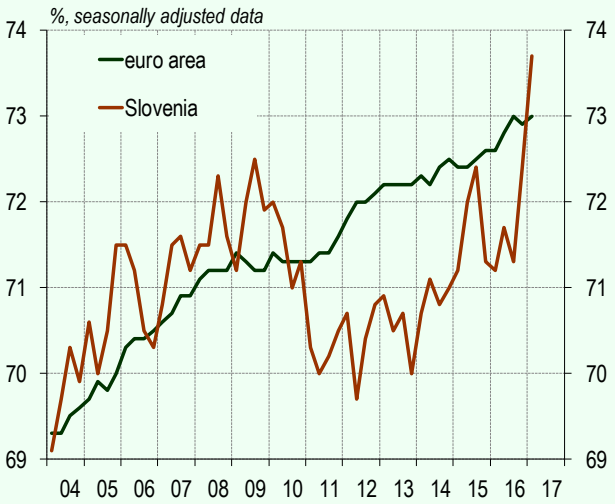
## Box 3.1: Labour market participation

There was a significant increase in the labour force participation rate in the first half of 2017, which reflects the proportion of active population in the working-age population (aged 15 to 64). According to the seasonally adjusted figures from the labour force survey, the participation rate in Slovenia increased until mid-2009, exceeding the average participation rate across the euro area. As Slovenian labour market was severely affected by the crisis, the participation rate fell to under 71%, below the euro area average. With the beginning of the recovery in 2014 it began to rise, and again overtook the euro area average participation rate in the first quarter of this year, by 0.7 percentage points. At 73.7% it also exceeded its pre-crisis level for the first time.

According to the seasonally unadjusted figures, the participation rate was up sharply in year-on-year terms in the second quarter of this year. The year-on-year change in the participation rate in the first half of the year averaged more than 2 percentage points, the largest since 2004. The increase was primarily attributable to the rise in the workforce in employment (2.6 percentage points), while the fall in the number of unemployed as a result of resumption of employment reduced the participation rate (by 0.7 percentage points). The contraction in the working-age population has also made a positive contribution since mid-2011,[1] which was the result of the population ageing.[2]

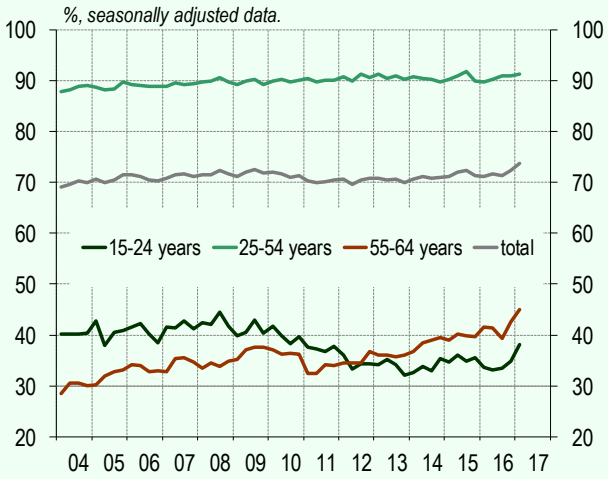
Throughout the measurement period the participation rate of the population aged 25 to 54 and of the older population (aged 55 to 64) followed an increasing trend, while the seasonally adjusted figures for the younger population (aged 15 to 24) reveal a cyclical dynamic. The participation rate of the younger population declined during the crisis as a result of transitions from employment to inactivity.[3] Since 2014 it has been increasing again in the wake of increased employment, passing 38% in the first quarter of this year. The outbreak of the crisis also brought about the beginning of a decline in the euro area average participation rate of the younger population, where the negative trend is still continuing. Despite the persistent negative trend in the euro area, young people in Slovenia have still not attained the average participation rate in the euro area, however the gap is gradually closing. The year-on-year change of 4.5 percentage points in the participation rate among the younger population in the first quarter of 2017 was attributable to an increase in the workforce in em-

**Figure 1: Labour market participation (15–64 years)**



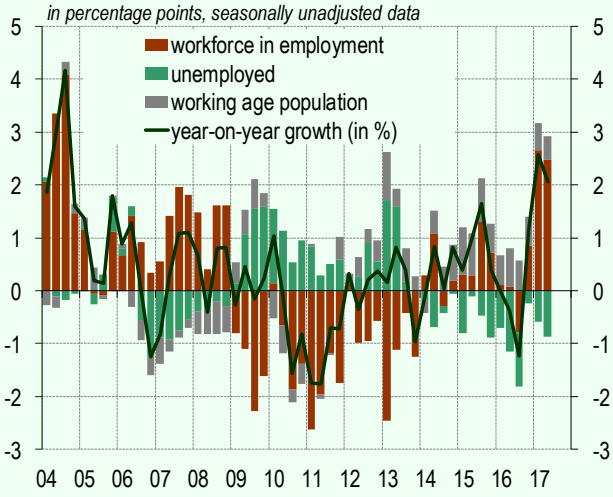

Source: Eurostat, Bank of Slovenia calculations.

**Figure 2: Participation in the labour market by age groups**




Source: Eurostat, Bank of Slovenia calculations.

**Figure 3: Contributions to the growth of participation in the labour market (15–64 years)**




Source: Eurostat, Bank of Slovenia calculations.

ployment and a fall in the working-age population, while falling unemployment held back the participation rate growth.

The participation rate of the older population is slightly higher than that of the younger population: according to seasonally adjusted figures it has increased by almost 17 percentage points since the first quarter of 2004, reaching 45% in the first quarter of this year. As the size of inactive population remained unchanged, until 2013 the increase in the participation rate among the older population was based on a rise in the active population, but since 2013 the rise in the working-age population has practically come to a halt as the inactive population declined. The decline in the inactive population is the result of a pension reform, which retained more people in the labour market by raising the retirement age. Despite the pension reform, in Slovenia the proportion of the active older population is relatively small; just over 60% of the older population was active across the euro area in the first quarter of this year. According to seasonally adjusted figures, the year-on-year change in the participation rate of the older population in the first quarter of this year stood at 3.3 percentage points. The increase in participation was attributable to a rise in the workforce in employment and a rise in unemployment.

The only age group where the participation rate exceeded the euro area average throughout the measurement period was those aged 25 to 54. According to seasonally adjusted figures, their participation rate reached 91.4% in the first quarter of this year, almost 6 percentage points higher than the euro area average. According to seasonally adjusted figures, the year-on-year change in the participation rate of the population aged 25 to 54 in the first quarter of this year stood at 1.7 percentage points.

[1] The working-age population consists of the active and inactive population aged between 15 and 64. The participation rate thus depends on changes in both the active and inactive population.

[2] The methodology used to calculate the contributions made by individual components to changes in the participation rate is analogous to the methodology used in Labour Market and Wage Developments in Europe: Annual Review 2016. (2016). Luxembourg: Publications Office of the European Union. Decomposition can be calculated as follows: (At / WAPt) – (At-1 / WAPt-1) = [(Et –Et-1) / WAPt] + [(Ut –Ut-1) / WAPt] + [(At-1 / WAPt) – (At-1 / WAPt-1)], where At is the active population in year t, WAPt is the working-age population, Et is workforce in employment and Ut is unemployment. The first term on the right-hand side of the equation represents the contribution made by the workforce in employment, the second term expresses the contribution made by unemployment, while the third term expresses the contribution made by the working-age population to the change in the participation rate.

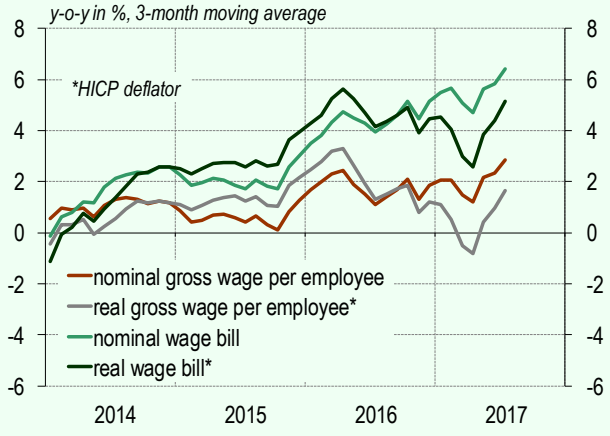
[3] The decline in the participation rate as a result of the fall in employment among the younger population was mitigated by an increase in unemployment and a contraction in the working-age population aged 15 to 24. The latter was the result of smaller inflows of people into the age category, as the number of live births averaged less than 18,000 a year between 1996 and 2002, a record low level.

proportion of firms facing difficulties of this type has already exceeded its pre-crisis level. The fastest growth in the proportion of firms facing a shortage of qualified workers is in construction.

## Wage developments

**Growth in the average nominal gross wage remains low compared with the pre-crisis period, although the first signs of slightly faster growth have perhaps been seen in recent months.** Year-on-year growth in the average nominal gross wage averaged 2% over the first seven months of the year. In the wake of falling unemployment, this year's relatively low wage growth is probably attributable to the recruitment of foreign nationals, increased labour market participation, low inflation and low productivity growth. The average nominal gross wage in July was nevertheless up 2.8% in year-on-year terms. July's growth in the average wage was attributable to an increase in wages other than extraordinary payments, while the contribution of extraordinary payments was negative. The same pattern is evident for the second consecutive month, which is perhaps a sign of the potential rise in wage growth. Having averaged 2.2%, year-on-year growth in wages in the public sector over the first seven months of the year was just 0.2 percentage points more than in the private sector, while last year's average

**Figure 3.8: Nominal and real total wage bill and average gross wage per employee**




*Note: Wage bill is calculated as the product of average gross monthly wages for employees of legal persons who received pay and the total number of employees of legal persons.*
*Source: SORS, Bank of Slovenia calculations.*

year-on-year growth in the private sector was 2 percentage points less than that in the public sector. This year's highest year-on-year growth in the nominal gross wage in the private sector was recorded by water supply, sewerage, waste management and remediation activities, by mining and quarrying, and by electricity, gas, steam and air conditioning supply.

**Employment growth and wage growth have both contributed to the continuing increase in the nominal wage bill.** Year-on-year growth in the nominal wage bill averaged 5.6% over the first seven months of the year, up 1.5 percentage points on the same period last year. Higher growth in employment in the private sector meant that growth in the nominal wage bill in the private sector

# 4 Current Account and Competitiveness Indicators

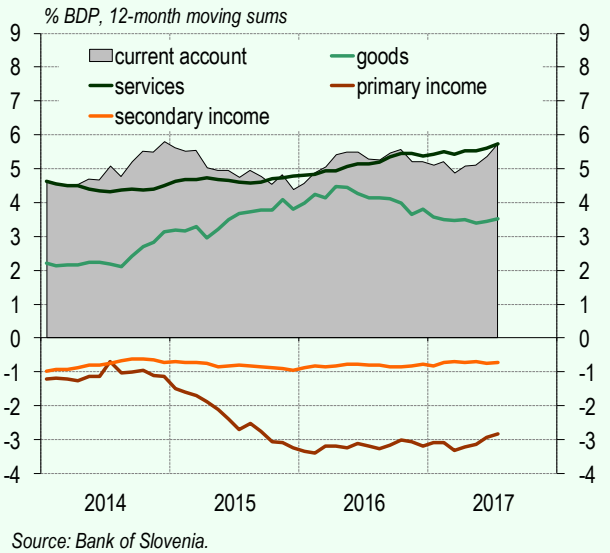
*The surplus of trade in merchandise and services has been increasing again this year, as export growth outpaces import growth despite negative terms of trade and the strengthening of the domestic market. There has also been a slight narrowing of the deficit in income, largely as a result of a decline in interest payments on long-term securities brought by the restructuring of government debt and the implementation of monetary policy via purchases of Slovenian government bonds. The 12-month current account surplus reached 5.7% of GDP in July. This was the result of the decline in investment in the first wave of the crisis, and later in final consumption after the introduction of government austerity measures, which in the breakdown of GDP were compensated for by the trade surplus. In this surplus there is potential space for a further increase in domestic final consumption and in investment, which should be limited by export growth if the economy wishes to maintain a positive external position over the long term. A trade surplus will be required for covering the deficit in income, on which the increase in foreign ownership of the economy could have a sharp impact via reinvested earnings and dividends.*

*In recent months the rise in the euro has gradually weakened the nominal competitiveness of exporters on markets outside the euro area, which for now has not been reflected in export growth. The differences in price developments between individual euro area countries have been small this year, and there has been no significant change in Slovenia's price competitiveness on euro area markets. Although unit labour costs in the second quarter of this year were up in year-on-year terms, the rate of growth was less than the average across the euro area, maintaining cost competitiveness, which improved significantly during the crisis as a result of internal devaluation.*

## Current account position

**The renewed strengthening of the current account surplus was the result of rapid growth in exports and a narrower deficit in primary income.** The 12-month current account surplus reached 5.7% of GDP in July, up 0.6 percentage points on the beginning of the year. The surplus of trade increased from 9% of GDP to 9.3% of GDP over this period, which was attributable to the ongoing increase in the surplus of trade in services. The merchandise trade surplus also remains high. This was attributable to the slowdown in growth in domestic investment, the less negative terms of trade after the first quarter and high export growth. The deficit in primary income

**Figure 4.1: Current account components**




*Source: Bank of Slovenia.*

declined to 2.8% of GDP from 3.1% of GDP in January, as the estimated deficit in reinvested earnings diminished, while the decline in the deficit in interest on long-term securities was even sharper. The deficit in secondary income remains stable, at just under 1% of GDP.

## Merchandise trade

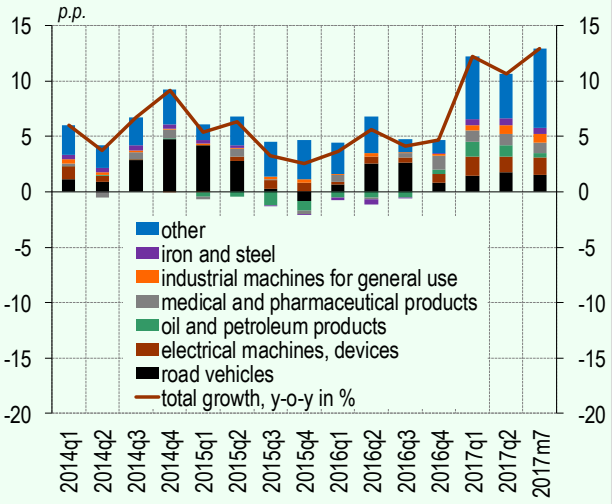
**The export sector has taken advantage of this year's improvement in the economic situation in the international environment to increase export growth.** According to balance of payments figures, nominal year-on-year growth in merchandise exports slowed to just 3.6% in the second half of last year, but rose to 12.4% over the first seven months of this year. The majority of the accelera-

**Table 4.1: Current account components**

| | in 12 months to | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | Jul.16 | Jul.17 | 16Q1 | 16Q2 | 17Q1 | 17Q2 | Jul.16 | Jul.17 |
| | *in EUR million* | | | | | | | | | | |
| **Current account balance** | 2,179 | 1,698 | 2,108 | 2,093 | 2,395 | 677 | 530 | 571 | 768 | 126 | 281 |
| **1. Goods** | 1,181 | 1,476 | 1,536 | 1,639 | 1,482 | 484 | 449 | 371 | 465 | 145 | 188 |
| **2. Services** | 1,697 | 1,860 | 2,174 | 2,038 | 2,401 | 467 | 526 | 520 | 638 | 175 | 237 |
| 2.1. Transport | 715 | 821 | 932 | 880 | 990 | 215 | 246 | 241 | 263 | 75 | 90 |
| 2.2. Travel | 1,315 | 1,276 | 1,337 | 1,316 | 1,393 | 311 | 286 | 286 | 343 | 116 | 141 |
| 2.3. Other | -333 | -237 | -94 | -158 | 17 | -59 | -6 | -7 | 33 | -15 | 6 |
| **3. Primary income** | -428 | -1,263 | -1,294 | -1,268 | -1,183 | -163 | -393 | -233 | -257 | -158 | -113 |
| 3.1. Labour income | 120 | 201 | 149 | 182 | 141 | 42 | 40 | 37 | 38 | 10 | 10 |
| 3.2. Investment income | -694 | -1,557 | -1,490 | -1,517 | -1,396 | -301 | -429 | -371 | -312 | -161 | -113 |
| 3.3. Other primary income | 146 | 93 | 46 | 67 | 72 | 95 | -4 | 101 | 17 | -7 | -9 |
| **4. Secondary income** | -271 | -375 | -309 | -315 | -305 | -111 | -53 | -88 | -77 | -37 | -32 |
| | *in % of BDP* | | | | | | | | | | |
| **Current account balance** | 5.8 | 4.4 | 5.3 | 5.3 | 5.8 | 7.3 | 5.2 | 5.8 | 7.2 | 3.7 | 7.8 |
| **1. Goods** | 3.2 | 3.8 | 3.9 | 4.2 | 3.6 | 5.2 | 4.4 | 3.8 | 4.3 | 4.3 | 5.2 |
| **2. Services** | 4.5 | 4.8 | 5.5 | 5.2 | 5.8 | 5.1 | 5.2 | 5.3 | 5.9 | 5.2 | 6.6 |
| 2.1. Transport | 1.9 | 2.1 | 2.3 | 2.2 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.2 | 2.5 |
| 2.2. Travel | 3.5 | 3.3 | 3.4 | 3.4 | 3.4 | 3.4 | 2.8 | 2.9 | 3.2 | 3.4 | 3.9 |
| 2.3. Other | -0.9 | -0.6 | -0.2 | -0.4 | 0.0 | -0.6 | -0.1 | -0.1 | 0.3 | -0.5 | 0.2 |
| **3. Primary income** | -1.1 | -3.3 | -3.3 | -3.2 | -2.9 | -1.8 | -3.9 | -2.4 | -2.4 | -4.6 | -3.1 |
| 3.1. Labour income | 0.3 | 0.5 | 0.4 | 0.5 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 |
| 3.2. Investment income | -1.9 | -4.0 | -3.7 | -3.9 | -3.4 | -3.3 | -4.2 | -3.8 | -2.9 | -4.7 | -3.1 |
| 3.3. Other primary income | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 1.0 | 0.0 | 1.0 | 0.2 | -0.2 | -0.3 |
| **4. Secondary income** | -0.7 | -1.0 | -0.8 | -0.8 | -0.7 | -1.2 | -0.5 | -0.9 | -0.7 | -1.1 | -0.9 |
| | *nominal year-on-year growth rates in %* | | | | | | | | | | |
| **Export of goods and services** | 5.6 | 4.9 | 5.0 | 3.9 | 10.1 | 4.2 | 6.0 | 12.8 | 12.0 | -2.3 | 14.3 |
| Export of goods | 5.9 | 4.7 | 4.0 | 3.1 | 9.4 | 3.1 | 5.5 | 13.1 | 11.6 | -3.4 | 13.0 |
| Export of services | 4.5 | 5.5 | 9.3 | 7.3 | 12.8 | 9.1 | 7.8 | 11.5 | 13.5 | 2.0 | 18.7 |
| Transport | 9.4 | 9.3 | 10.9 | 8.7 | 13.7 | 12.9 | 7.1 | 12.9 | 11.6 | -1.7 | 17.4 |
| Travel | 0.8 | 1.8 | 4.4 | 3.9 | 7.4 | 5.7 | 4.0 | 5.0 | 13.4 | 5.9 | 13.9 |
| Other | 4.9 | 6.5 | 12.9 | 9.6 | 17.4 | 9.0 | 11.9 | 16.0 | 15.2 | -0.2 | 26.9 |
| **Import of goods and services** | 4.4 | 3.6 | 4.2 | 2.4 | 10.7 | 1.2 | 4.2 | 15.6 | 11.9 | -0.7 | 11.7 |
| Import of goods | 3.8 | 3.6 | 4.0 | 2.2 | 10.8 | 0.8 | 4.6 | 16.2 | 12.3 | -1.1 | 11.8 |
| Import of services | 7.7 | 3.8 | 5.7 | 3.4 | 10.3 | 4.1 | 1.8 | 11.6 | 9.5 | 1.5 | 11.6 |
| Transport | 10.4 | 4.5 | 8.3 | 4.0 | 14.8 | 9.1 | -0.5 | 13.7 | 16.9 | 2.0 | 15.3 |
| Travel | 5.3 | 10.4 | 3.8 | 9.0 | 9.7 | -11.3 | 18.3 | 38.7 | 4.9 | -0.3 | 7.4 |
| Other | 7.6 | 1.3 | 5.5 | 1.3 | 8.8 | 6.1 | -2.4 | 5.2 | 8.4 | 2.6 | 13.3 |

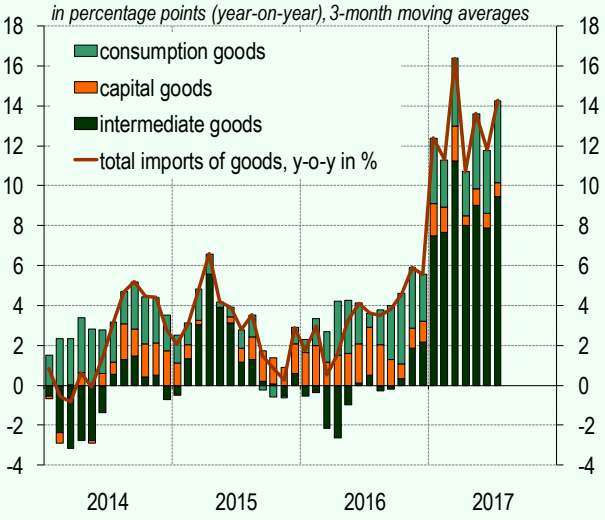
*Source: Bank of Slovenia.*
*Note: Shares in GDP are calculated on the basis of monthly estimates of GDP.*

**Figure 4.2: Contributions to growth in goods exports by product category**




*Source: SORS, Bank of Slovenia calculations.*

**Figure 4.3: Contributions to growth in goods exports by broad**




*Source: SORS, Bank of Slovenia calculations.*

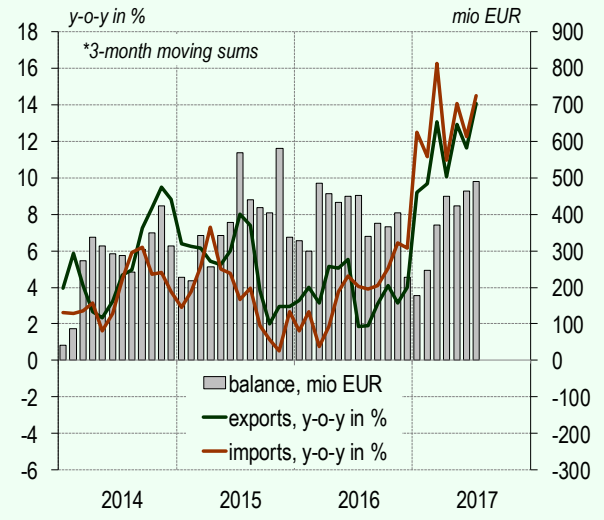
tion is attributable to increased exports to euro area countries, mainly Italy, Germany and Austria, although exports to other markets are also strengthening. There has been a notable reversal in export flows to Russia, which is recovering economically, and whose currency is stronger than last year. The acceleration is also diversified in terms of product categories. Exports of electrical machinery and equipment strengthened, exports of road vehicles strengthened again, and exports of pharmaceuticals, machinery, and iron and steel all increased. The increase in aggregate growth in other product categories was even stronger.[1] Another factor in the nominal growth in exports was the rise in export prices, which is most evidently being reflected in the positive contribution made to overall export growth by re-exports of petroleum. Year-on-year growth in domestic producer prices on the foreign market had strengthened to 3.2% by July.

**The sharp increase in growth in nominal merchandise imports is primarily attributable to increased imports of intermediate goods.** This was largely industry satisfying its needs in the wake of increased growth in output. Growth in imports of consumer goods strengthened further, although nominal growth in domestic final consumption has slowed moderately this year. Growth in imports of capital goods slowed in the second quarter of this year in line with lower growth in investment. According to balance of payments figures, overall year-on-year growth in merchandise imports stood at 5.2% in the second half of last year, but reached 13.8% over the first seven months of this year. The impact of growth in import prices on nominal growth in merchandise imports has diminished in recent months. This is attributable to the decline in year-on-year growth in prices of energy imports from 22.3% in February to just 0.2% in July. Overall growth in prices of merchandise imports stood at less than 2% in July.

**The merchandise trade surplus remains large and stable.** The jump in nominal growth in exports is comparable to the increase in imports, despite the deterioration in the terms of trade. The terms of trade deteriorated in the first quarter as a result of a rise in global commodity prices, oil in particular, but the deterioration later eased. In July the terms of trade actually improved, at least in terms of the ratio of growth in import prices to domestic producer prices on the foreign market. The merchandise trade surplus over the first seven months of the year amounted to EUR 1,024 million, down just EUR 55 million on the same period last year.[2]

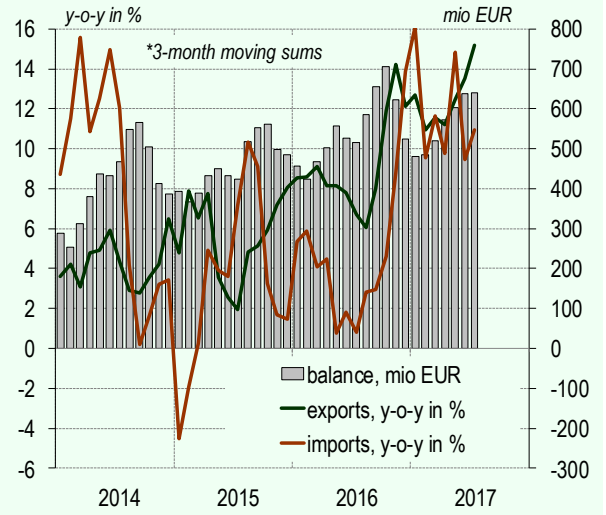
[1] There are 59 divisions of products under the SITC.
[2] According to a rough estimate that takes account of national accounts deflators, the deterioration in the terms of trade in the first half of the year reduced the trade surplus by EUR 133 million. The terms of trade are likely to have deteriorated again in the third quarter because of rises in oil prices.

Figure 4.4: Goods trade*




Source: Bank of Slovenia.

Figure 4.5: Trade in services*

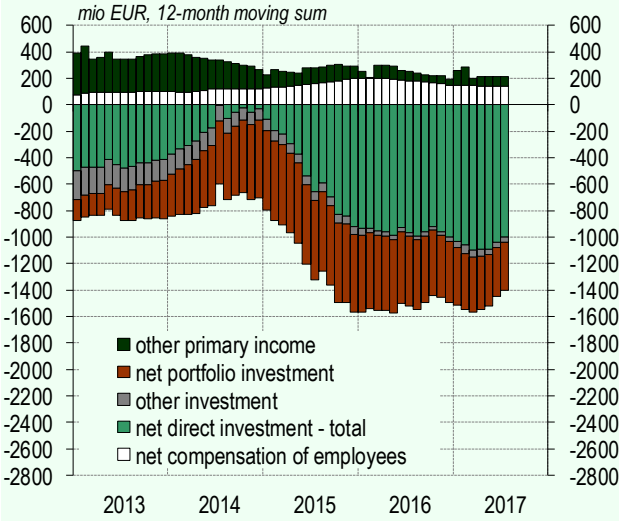



Source: Bank of Slovenia.

## Trade in services

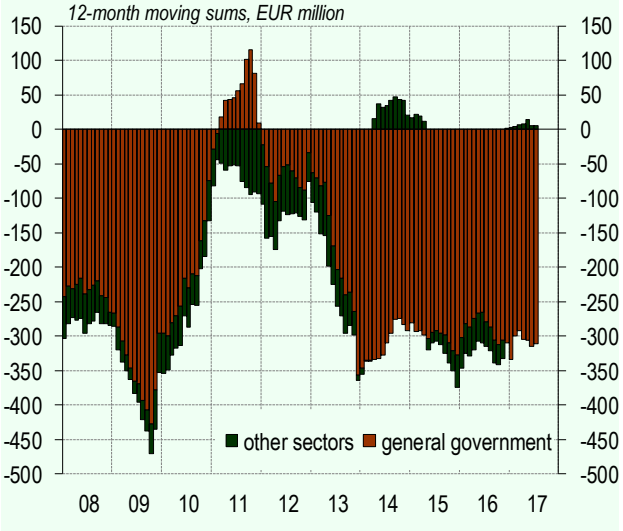
**The surplus of trade in services is continuing to increase as a result of rapid growth in exports of services of all types.** Year-on-year growth in total exports of services increased sharply at end of last year, and strengthened further this year, reaching almost 19% in July. Growth in exports of transport services remains at a high level, in line with the increase in merchandise trade and transit and the expansion of transport activities. Growth in exports of travel services increased significantly, the number of arrivals by inbound international tourists having risen sharply. Aggregate growth in exports of other services also remains high; other business services are strengthening, and exports of construction services have remained high for the second consecutive year. Growth in imports of services increased sharply towards the end of last year, primarily because of increases in imports of transport services, construction services and other business services. Growth remained rapid over the first seven months of this year, albeit not as pronounced as on the export side. Growth in imports of travel services increased notably relative to the end of last year, while growth in imports of other business services slowed. The surplus of trade in services is thus continuing to strengthen. It amounted to almost EUR 1,400 million over the first seven months of this year, up EUR 230 million in year-on-year terms. The key factor was the narrowing of the deficit of trade in other business services by EUR 106 million.

Figure 4.6: Net primary income




Source: Bank of Slovenia.

Figure 4.7: Net secondary income




Source: Bank of Slovenia.

## Box 4.1: Technological complexity of exports

The technological complexity of Slovenian manufacturing exports is gradually improving. This has primarily been reflected in a rise in the proportion of manufacturing exports accounted for by high-tech products from 10.6% in 2006 to 13.4% in 2016, and a simultaneous decline in the proportion accounted for by low-tech products from 22.0% to 18.4%. The largest factor in the rise in the proportion accounted for by high-tech products over the last ten years was growth in exports of pharmaceutical products and preparations, while the decline in low-tech products was attributable to a decline in exports of furniture and clothing. The proportion of high-tech exports in Slovenia is nevertheless still below the EU average. Slovenia also remains behind other new Member States in terms of the proportion of high-tech exports, although its average nominal annual growth in the aforementioned segment since 2006 has been 0.4 percentage points higher than the average nominal annual growth in the exports of new Member States, and fully 5 percentage points higher than the average nominal annual growth in EU exports. The increase in the proportion of high-tech exports is attributable to growth in exports of computer, electronic and optical products, while the proportion accounted for by the aviation industry is low.

Slovenia primarily exports medium/high-tech products. Growth in this segment is above the EU average, although Slovenia trails growth across the new Member States. Within

**Table 1: Technological complexity of exports of the manufacturing sector[1]**

| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | CAGR[3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | % | | | | | | | | |
| **High tech products** | Slovenia | 10.6 | 10.0 | 11.0 | 13.6 | 13.7 | 13.7 | 13.4 | 14.3 | 14.1 | 14.5 | 13.4 | 7.3 |
| | EU28 | 21.6 | 18.5 | 18.2 | 20.9 | 20.2 | 18.5 | 19.2 | 18.7 | 19.1 | 20.2 | 20.3 | 2.3 |
| | Euro area | 20.3 | 18.2 | 17.9 | 20.4 | 19.7 | 18.2 | 19.0 | 18.9 | 19.2 | 20.4 | 20.4 | 3.2 |
| | New members[2] | 15.0 | 15.2 | 16.2 | 19.0 | 19.0 | 17.1 | 16.2 | 15.5 | 15.5 | 15.6 | 15.2 | 6.9 |
| | Germany | 19.7 | 17.7 | 17.4 | 19.3 | 18.5 | 17.3 | 18.2 | 18.1 | 18.2 | 19.4 | 19.5 | 3.3 |
| **Medium high-tech products** | Slovenia | 46.7 | 49.5 | 49.2 | 48.8 | 47.6 | 46.4 | 45.3 | 45.4 | 46.7 | 46.5 | 47.7 | 5.0 |
| | EU28 | 41.9 | 43.9 | 43.2 | 42.0 | 42.3 | 42.5 | 42.2 | 41.9 | 42.7 | 43.2 | 43.9 | 3.4 |
| | Euro area | 43.3 | 44.7 | 44.1 | 42.9 | 43.3 | 43.7 | 42.9 | 43.1 | 43.4 | 44.0 | 44.3 | 3.4 |
| | New members[2] | 41.3 | 42.7 | 42.0 | 40.8 | 40.5 | 41.2 | 41.5 | 42.3 | 43.1 | 44.2 | 45.6 | 7.8 |
| | Germany | 52.0 | 53.3 | 53.2 | 51.8 | 53.1 | 54.1 | 53.7 | 54.0 | 54.2 | 54.2 | 54.1 | 3.8 |
| **Medium low-tech products** | Slovenia | 20.7 | 20.5 | 21.0 | 17.5 | 19.3 | 21.3 | 21.7 | 21.8 | 21.4 | 21.3 | 20.5 | 4.7 |
| | EU28 | 18.5 | 19.4 | 20.6 | 17.6 | 19.0 | 20.6 | 20.3 | 20.6 | 19.1 | 17.5 | 16.4 | 1.7 |
| | Euro area | 18.4 | 19.1 | 20.0 | 17.4 | 18.6 | 19.9 | 19.9 | 19.2 | 18.4 | 16.8 | 16.1 | 1.8 |
| | New members[2] | 22.7 | 21.9 | 22.7 | 19.5 | 20.7 | 22.3 | 22.2 | 21.3 | 20.2 | 19.1 | 17.8 | 4.1 |
| | Germany | 15.9 | 16.6 | 16.7 | 14.9 | 15.3 | 15.6 | 15.3 | 14.9 | 14.6 | 13.8 | 13.5 | 1.7 |
| **Low-tech products** | Slovenia | 22.0 | 20.0 | 18.7 | 20.1 | 19.4 | 18.5 | 19.5 | 18.5 | 17.7 | 17.7 | 18.4 | 3.0 |
| | EU28 | 18.0 | 18.1 | 17.9 | 19.5 | 18.5 | 18.3 | 18.4 | 18.7 | 19.1 | 19.0 | 19.5 | 3.8 |
| | Euro area | 18.1 | 17.9 | 17.9 | 19.3 | 18.4 | 18.3 | 18.1 | 18.7 | 18.9 | 18.8 | 19.2 | 3.8 |
| | New members[2] | 21.1 | 20.2 | 19.1 | 20.6 | 19.7 | 19.5 | 20.1 | 20.9 | 21.1 | 21.2 | 21.4 | 6.8 |
| | Germany | 12.5 | 12.5 | 12.7 | 14.0 | 13.1 | 13.0 | 12.8 | 13.0 | 13.0 | 12.6 | 12.9 | 3.7 |

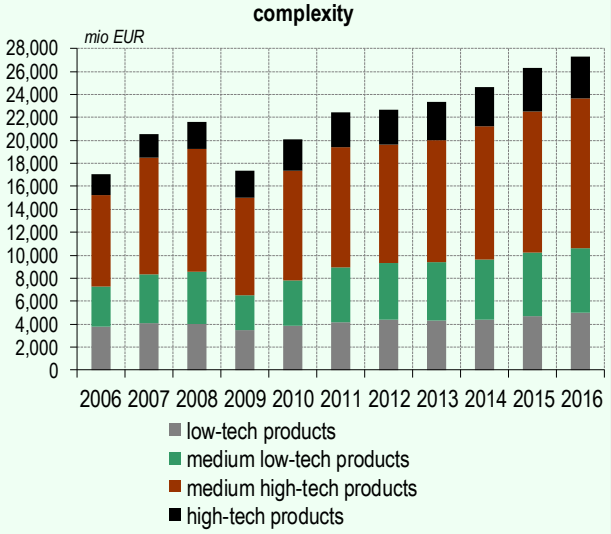
*[1] The distribution of exports of the manufacturing sector into groups according to technological complexity is carried out according to Eurostat's methodology based on the NACE Rev. 2 classification (see SKD 2008). The methodology was last updated in 2008. Eurostat divided the entire C—Manufacturing group into four groups in terms of technological complexity: high-tech products, medium high-tech products, medium low-tech products and low-tech products. In the case of Slovenia, exports of the manufacturing sector represented, on average, 91.7% of total exports of goods in the period 2006-2016.*

*[2] New member states: countries that joined the European Union after 1 May 2004 (Slovenia, Slovakia, Poland, Malta, Hungary, Lithuania, Latvia, Estonia, the Czech Republic, Cyprus, Romania, Bulgaria, Croatia).*

*[3] CAGR: average annual growth rate of nominal value of exports.*

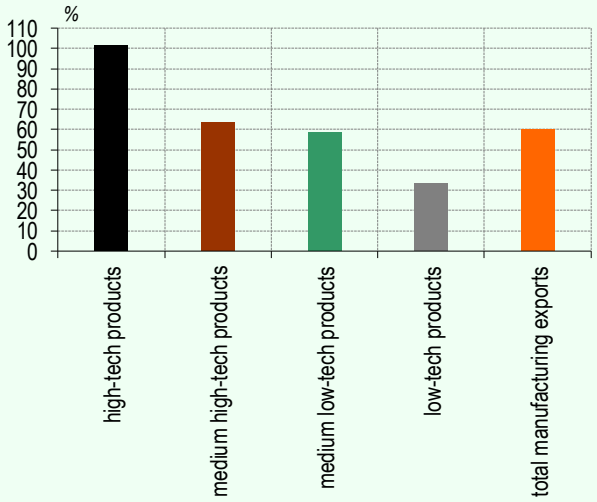
*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 1: Export of production goods by technological complexity**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 2: Increased export of manufacturing products in terms of technological complexity in the period 2006–2016**




*Source: Eurostat, Bank of Slovenia calculations.*

the segment of medium/high-tech products, the most notable element is motor vehicles, trailers and semi-trailers, exports of which have increased by EUR 2.4 billion over the decade. Exports of electrical machinery strengthened by EUR 1.0 billion over the same period. The proportion of exports accounted for by the medium/high-tech segment increased from 46.7% in 2006 to 47.7% in 2016. The proportion accounted for by this segment was above the EU average and the average across the new Member States throughout the decade.

The proportion accounted for by medium/low-tech products has stagnated. Although the technological complexity of manufacturing is gradually increasing, the proportion of total manufacturing exports accounted for by medium/low-tech products remained virtually unchanged between 2006, when it stood at 20.7%, and 2016, when it stood at 20.5%. This is in contrast to the changes in the proportions of exports across the EU and the new Member States accounted for by this segment, which declined over the decade. In Slovenia the segment remains internationally competitive: its nominal annual growth in exports over the last decade was higher than the average across the EU and the average across the new Member States. The largest component is metals, although fabricated metal products have almost overtaken them over the last decade. Annual growth in exports of fabricated metal products averaged 5.3% over the decade, 3.2 percentage points more than average growth in exports of metals.

## Primary and secondary income

**The deficit in primary income has diminished in year-on-year terms this year.** The deficit amounted to EUR 603 million over the first seven months of this year, a narrowing of EUR 111 million in year-on-year terms. The main factor in the narrowing was the smaller deficit in payments of interest on long-term securities to the rest of the world. This is related to the restructuring of the public debt and the securities purchase programme within the framework of monetary policy, which reduced payments of interest expenditure to the rest of the world, while at the same time residents' interest receipts increased because of strengthened investments in foreign securities. The estimated deficit in reinvested earnings also declined, while the surplus in the government sector's primary income increased, primarily in connection with transactions with the EU budget. The net outflow of dividends increased in the wake of improved performance by firms under foreign ownership. There was also a slight decline in the labour income surplus.

**The deficit in secondary income remains stable, and under the prevailing impact of government transactions with the EU budget.** It amounted to EUR 197 million over the first seven months of the year, almost unchanged in year-on-year terms. The deficit in the government sector's secondary income was virtually identical to the overall figure. The main items were EU own resources based on VAT and GNI, and social benefits. In both cases, the year-on-year changes in the deficit were

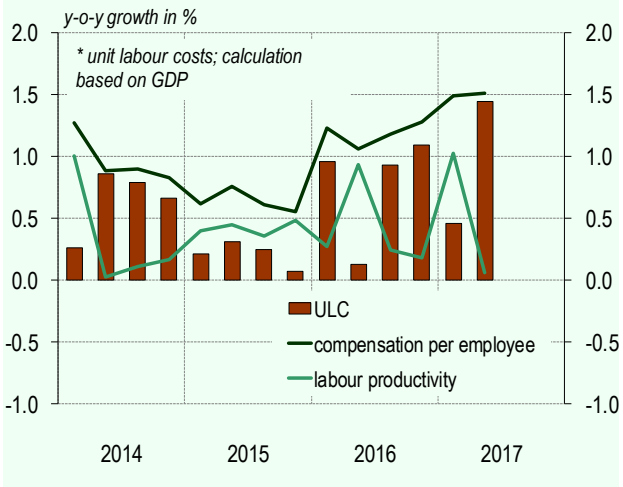
**Figure 4.8: Nominal harmonised competitiveness indicator (vis-a-vis 19 trading partners outside the euro area)**


*Source: ECB, Bank of Slovenia calculations.*

**Figure 4.9: Harmonised price competitiveness indicator (based on HICP/CPI deflators)**

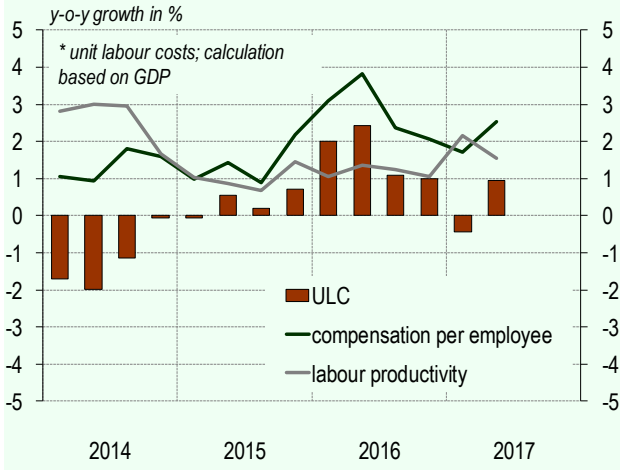

*Source: ECB, Bank of Slovenia calculations.*

**Figure 4.10: Labour productivity, ULC* and compensation per employee in euro area (total economy)**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 4.11: Labour productivity, ULC* and compensation per employee in Slovenia (total economy)**




*Source: Eurostat, Bank of Slovenia calculations.*

minor. The role in the overall position in secondary income played by other sectors' secondary income has become negligible.

## Selected competitiveness indicators

**The rise in the euro in recent months has brought a deterioration in the nominal competitiveness of Slovenia's exports on markets outside the euro area.** The nominal harmonised competitiveness indicator measured against a basket of 19 major trading partners outside the euro area began rising again under the influence of the new appreciation in the euro, and was up 3.0% in year-on-year terms in August. This was partly attributable to the year-on-year appreciation in the euro against the US dollar, which reached 5.3% in August. The euro also appreciated against the pound sterling, the Swiss franc, the Japanese yen, the Turkish lira and the Chinese yuan. Because of last year's growth and the growth in recent months, in August the nominal competitiveness indicator exceeded its average levels of 2015 and 2016, and is now just 2.4% down on its average of 2014.

**This year's domestic price developments have not had an impact on Slovenia's price competitiveness relative to other euro area countries.** Inflation in Slovenia is not deviating significantly from the euro area average this year. Since the second quarter of this year, price growth has been slightly slower than in Austria, Germany

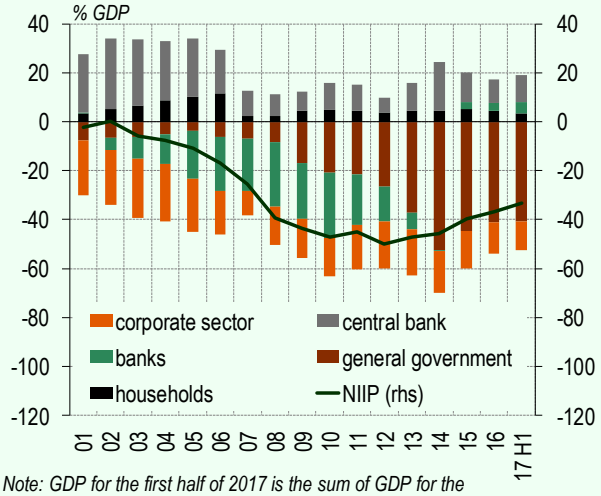
## Box 4.2: Slovenia's net international investment position

The net international investment position (NIIP) is the stock of assets held by residents of a particular economy (of a country in simple terms) in non-residents (in the rest of the world in simple terms) minus the stock of residents' liabilities to non-residents (to the rest of the world in simple terms). A negative NIIP indicates that a country's liabilities to the rest of the world exceed its asset holdings in the rest of the world. The majority of countries release NIIP figures on a quarterly basis.

The NIIP is a key component of the national balance sheet: the NIIP plus non-financial assets equals the net worth of an economy. In addition, together with balance of payments flows the NIIP captures the international accounts of an economy. The NIIP is an important barometer of the national financial position and creditworthiness. Two methods are used to assess the size of the NIIP with regard to the size of the economy: the percentage ratio of the NIIP to GDP, and the percentage ratio of the NIIP to the economy's total financial assets. The ratio of the NIIP to GDP is used for the purpose of this analysis. The definitions are based on the sixth edition of the IMF's Balance of Payments Manual (BPM6).

With the exception of 2002, until 2017 Slovenia's NIIP as a percentage of GDP exceeded the indicative threshold1 set out in the European Commission's macroeconomic imbalance procedure. The NIIP improved in the first half of 2017, and is no longer problematic.2 Between 2000 and the first half of 2017 Slovenia's NIIP disclosed a net debt position, with the exception of 2002. The high economic growth before the crisis, the low interest rates and the easy access to financial resources in the rest of the world led to an increase in the indebtedness in the rest of the world of commercial banks and leasing companies in the form of loans. In early 2009 the central bank and the household sector were the only institutional sectors that held net financial claims against the rest of the world. The latter further increased their investments in the rest of the world. The government sector and the corporate sector increased their net liabilities to the rest of the world. Non-financial corporations reduced their net liabilities to the rest of the world on account of increased borrowing at domestic banks. Bank borrowing in the form of loans in the rest of the world only declined slightly, as a result of the replacement of foreign borrowing by leasing companies with domestic borrowing via banks. During the same period claims and liabilities vis-à-vis the rest of the world in the form of currency and deposits almost equalised as a result of Slovenia joining the euro area, and the increase in the central bank's liabilities to the rest of the world in the form of this instrument.

**Figure 1: International investment position by sector**

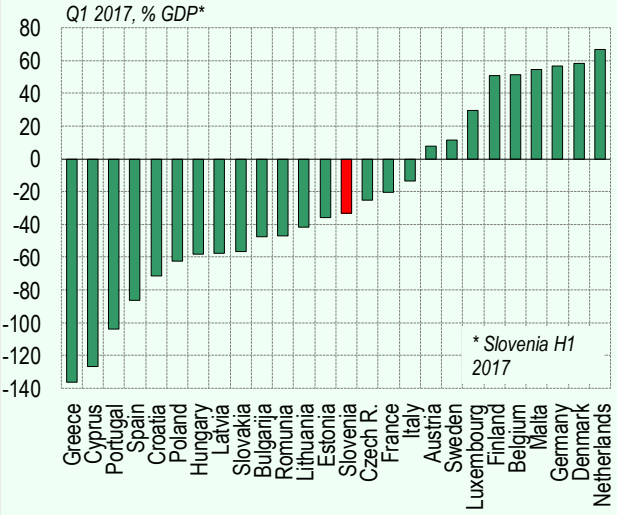



*Note: GDP for the first half of 2017 is the sum of GDP for the last four quarters.*
*Source: Bank of Slovenia.*

In its early years the financial and economic crisis saw no reduction in Slovenia's net debt position, but the negative NIIP began to gradually diminish after 2012. The improvement in the NIIP was attributable to the banks, which reduced their net financial liabilities in the form of loans as a result of debt repayments in the rest of the world and limited access to funding on international markets. Another positive contribution to the reduction came from the central bank, as a result of a decline in liabilities from the TARGET2 position. The general government sector made a negative contribution. For the purpose of financing the budget and general financing, the government issued a large amount of debt securities, whose purchasers were mostly non-residents, thereby causing a deterioration in its position vis-à-vis the rest of the world. In addition, net financial liabilities in the form of currency and deposits also began to decline.

Slovenia's NIIP expressed as a percentage of GDP has been improving since 2013. The largest factors in the recent period have been bank deleveraging, the reduction in government deposits in the rest of the world, and the reduction of the government sector's liabilities in the rest of the world from debt securities. By contrast, the central bank increased its deposits in the rest of the world as a result of liabilities from the TARGET2 position. The sale of holdings in domestic firms brought an influx of foreign capital into Slovenia. This could entail these firms being financed in the future from parent companies or financed at banks in the rest of the world, which could have an adverse impact on Slovenia's NIIP.3

**Figure 2: Net international investment position**




*Source: Eurostat, SORS, Bank of Slovenia calculations.*

Among EU Member States, the largest net creditor vis-à-vis the rest of the world in the first quarter of this year was the Netherlands, followed by Denmark, Germany, Malta, Belgium and Finland. All of these countries have a positive NIIP of more than 50% of GDP. Luxembourg, Sweden and Austria also have a positive NIIP. The other EU Member States are net debtors, i.e. they have a negative NIIP. Slovenia discloses a negative NIIP in the amount of 33.2% of GDP, and alongside Italy, France and the Czech Republic is still inside the indicative threshold of the macroeconomic imbalance procedure. The remaining countries exceed the threshold of -35% of GDP. The countries that were hit hardest by the crisis disclose the most negative positions. Certain eastern European countries with a high level of FDI, such as Poland and Slovakia, also have a large negative NIIP.

[1] The NIIP is one of the indicators in the European Commission's macroeconomic imbalance procedure (MIP). The purpose of the MIP is to define, prevent and rectify any damaging macroeconomic imbalances that could adversely impact economic stability in a particular EU Member State, the euro area or the EU as a whole. The MIP was introduced in 2011, when the financial crisis revealed that macroeconomic imbalances such as a large current account deficit or a real estate bubble in one country could have an impact on others.

[2] This is an approximation, as GDP is calculated on the basis of the sum of the last four quarters.

[3] Changes in the NIIP would also depend on developments in other variables.

and Italy, but faster than in France. The average level of the harmonised indicator relative to the euro area over the first eight months of the year was down just 0.1% in year-on-year terms.

**Developments in unit labour costs in Slovenia were again more favourable than in the euro area overall in the second quarter.** In the wake of higher growth in labour costs and lower growth in productivity, unit labour costs in the second quarter were up 1% in year-on-year terms. Because the simultaneous year-on-year growth in productivity in the euro area slowed to just 0.1%, while growth in labour costs remained at its level of the first quarter, growth in unit labour costs across the euro area was higher than in Slovenia. This maintained the cost competitiveness of the Slovenian economy on euro area markets, which improved significantly during the crisis because of internal devaluation.

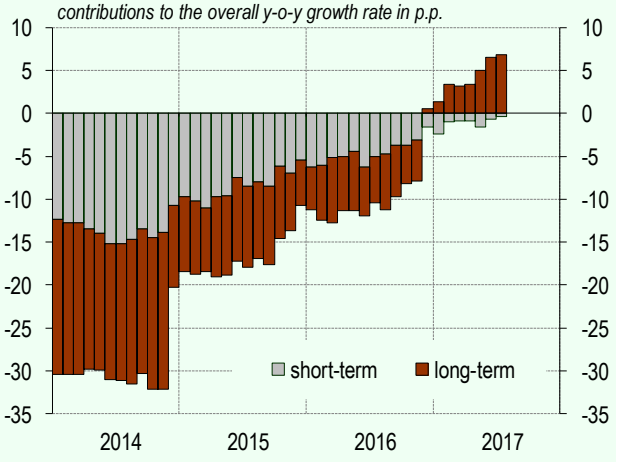
# 5 Financing of Non-Financial Corporations, Households and Banks

*After declining for several years, bank lending in the corporate segment is reviving in 2017. The bank financing is extensively replacing other sources of financing, most notably debt securities. In household lending the banks are focusing more on higher-yielding consumer loans. In general the banks are increasingly returning to their core business of lending to the non-banking sector, which in conjunction with rising portfolio quality is producing a good outlook for the financing support to future economic activity.*

## Corporate and household financing

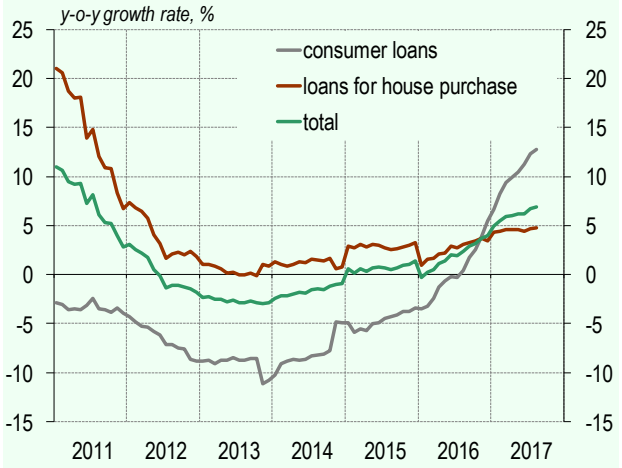
**After several years of decline, growth in bank loans to non-financial corporations has revived in 2017.** The stock of loans increased by 3.8% in the first half of the year, most notably through newly issued loans to SMEs, which has coincided with strong export activity and deeper integration in the global value chains. In particular, the growth has been strongest for loans with larger maturity. In combination with the extensive clean-up of the unhealthy parts of the balance sheet in 2016, this indicates a resumption in real investment activity, and lesser use of resources for the purposes of financial consolidation, which was prevalent in previous years. Overall bank lending is increasingly replacing liabilities from debt securities, which net issuance was in the first half of 2017 down more than 32% in year-on-year terms. There was an increase in trade credits at large enterprises in line with the seasonal dynamics, while financing via equity is also continuing to increase, having still accounted for the largest portion of corporate financial liabilities (34% of the total) in the previous years.

**Figure 5.1: Ggrowth in loans* to non-financial corporations by maturity**



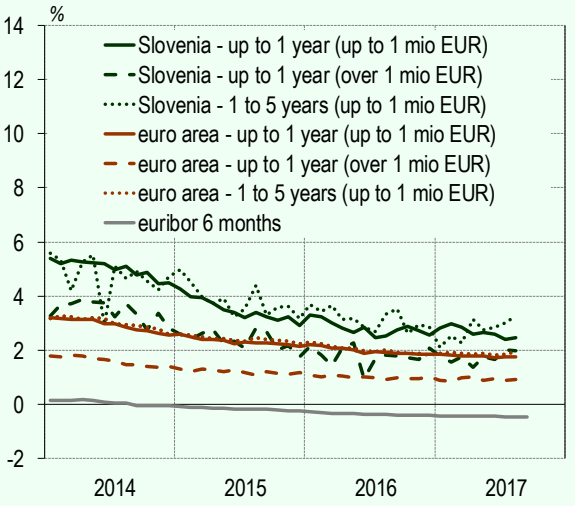

*Note: * Net loans under the Decision on Books of Account and Annual Reports of Banks and Savings Banks.*
*Source: Bank of Slovenia.*

**Figure 5.2: Loans to households**




*Note: * Net loans under the Decision on Books of Account and Annual Reports of Banks and Savings Banks.*
*Source: Bank of Slovenia.*

Figure 5.3: Interest rates on new loans to NFCs

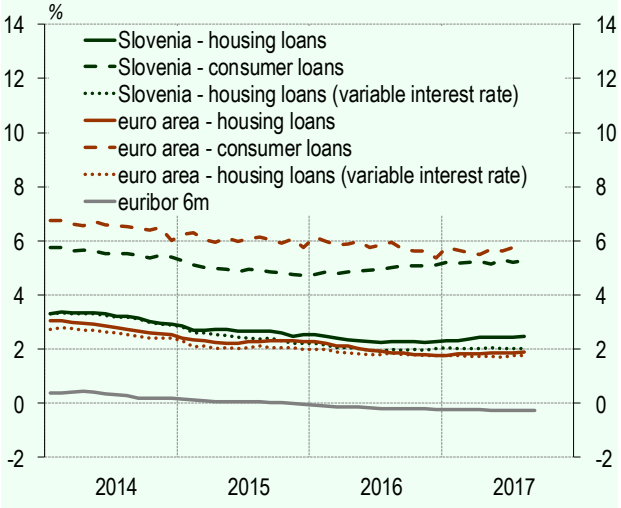



Source: ECB, Bank of Slovenia.

**In the segment of household financing, bank loans are increasing for the third consecutive year.** The stock increased by just under 6% in the first half of this year. After a long decline, consumer loans have been on a sharp increase since 2016 (recording growth of 9% in the first half of 2017), particularly in the foreign bank segment, while the portfolio of the domestic banks is mainly defined by lower-yielding housing loans.

**After the consolidation of the banking system, the profound effects of monetary policy and its pass-through to lower bank lending costs are becoming evident.** The average weighted interest rate on new loans to non-financial corporations was in the first half of the year down 50 basis points on the same period last year, and down 250 basis points on 2014. Having exceeded 75 basis points in 2013, the spread with the comparable average interest rates in the euro area had disappeared by the end of 2016. Between 2014 and 2017 the spread between interest rates on small loans (up to EUR 0.25 million) and interest rates on large loans (more than EUR 1 million) narrowed by more than 50 basis points, which is indicative of the more favourable financing environment for the SMEs. In the segment of households, the average interest rate on new housing loans declined by 75 basis points between 2014 and 2017, while the decline in interest rates on consumer loans was slightly smaller (50 basis points).

Figure 5.4: Interest rates on loans to households




Source: ECB, Bank of Slovenia.

## Financial assets of non-financial corporations and households

**The financial assets of non-financial corporations and households remains predominantly characterized by the strong growth in deposits.** In the first half of the year, household deposits increased by 5.5% while corporate deposits increased by 8.4%, together representing 70% of total bank funding. The low interest rate environment is continuing to encourage the trend of decline in fixed-term deposits and a simultaneous faster increase in sight deposits, which now account for 69% of total deposits, compared with 61% last year. Alongside sight deposits, the stock of holdings of equity instruments has also increased in 2017, by 4% at non-financial corporations and by 6% at households. The increase was primarily the result of a higher valuation on share markets and, to a lesser extent, result of new transactions. The largest proportion of the securities portfolio consists of domestic non-financial corporations and government debt securities. The largest investments in the rest of the world comprise securities of high-tech firms, and investments in pension and investment funds.

## The banking system

**The structure of the balance sheet of monetary and financial institutions suggests their return to core activities, and is indicative of a health basis for the**

## Box 5.1: Bank performance

Trends in lending to the non-banking sector and the further improvement in investment quality remain favourable in the banking system. Funding via deposits, sight deposits in particular, is continuing to increase concurrently with a slower debt repayment on foreign markets. The banks are profitable, albeit less than last year, while the decline in net interest income is slowly easing. Capital adequacy remains favourable.

Year-on-year growth in total assets increased to 2.1% in August. Total assets were up EUR 244 million on the previous month, primarily as a result of deposits by the non-banking sector, mostly deposits by non-financial corporations. On the asset side, growth in household loans and corporate loans is increasing, although the increase in loans is still smaller than the net inflow of deposits by the non-banking sector. The banks have large holdings of liquid assets, part of which could be redirected into loans in the future.

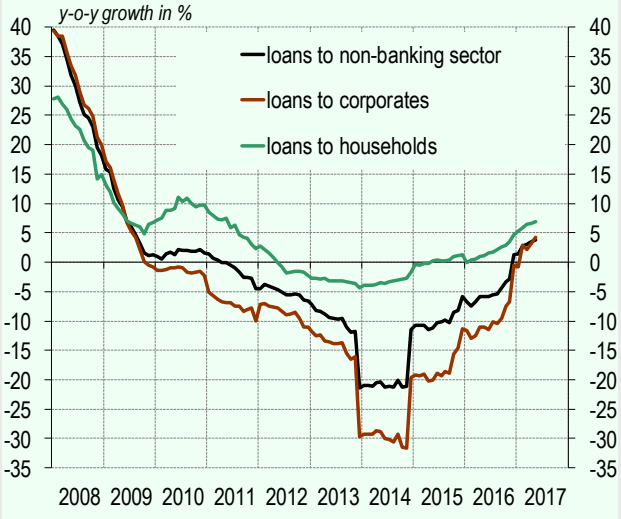
Growth in loans to the non-banking sector is gradually strengthening, and reached 5.1% in August. The stock of loans increased only moderately in August, by EUR 66 million. In the non-banking sector segment, loans to households and non-financial corporations (NFCs) have increased by approximately EUR 0.6 billion this year, where the nominal increase in loans to NFCs was just half of the increase in loans to households.

Despite the relatively small net increase, growth in loans to NFCs is increasing, and reached 7.5% in year-on-year terms in August. This is partly attributable to a base effect caused by the contraction in loans to NFCs that lasted until last November. There was a net increase of EUR 13 million in loans to NFCs in August, taking the increase over the first eight months of the year to EUR 190 million. Only long-term loans to NFCs have recorded a net increase this year. This is also reflected in the large differences in growth in loans according to maturity: year-on-year growth in long-term loans exceeded 9%, while growth in short-term loans is still negative. Short-term loans merely account for just over 12% of the total stock of corporate loans. The majority of this year's increase in loans relates to SMEs.

The trend of increasing growth in loans to households has continued, the year-on-year rate reaching 7.5% in August. There was a net increase of EUR 68 million in the stock of household loans in August, taking the increase over the first eight months of the year to EUR 391 million. Growth in consumer loans continues to strengthen, reaching 13.3% in year-on-year terms in August, while growth in housing loans has remained slightly above 5% for almost the entire year, and stood at 5.2% in August. The nominal increases in housing loans and consumer loans over the first eight months of this year were almost entirely comparable. The increases in the two main types of household loan have thus almost entirely equalised, while last year the increase in housing loans significantly exceeded the increase in consumer loans. The improvement in the economic situation, i.e. the increase in consumption and the improved situation on the labour market, and the active marketing and approval of loans of this type by certain banks are contributing to the ongoing growth in consumer loans.

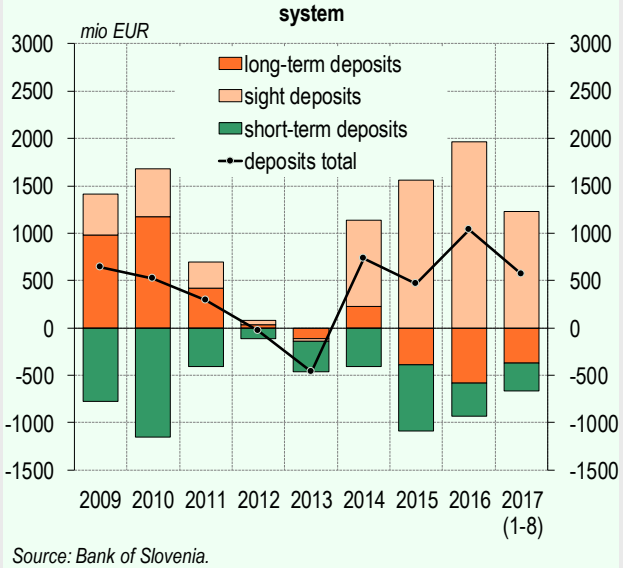
Funding structure has continued to shift in the direction of an

**Figure 1: Loans to non-banking sector**



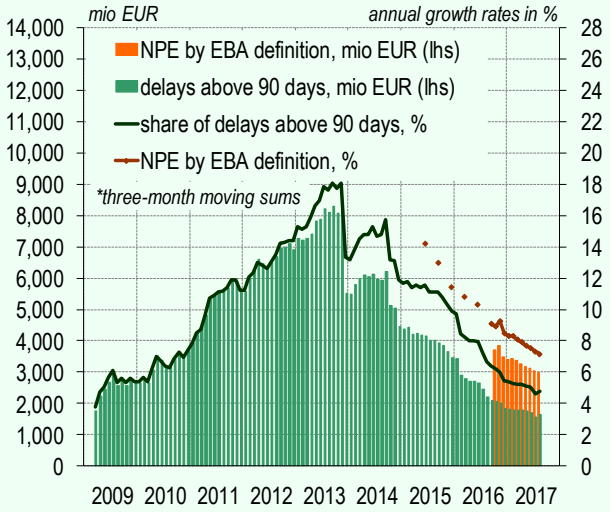

*Source: Bank of Slovenia.*

**Figure 2: Increase in deposits to households – the banking system**



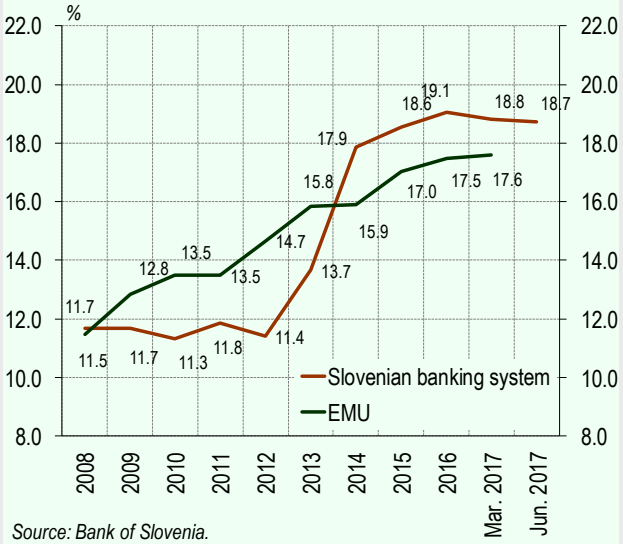

*Source: Bank of Slovenia.*

**Figure 3: Non-performing claims of banks**




Source: Bank of Slovenia.

**Figure 4: Capital adequacy ratio (CAR)**




Source: Bank of Slovenia.

increase in deposits by the non-banking sector. In August they accounted for just under 72% of the Slovenian banking system's total liabilities. At the same time wholesale funding is slowly declining, and is now just over a quarter of its pre-crisis level. In the context of a large liquidity surplus the banks have no need for additional funding, and are therefore not participating in the ECB's regular tenders, which has seen the proportion of funding accounted for by these liabilities remain at 3.1% since March of this year.

Growth in deposits by the non-banking sector slowed slightly at the beginning of the second half of the year, but still stood at a solid 5.2% in August. The proportion of funding accounted for by household deposits, which are the most important source of funding for Slovenian banks, strengthened further over the first eight months of the year, to reach 46%. Growth in household deposits has been gradually slowing since April, but nevertheless remains relatively solid: the year-on-year rate stood at 5.4% in August. The low interest rates, the traditional behaviour of Slovenian savers and the lack of alternative investments remain the main factors acting to further shorten the average maturity of deposits by the non-banking sector. The proportion of sight deposits is increasing: in August they accounted for almost 68% of total deposits by the non-banking sector, as a result of an actual increase in sight deposits and also a decline in fixed-term deposits.

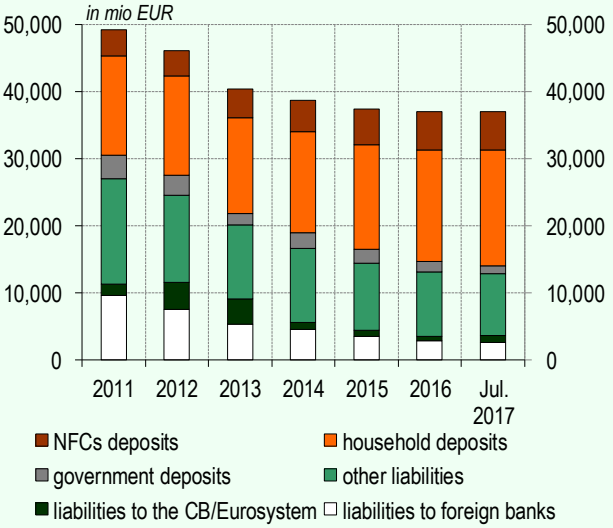
The quality of the credit portfolio as measured by the NPE ratio in line with the broader EBA definition is continuing to improve, which has also been reflected in a reduction in credit risk indicators. The NPE ratio declined by 1.3 percentage points over the first eight months of the year to stand at 7.2% in August. The stock of NPEs nevertheless remains a burden on optimal bank performance. It declined by EUR 0.5 billion over the first eight months of the year, but still amounted to EUR 3 billion. Non-financial corporations still account for two-thirds of the banking system's total NPEs, and despite continual improvement the NPE ratio for non-financial corporations is still the highest among all client categories at 14.6%. Inside the non-financial corporations sector the most notable improvement has been in exposures to firms in manufacturing, construction, and accommodation and food service activities. The same trend is evident in respect of SMEs, where there has also been a deterioration in financial intermediation.

The banking system generated a pre-tax profit of EUR 341 million over the first eight months of the year. This year gross income and profit are down slightly on the same period last year. Gross income over the first eight months of the year was down 4.5% in year-on-year terms. Net interest income was down 4.8% on the same period last year, while non-interest income was down 4.0%. However, the decline in both types of income has slowed in recent months. In the case of net interest income, it is the result of the gradual increase in the stock of loans and the favourable funding structure in terms of cost. The most notable factor in the case of non-interest income is the slight improvement in fees and commission, where the year-on-year contraction came to an end in August. The net interest margin measured over the last 12 months has remained at virtually the same level in recent months, at 1.83. The banking system released impairments and provisions in the total amount of EUR 32 million over the first eight months of the year. Operating costs remain comparable to the same period last year (they were down 0.3%).

The banking system's capital adequacy remains solid, despite a slight decline in recent quarters. The total capital ratio stood at 20.5% on an individual basis, and 18.7% on a consolidated basis in the second quarter of 2017. The decline in capital adequacy in the first half of this year was the result of growth in capital requirements outpacing growth in regulatory capital. As a result of increased bank lending activity, capital requirements are strengthening in particular in the corporate sector and in retail banking. The small domestic banks remain the most vulnerable in capital terms, despite an increase in capital adequacy in the second quarter. Capital adequacy can be expected to decline further in the future, if the banks fail to adjust the amount of capital to match the further strengthening of lending and the corresponding increase in capital requirements.

**future financing of business entities.** Lending to the non-banking sector was in the first half of the year up 3.5% in year-on-year terms, while exposure to other banks and investments in securities and other financial assets is undergoing a sustained decline. The decline largely resembles the reduction in holdings of domestic government securities, while investments in foreign securities are increasing. The banks are continuing to increase their liquid assets at the central bank, the average level of which in the first half of the year was up 18% in year-on-year terms. On the liability side, the banks are continually paying down wholesale funding, where loans by banks in the first half of the year were down approximately 19%. The improvement in the quality of the banks' credit portfolio has continued in 2017; the NPE ratio according to the EBA definition declined by 1 percentage point in the first half of the year to 7.5%.

**Figure 5.5: Selected liabilities of domestic banks**




*Source: Bank of Slovenia.*

# 6 Public Finances

*The general government deficit is continuing to narrow, which is attributable to the favourable economic situation and the maintenance of certain austerity measures. The Ministry of Finance is planning a general government deficit of 0.8% of GDP for this year, and a further improvement in fiscal performance within the framework of the drafting of the state budgets for 2018 and 2019. A surplus of 0.4% of GDP is being planned for next year. As Slovenia is moving into the territory of a positive output gap, and the general government debt is relatively high, it is vital to generate budget surpluses. Cyclical revenues should be directed into generating savings.*

*The general government debt is high, but remains below the euro area average. It stood at 79.8% of GDP at the end of June 2017, and is expected to decline further by the end of the year as a result of maturing debt. In September the government executed further transactions to convert US dollar debt into euro-denominated debt, thereby halving the stock of debt issued in US dollars. The terms of borrowing remain favourable: spreads are currently at their lowest level of recent years (around 60 basis points over the benchmark German 10-year bonds).*

*The risks in the fiscal area are related to the upward pressure on expenditure from various interest groups, which has been strengthened by the favourable economic situation. The risks also relate to possible one-off factors, to the high level of implicit and potential liabilities, and the potential acceleration in public investment.*

## General government deficit

**The general government deficit is declining in the favourable economic situation, but the general government debt remains high.** Last year's general government deficit amounted to 1.9% of GDP according to revised figures. It declined significantly in the first half of this year to stand at 0.6% of GDP, compared with 2.0% of GDP in the same period last year. At the end of September the Ministry of Finance stated in the Budget memorandum for 2018 and 2019 that a deficit of 0.8% of GDP is planned for this year, the same as in April's Stability Programme in the wake of an improved economic outlook and a slight deterioration in the initial position (a downward revision of 0.1 GDP percentage points in the deficit for 2016). With the level of interest similar to last year, the primary surplus is continuing to increase this year.

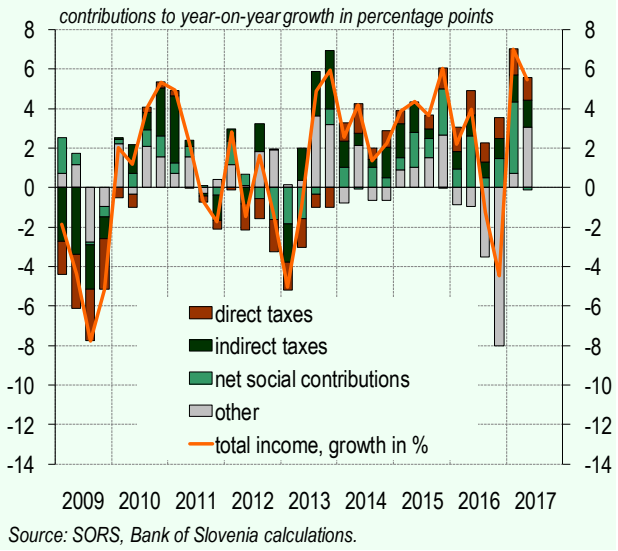
**General government revenues in the first half of 2017 increased as a result of the further strengthening of economic activity and high dividend payments, but revenues from the EU budget remained low.** General government revenues in the first half of the year were up 6.2% in year-on-year terms. Year-on-year growth in revenues from taxes and social security contributions strengthened to 5.0%, the highest figure since 2008. The main factors in the high growth were the encouraging situation on the labour market and the strengthening of private consumption, which have been supported by the good economic outlook. The strengthening of taxes and social security contributions is primarily based on the

**Table 6.1: General government deficit and debt in Slovenia, 2012-2019**

| | SORS | | | | 2017 | Draft Budgetary Plan | | | Stability Programme | | | | EC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % GDP | 2013 | 2014 | 2015 | 2016 | (1) | 2016 | 2017 | 2018 | 2017 | 2018 | 2019 | 2020 | 2017 | 2018 |
| **Revenue** | 45.2 | 44.7 | 45.2 | 43.6 | 43.5 | 42.9 | 43.0 | 42.5 | 43.5 | 43.7 | 43.0 | 42.4 | 43.4 | 42.9 |
| **Expenditure** | 60.3 | 50.1 | 48.1 | 45.5 | 45.4 | 45.1 | 44.3 | 43.3 | 44.4 | 43.9 | 42.8 | 41.9 | 44.8 | 44.0 |
| **of which: interest** | 2.6 | 3.3 | 3.3 | 3.2 | 3.2 | 2.8 | 2.4 | 2.3 | 2.4 | 2.1 | 2 | 1.8 | 3.0 | 2.8 |
| **Net lending (+) / borrowing (-)** | -15.1 | -5.4 | -2.9 | -1.8 | -1.9 | -2.2 | -1.3 | -0.8 | -0.8 | -0.2 | 0.2 | 0.4 | -1.4 | -1.2 |
| **excl. support to fin. institutions** | -5.0 | -4.4 | -2.9 | -1.8 | -1.9 | -2.2 | -1.3 | -0.8 | -0.8 | -0.2 | 0.2 | 0.4 | -1.4 | -1.2 |
| **Primary balance** | -12.5 | -2.1 | 0.4 | 1.4 | 1.3 | 0.6 | 1.2 | 1.5 | 1.6 | 1.9 | 2.2 | 2.1 | 1.6 | 1.6 |
| **Structural balance** | … | … | … | … | … | -1.5 | -0.8 | -0.9 | -0.6 | -0.3 | -0.1 | 0.0 | -1.8 | -2.3 |
| **Debt** | 71.0 | 80.9 | 83.1 | 79.7 | 81.4 | 80.2 | 78.2 | 76.5 | 77 | 74.3 | 70.9 | 67.5 | 77.8 | 75.5 |
| **Real GDP** (growth, % ) | -1.1 | 3.1 | 2.3 | 2.5 | 5.3 | 2.3 | 2.9 | 2.6 | 3.6 | 3.2 | 2.6 | 2.6 | 3.3 | 3.1 |

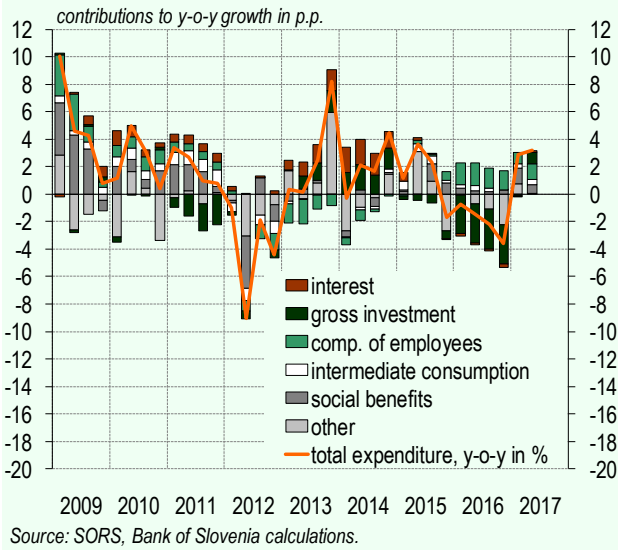
*Note: For 2017 data from the first quarter is used.*
*Source: SORS (realization), Draft Budgetary Plan (Ministry of Finance, October 2016), Stability Programme (Ministry of Finance, April 2017), European Commission (May 2017).*

**Slika 6.1: General government revenues**




*Source: SORS, Bank of Slovenia calculations.*

**Figure 6.2: General government expenditure excluding support to financial institutions**




*Source: SORS, Bank of Slovenia calculations.*

growth of the tax bases: the contribution made by discretionary measures is small.[1] All tax resources are strengthening. Among non-tax resources there has been an increase in revenues from distributed income from corporations (dividends), while capital transfers (including revenues from the EU budget) were down in year-on-year terms in the first quarter of the year, but not in the second quarter.[2]

**After declining for three years, general government expenditure has increased this year as a result of the relaxation of austerity measures, although growth is lower than on the revenue side.** General government expenditure over the first six months of the year was up 3.0% in year-on-year terms. There was slightly above-average growth in employee compensation, which is a reflection of the relaxation of austerity measures (including a rise in the wage scale last September, promotions at the end of the year, and a rise in leave allowance and contributions for supplementary collective pension insurance, and also an increase in employment). Employment in the general government sector in the first half of the year was up 1.9% in year-on-year terms, while compensation of employees per employee recorded similar growth. Compensation of employees accounted for

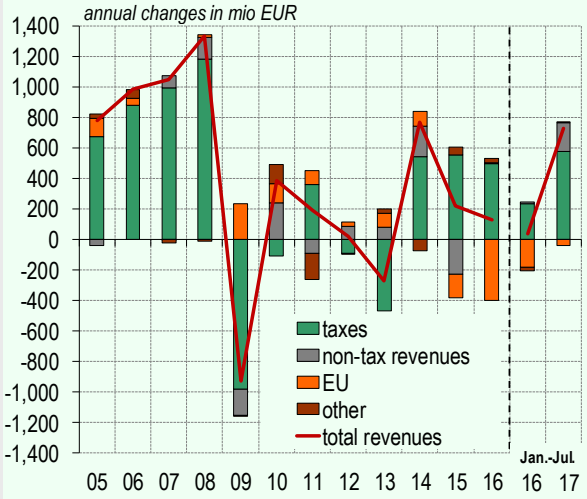
[1] Changes in the area of taxation (which have reduced personal income tax revenues, have raised corporate income tax revenues, and are expected to increase revenues as a result of measures to combat the grey economy) are expected to have a neutral financial impact. Excise duties on tobacco products were raised in February and July of this year.
[2] EUR 1.2 billion of European projects and tenders had been confirmed by 27 July 2017 (of the EUR 3.2 billion available to Slovenia).

## Box 6.1: Public finance developments according to cash flow methodology

The consolidated general government deficit over the first seven months of the year narrowed to EUR 39 million in year-on-year terms. The reduction in the deficit was mostly attributable to the state budget, which this year is disclosing a smaller deficit than planned. It amounted to EUR 105 million over the first eight months of the year (compared with EUR 528 million over the same period last year). The local government surplus over the first seven months of the year was slightly larger than last year. The local government sector mainly saw an increase in tax revenues (personal income tax and wealth taxes), while expenditure is up in the majority of categories, investment expenditure recording above-average growth. The Health Insurance Institute disclosed a larger deficit over the first eight months of this year than in same period last year (EUR 19 million compared with EUR 12 million), although its revenues have been growing at their fastest rate since 2008. Expenditure on sick pay is increasing sharply for the third consecutive year (it is up almost 12% in year-on-year terms), while other expenditures are also up (on wages, on goods and services, and other).

Both tax and non-tax general government revenues increased during the first seven months of the year, while revenues from the EU budget were down. The fastest-growing tax revenues

**Figure 1: Revenue from the consolidated balance of public finance**




*Source: Ministry of Finance, Bank of Slovenia calculations.*

**Table 1: Consolidated balance sheet * of public finance**

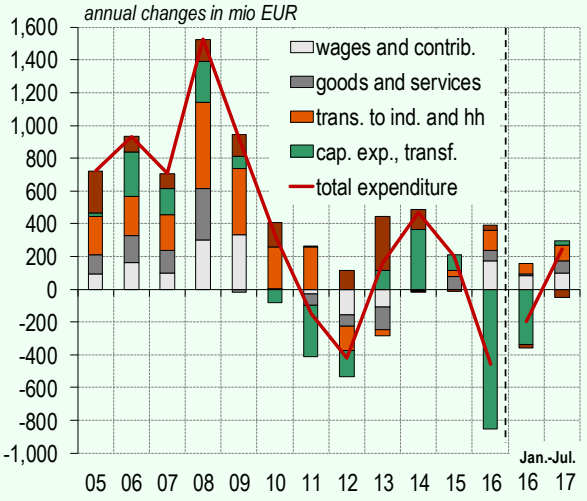
| | 2016 | last 12 months to Jul. 17 | | | 2016 Jan.-Jul. | 2017 Jan.-Jul. | Jan.-Jul.17 |
|---|---|---|---|---|---|---|---|
| | EUR millions | | % GDP | y-o-y, % | EUR millions | | y-o-y, % |
| **Revenue** | **15,842** | **16,573** | **39.5** | **5.2** | **8,956** | **9,687** | **8.2** |
| Tax revenue | 14,240 | 14,814 | 35.3 | 6.0 | 8,100 | 8,674 | 7.1 |
| - goods and services | 5,433 | 5,588 | 13.3 | 4.1 | 3,106 | 3,261 | 5.0 |
| - social security contributions | 5,721 | 5,900 | 14.1 | 4.9 | 3,301 | 3,481 | 5.4 |
| - personal income | 2,079 | 2,177 | 5.2 | 8.2 | 1,138 | 1,236 | 8.6 |
| - corporate income | 599 | 703 | 1.7 | 15.1 | 371 | 474 | 27.8 |
| From EU budget | 481 | 438 | 1.0 | -37.1 | 299 | 257 | -14.3 |
| Other | 1,121 | 1,320 | 3.1 | 23.0 | 557 | 756 | 35.8 |
| **Expenditure** | **16,497** | **16,742** | **39.9** | **-0.1** | **9,480** | **9,725** | **2.6** |
| Current expenditure | 7,407 | 7,532 | 18.0 | 3.3 | 4,300 | 4,425 | 2.9 |
| - wages and other personnel expenditure (incl. contributions) | 3,785 | 3,882 | 9.3 | 5.1 | 2,206 | 2,302 | 4.4 |
| - purchases of goods, services | 2,371 | 2,448 | 5.8 | 5.4 | 1,271 | 1,348 | 6.0 |
| - interest | 1,074 | 1,066 | 2.5 | 0.5 | 716 | 707 | -1.2 |
| Current transfers | 7,700 | 7,806 | 18.6 | 2.7 | 4,587 | 4,693 | 2.3 |
| - transfers to individuals and households | 6,496 | 6,593 | 15.7 | 2.4 | 3,859 | 3,956 | 2.5 |
| Capital expenditure, transfers | 962 | 987 | 2.4 | -33.2 | 352 | 377 | 7.2 |
| To EU budget | 427 | 417 | 1.0 | 6.9 | 240 | 230 | -4.3 |
| **GG surplus/deficit** | **-654** | **-170** | **-0.4** | | **-523** | **-39** | |

*Note: *Consolidated accounts of the state budget, local government budgets, pension and health fund on cash accounting principle.*
*Source: Ministry of Finance, Bank of Slovenia calculations.*

are from corporate income tax. There is also high growth in personal income tax and social security contributions, a reflection of the favourable situation on the labour market. According to the available figures, revenues from taxes and social security contributions in the first three quarters of the year were up 6.2% in year-on-year terms. Revenues from the EU budget are down on last year. The majority of these comprise funds for the implementation of the common agricultural policy and the common fisheries policy, while the decline relative to last year is the result of reduced disbursement from the Cohesion Fund.

Consolidated general government expenditure is also increasing, albeit more slowly. Expenditure on wages and contributions recorded notable growth, as a result of the gradual relaxation of austerity measures in the area of wages. Transfers to individuals and households are also increasing. Alongside the aforementioned sick pay, the majority of the increase relates to pensions, although growth in pensions remains relatively low for now (1.6%). The favourable developments on the labour market are further reducing expenditure on unemployment, while unemployment benefits are only being received by just over a fifth of all unemployed people. Payments into the EU budget were also down in year-on-year terms.

**Figure 2: Expenditures of the consolidated balance of public finances**



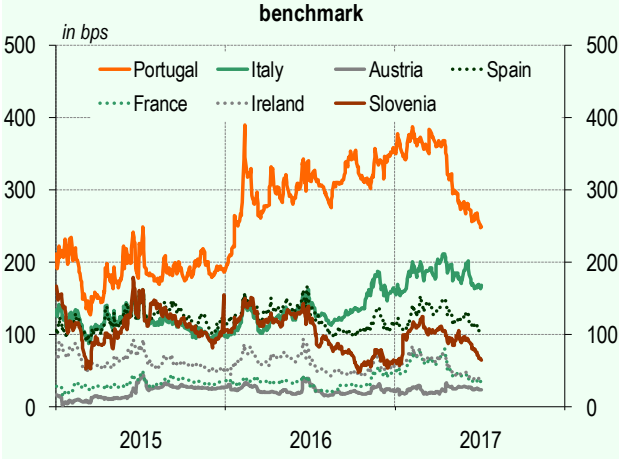

*Source: Ministry of Finance, Bank of Slovenia calculations.*

approximately a third of the growth in expenditure, while the contribution made by social security benefits was similar. Pension payments in the first eight months of the year were up 1.6%, primarily as a result of the adjustment of pensions. In the second quarter government investment was up in year-on-year terms for the first time since the beginning of 2015, taking the increase over the first half of the year to 5.6%. Expenditure on intermediate consumption increased, while interest payments remained at a similar level.

## Government debt and guarantees

**The general government debt increased in the first half of the year.** It amounted to EUR 33,268 million or 79.8% of GDP at the end of June, compared with EUR 31,730 million or 78.5% of GDP at the end of last year. The increase was primarily the result of issuance of long-term securities, which outweighed the maturing bonds and bond conversions. The Ministry of Finance has carried out debt restructuring from US dollars to euros in March, May and September of this year, the last of which also involved extending the maturity of the US dollar debt. The US dollar debt has declined by just over USD 2 billion this year (around EUR 1.5 billion at the fixed exchange rates applicable on the US dollar debt), and stood at USD 4.6 billion at the end of September. Issuance of long-term debt denominated in euros amounted to EUR 5.3 billion over the first nine months of the year, which was partly used to reduce US dollar debt and to repay maturing liabilities (around EUR 1.3 billion of long-term liabilities have matured this year), while the remainder was earmarked for financing the deficit and increasing

**Figure 6.3: Spreads of long-term government bonds over German benchmark**



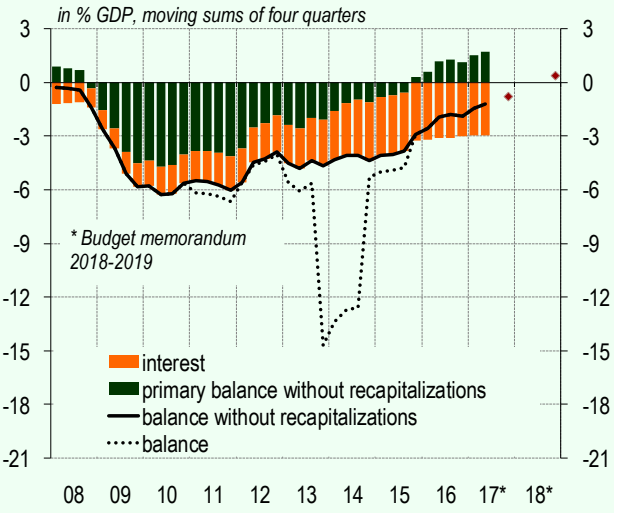

*Note: Spread is calculated as the difference between the yield of a 10-year government bond and the yield of a reference German bond on a daily basis and is used as a measure of a country's credit risk.*
*Source: Bloomberg, Bank of Slovenia calculations.*

government deposits. The debt restructuring has had a favourable impact on the public finances on account of reduced interest payments in the future, an extension of the maturity of the debt, the increased liquidity of issued bonds, and a reduction in exchange rate hedging of US dollar debt. Treasury bill issues of all maturities are still attaining negative interest rates this year. Issuance of treasury bills amounted to more than EUR 0.6 billion over the first ten months of the year. In September the Ministry of Finance forecast that the general government debt would decline to 75% of GDP by the end of the year.

**Government guarantees have been gradually declining since the end of last year as a result of maturing liabilities.** They amounted to EUR 6.4 billion or 15.3% of GDP at the end of the second quarter, down from 16.9% of GDP at the end of last year. The majority of the decline was related to the maturing of liabilities of DARS d.d., SID banka, SDH d.d. and the BAMC. No new guarantees were issued in the first half of the year, and there was no use of the SID banka quota. The commission from the issue of guarantees and sureties received by the state budget amounted to close to EUR 8.3 million in the first half of the year, primarily from the BAMC and Termoelektrarna Šoštanj d.o.o. Guarantees in the amount of EUR 0.5 million were called in the first half of the year.

**The required yield on Slovenian government bonds is low.** As monetary policy has remained expansionary, and the low interest rate environment has persisted, yields on government bonds remain low in the wake of the improvement in economic activity. The developments in Slovenian government bond yields are also attributable to an improvement in sovereign debt ratings. Slovenia was upgraded by Standard & Poor's in June, and by Moody's in September. The required yield on 10-year Slovenian government bonds has been stable since mid-July at close to 1%, the spread over the benchmark German bond fluctuating around 60 basis points.

**Slika 6.4: General government deficit**




*Source: SORS, Ministry of Finance, Bank of Slovenia calculations.*

## Planned developments in the general government deficit

**A general government deficit is estimated at 0.8% of GDP for this year, and a surplus is expected next year.** The Ministry of Finance is confirming a general government deficit of 0.8% of GDP for this year in its budget documents. In the wake of an increase of EUR 132 million[3] in the general government expenditure ceiling, a budget surplus in the amount of 0.4% of GDP[4] is forecast for 2018, the first surplus since the figures were first available in 1995 (a deficit of 0.2% of GDP had been planned in the Stability Programme). Because the economic situation is more favourable than previously expected, a faster decline in the nominal deficit is now expected. The government has already submitted its draft amendments to the 2018 budget and its draft budget for 2019 to the National Assembly.

**The objective of fiscal policy remains a balanced structural position[5] by 2020.** This objective was confirmed in this April's update of the Stability Programme. In its Budget memorandum for 2018 and 2019, the government declared that it is maintaining its commitment to

[3] This comprises an increase of EUR 50 million in expenditure in the state budget (as a result of higher expenditure from EU funds), and an increase of EUR 20 million at the Health Insurance Institute.
[4] Source: Draft ordinance amending the Ordinance on the framework for the preparation of the general government budgets for the 2018-2020 period.
[5] Under the requirements of the Stability and Growth Pact, Slovenia's medium-term budgetary objective should be a surplus in the amount of at least 0.25% of GDP.

meeting the medium-term fiscal objective. The pace of convergence on the objective also depends on the size of the (positive) output gap. When it exceeds 1.5% of GDP (taking into account that Slovenia's general government debt is more than 60% of GDP), the required fiscal effort[6] increases from 0.6% of GDP to 1% of GDP, making it more demanding to uphold the rules. Another important element in decisions on fiscal policy compliance with the requirements of the Stability and Growth Pact is the expenditure rule, which broadly entails a requirement for growth in general government expenditure to be lower than growth in potential output, which allows for sufficient fiscal consolidation.

**Progress on structural reforms is slow.** An ageing population is one of the key challenges facing the majority of euro area countries, but it is particularly pronounced in Slovenia.[7] In the area of pensions, last April saw the publication of a White paper on pension and disability insurance, which contains potential solutions for pension reform. Coordinated guidelines for overhauling the pension system were drafted by the social partners in July of this year. Healthcare reform remains a government priority in 2018 and 2019. The key law in this area is the Health Care and Health Insurance Act. The new version of this law is expected to bring changes in the area of supplementary health insurance, changes in the method and source of funding, new methods for reaching agreement with providers, and other changes. Some expenditure now covered by the Health Insurance Institute is gradually being transferred to the state budget. Work is also continuing in the area of the creation of a system of long-term care. The government adopted its long-lived society strategy in July, the draft law on long-term care is scheduled for public debate in October of this year, and pilot projects to test the proposed solutions are expected to begin in January of next year.

**The key is controlling general government expenditure.** In the area of wages, it was necessary to reach an agreement this year between the government and the public sector unions with regard to the use of funding to eliminate wage anomalies. Negotiations are underway in two parts. An agreement for employees up to the 26th wage grade was reached in the summer, under which the planned funding to eliminate wage anomalies was used in full. Negotiations are also in progress for employees above the 26th wage grade, for positions comparable to physicians, and with regard to the removal of the remaining austerity measures. The government is also planning to remove certain austerity measures in the area of social transfers, most notably child benefits. Further pressure on expenditure comes from the demand for funding for the defence budget. The main uncertainty remains in connection with government investment activity, i.e. major planned investment projects and the ability to speed up the disbursement of EU funds, which in the current situation could additionally contribute to the potential overheating of the economy. The reduction of the deficit could be hindered by one-off factors such as BAMC transactions and court judgments.

[6] The fiscal effort metric is the change in the structural fiscal position (i.e. the position of the general government sector). The structural position is calculated by eliminating cyclical components, one-off effects and other temporary measures from the position of the general government sector. It amounted to a deficit of 1.7% of GDP in 2016, according to European Commission estimates. According to the aforementioned estimates, Slovenia reduced its structural deficit by 0.4% of GDP in 2016, which is the change in structural position or fiscal effort.

[7] The ageing population is forecast to cost Slovenia 5.8% of GDP by 2060 (largely on account of pensions), compared with 1.5% of GDP across the euro area. New calculations for individual EU Member States will be published next year in the Ageing Report being drawn up by the European Commission.

# 7 Price Developments

*This year's developments in inflation as measured by the HICP have reflected price shocks on international markets, although some have also been the result of one-off developments on the domestic market. After rising sharply at the beginning of the year, inflation fell and has stabilised at 1.4% in recent months. Core inflation remains low, despite the strengthening in domestic consumption. It is close to but below the euro area average. This is primarily attributable to prices of non-energy industrial goods, which have been falling for nine years now. The positive economic developments in recent years and the improvement in the situation on the labour market have been more rapidly reflected in services prices, growth in which has been close to 2% for more than a year now.*

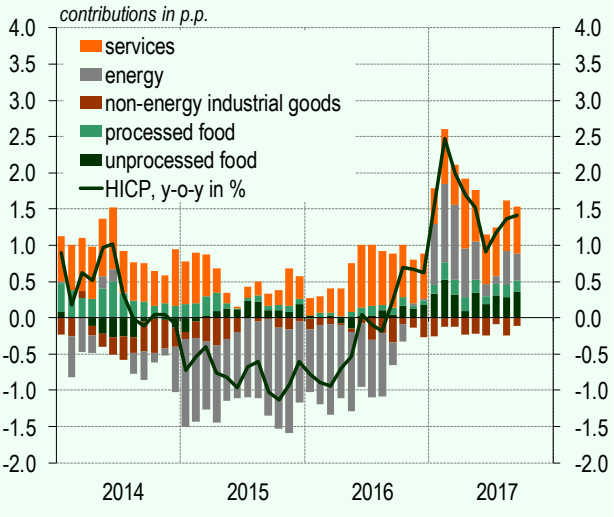
## Structure of price developments

**Year-on-year inflation as measured by the HICP in the third quarter was down slightly on the previous quarter.** After rising sharply in February, inflation slowed until June. In July the trend reversed, and inflation has stabilised at 1.4% over the last two months. Year-on-year inflation in the third quarter was down 0.1 percentage points on the second quarter at 1.3%. There was a slight change in the structure of inflation. Year-on-year growth in energy prices and services prices declined. By contrast, the negative contribution made by prices of non-energy industrial goods slowed, and the contribution made by prices of unprocessed food increased.

## Macroeconomic factors and core inflation indicators

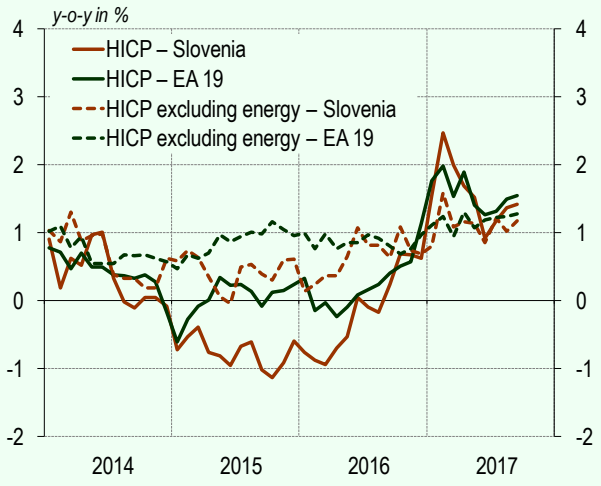
**Core inflation is not reflecting the increase in domestic demand, and remains below 1.0%.** Core inflation

**Figure 7.1: Contributions to headline HICP inflation**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 7.2: Inflation**

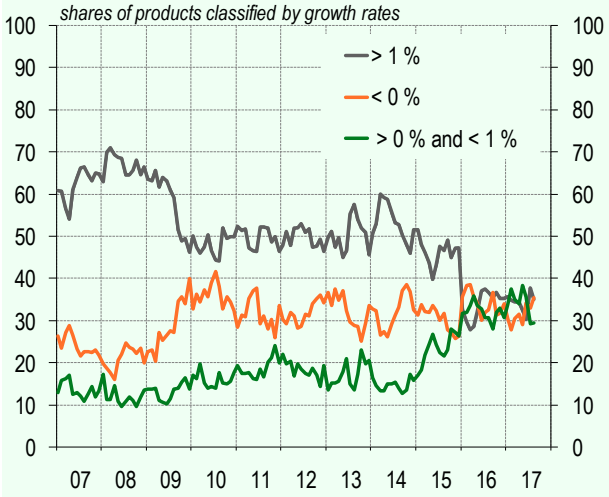



*Source: Eurostat.*

indicators continue to point to slower price growth in Slovenia than in the euro area. Core inflation as measured by the HICP excluding energy and food remains low, and stood at 0.8% in the third quarter, unchanged from the previous quarter. The lower growth in services prices was balanced by a slowdown in the fall in prices of non-energy industrial goods. Inflation according to this metric has remained below 1% for more than a year now. Core inflation across the euro area also remained unchanged from the previous quarter, maintaining the gap at 0.3 percentage points. Within this framework, growth in services prices is overtaking the average across the euro area, while prices of non-energy industrial goods are sharply behind the euro area average.

**The pressures on core inflation are relatively weak: growth in unit labour costs in the first half of the year was low and the growth in import prices slowed over the first eight months of the year.** Year-on-year growth in import prices slowed from 5.3% in February to 2.7% in August, and is mostly the result of dynamics in US dollar commodity prices on the global market and the appreciation of the euro. Growth in unit labour costs in the first half of the year was low, at just 0.5%. There are also no major pressures on prices for the moment on the supply side. By contrast, the real wage bill is increasing, which is being reflected in increased consumption and retail turnover. According to SORS survey figures, firms and consumers are expecting price rises over the short term.

**Figure 7.4: Core inflation as measured by the HICP excluding energy and unprocessed food**

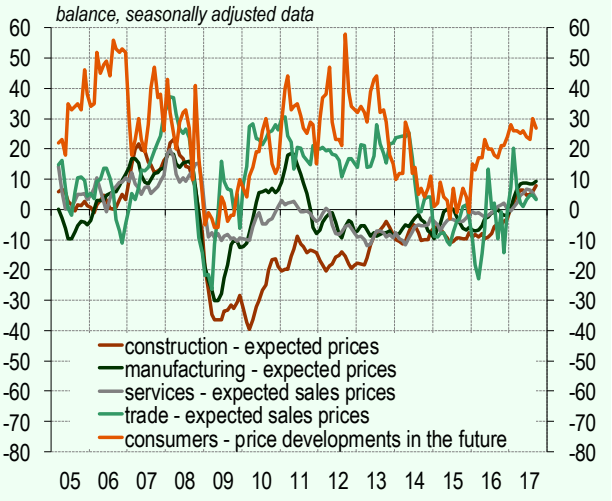



Source: SORS, Bank of Slovenia calculations.

**Figure 7.5: Headline inflation as measured by the HICP**


Source: SORS, Bank of Slovenia calculations.

**Figure 7.3: Surveys on business trends and consumer opinion**




Source: SORS.

**Figure 7.6: Energy prices**


Source: Eurostat, Bank of Slovenia calculations.

**The structure of price growth indicates that upward pressures on prices have been relatively weak over the first nine months of the year, and mostly related to external factors.** Figures 7.4 and 7.5 illustrate the breakdown of products according to their price growth. Figure 7.4 shows that the proportion of products included in core inflation that are recording negative price growth has persisted at around 33% since mid-2009. The breakdown began to shift slightly in mid-2013, primarily on account of products recording positive growth. The proportion of products recording negative growth increased again this year, while the other two categories swapped places. The developments were slightly different for products included in headline inflation, where prices are highly dependent on foreign markets. In this case the fluctuations are larger, and primarily consist of products recording negative growth and products recording growth of more than 1% swapping, which primarily reflects the shocks in oil prices and prices of unprocessed food. In both inflation aggregates it is evident that the number of products recording negative growth has increased again in the last three months.

## Microeconomic factors

**US dollar oil prices have risen again in recent months, although their impact on domestic inflation has partly been neutralised by the rise in the euro.** The average price of a barrel of Brent crude in the third quarter was up 7.3% in year-on-year terms in euros, but up 13% in US dollars. As a result of the rise in euro oil prices, year-on-year growth in energy prices has begun increasing since its low of July, reaching 3.2% in September. The main factor is the resumption of faster growth in prices of motor fuels. Of the other components of energy prices, year-on-year growth in prices of derived heat moved back into positive territory after two years, while year-on-year growth in prices of solid fuels slowed by contrast.

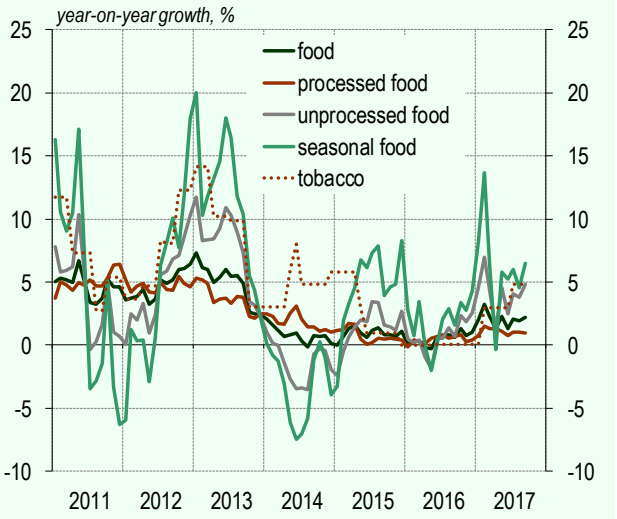
**As a result of an increase in year-on-year growth in prices of unprocessed food and a rise in excise duties on tobacco products, growth in food prices in Slovenia has outpaced the average across the euro area this year.** Year-on-year growth in prices of unprocessed food has been highly volatile this year, and largely dependent on imported spikes in prices of vegetables

**Table 7.1: Structure of the HICP and price indicators**

| | weight | average year-on-year growth, % | | | | | year-on-year growth in quarter, % | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | 2013 | 2014 | 2015 | 2016 | 1H17 | 16Q2 | 16Q3 | 16Q4 | 17Q1 | 17Q2 | 17Q3 |
| **HICP** | *100.0%* | 1.9 | 0.4 | -0.8 | -0.2 | 1.0 | -0.4 | 0.0 | 0.7 | 2.0 | 1.4 | 1.3 |
| **Breakdown of HICP:** | | | | | | | | | | | | |
| **Energy** | *11.9%* | 1.8 | -1.4 | -7.8 | -5.2 | 1.5 | -7.2 | -4.9 | -0.5 | 8.1 | 3.7 | 2.6 |
| **Food** | *22.8%* | 4.9 | 0.8 | 0.9 | 0.5 | 1.5 | 0.1 | 0.7 | 1.0 | 2.5 | 1.6 | 2.1 |
| **processed** | *15.4%* | 3.6 | 1.8 | 0.7 | 0.4 | 0.8 | 0.5 | 0.7 | 0.5 | 1.2 | 1.0 | 1.0 |
| **unprocessed** | *7.4%* | 7.7 | -1.4 | 1.4 | 0.7 | 2.8 | -0.8 | 0.9 | 2.3 | 5.3 | 2.8 | 4.2 |
| **Other goods** | *27.8%* | -0.8 | -1.0 | -0.6 | -0.5 | -0.7 | -0.2 | -0.9 | -0.6 | -0.6 | -0.8 | -0.5 |
| **Services** | *37.4%* | 2.3 | 1.8 | 0.9 | 1.6 | 1.9 | 1.8 | 2.1 | 1.8 | 1.6 | 2.1 | 1.8 |
| **Core inflation indicators:** | | | | | | | | | | | | |
| **HICP excl. Energy** | *88.1%* | 2.0 | 0.7 | 0.4 | 0.6 | 0.9 | 0.7 | 0.8 | 0.8 | 1.2 | 1.0 | 1.1 |
| **HICP excl. energy and unprocessed food** | *80.7%* | 1.4 | 0.9 | 0.4 | 0.6 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 |
| **HICP excl. energy, food, alcohol and tobacco** | *65.2%* | 0.9 | 0.6 | 0.3 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 |
| **Other price indicators:** | | | | | | | | | | | | |
| **Industrial producer prices on domestic market** | | 0.3 | -1.1 | -0.5 | -1.4 | -0.1 | -1.9 | -1.5 | -0.7 | 0.6 | 1.3 | 1.4* |
| **GDP deflator** | | 1.6 | 0.8 | 1.0 | 0.9 | 1.3 | 0.7 | 0.5 | 1.0 | 1.1 | 2.3 | ... |
| **Import prices**[1] | | -1.5 | -1.1 | -1.4 | -2.2 | 1.6 | -4.0 | -1.6 | -0.1 | 4.4 | 3.6 | 2.3* |

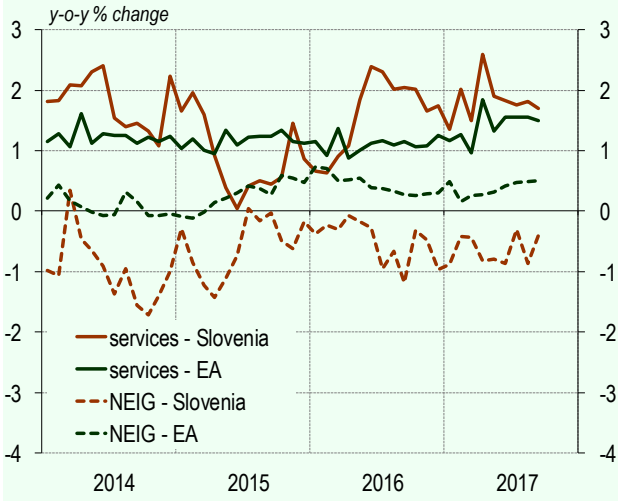
*Notes: * Calculations do not include september data, [1] national accounts data.*
*Source: SORS, Eurostat, Bank of Slovenia calculations.*

**Figure 7.7: Food prices**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 7.8: Services prices and prices of non-energy industrial goods**



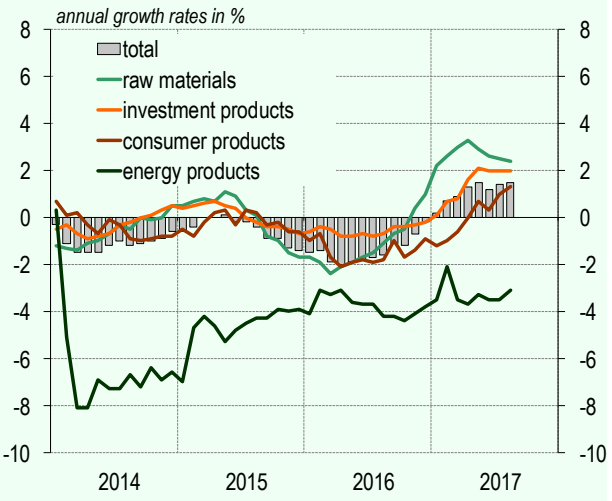

*Source: Eurostat, Bank of Slovenia calculations.*

and peculiar developments in prices of fruit. Year-on-year growth averaged 4.1% over the first nine months of this year, compared with just 0.1% over the same period last year. At the same time the rate outpaced average growth across the euro area by 3.3 percentage points. By contrast, average year-on-year growth in prices of processed food over the same period was 0.3 percentage points less than average growth across the euro area. However, the gap has widened over the year, reaching 1.0 percentage points by September. Excluding the impact of the rise in excise duties on tobacco, prices of processed food in Slovenia are actually falling. The fall is mostly attributable to the categories of bread and cereal products, oils and fats, and alcoholic beverages. Year-on-year growth in overall food prices in Slovenia has also outpaced the euro area, albeit seemingly more as a result of external factors than domestic factors.

**Year-on-year growth in prices of non-energy industrial goods is significantly less than the average across the euro area.** This category has been recording negative year-on-year growth for more than nine years now. The majority of products are recording year-on-year price falls: the largest falls are in prices of cars and prices of furniture and household appliances. Prices of clothing and footwear have risen in year-on-year terms in recent months, partly as a result of changes in seasonal developments owing to the relaxation of regulations with regard to sales. The fall in prices of non-energy industrial goods in Slovenia averaged 0.6% over the first nine months of this year, compared with an average rise of 0.4% across the euro area.

**The favourable economic situation has been reflected for more than a year now in year-on-year growth in services prices, which remains above the average across the euro area this year.** Growth in core inflation is being driven by services prices, year-on-year growth in which has been close to 2% for more than a year now. It nevertheless seems that the dynamic has actually slowed in the last few months of this year. This was attributable to tradable services, where year-on-year growth in prices of telephone services has been declining all year, while prices of passenger air transport have shown greater volatility than in previous years. By contrast, prices of

**Figure 7.9: Industrial producer prices on the domestic market**




*Source: SORS, Bank of Slovenia calculations.*

## Box 7.1: Estimation of the exchange rate pass-through into Slovenia's core inflation

Since the beginning of this year the euro has appreciated sharply against the currencies of some of Slovenia's major trading partners.[1] Via relatively more expensive exports and cheaper imports, a rising currency leads to a loss of competitiveness on the international market, and a fall in domestic inflation. Given that the ECB's primary objective is defined as price stability (consumer price inflation of close to but below 2%), this box attempts to evaluate the impact of the euro appreciation on inflation in Slovenia.

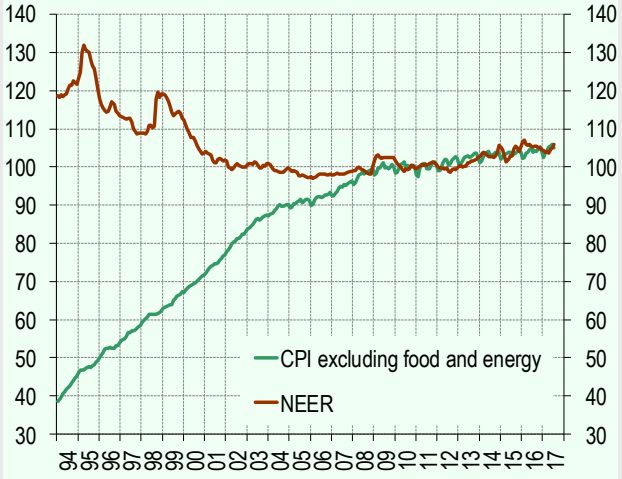
The exchange rate pass-through into Slovenia's core inflation was obtained through estimating a vector autoregression with time varying parameters.[2] Four endogenous variables were included in the model (industrial production index, consumer price index excluding energy and food, nominal effective exchange rate and short-term interest rate), together with their first and second lags and a constant. All variables in the model are expressed as logs, with the exception of the interest rate, which is expressed in percentages. The model was estimated using Bayesian methods, while the identification of structural shocks was achieved through a combination of Cholesky decomposition and sign restrictions.[3] The analysis was conducted on the basis of monthly data for the period of January 1994 to July 2017. The use of a time-varying parameter model allows for the study of the exchange rate pass-through impact over time, although there are of course certain limitations to the analysis, for which caution is required in the interpretation of the results.[4]

The link between the exchange rate and prices has changed over time, which is immediately indicated by the correlation coefficient of the nominal effective exchange rate index and the consumer price index excluding energy and food. This stood at -0.8 for the period between 1994 and 2017, but was positive between 2009 and 2017. The two time series are illustrated in Figure 1. The consumer price index excluding energy and food increased over the entire period, slowing for the first time when Slovenia joined the EU and for the second time at the outbreak of the crisis at the end of 2008. With the exception of two major appreciations, the nominal effective exchange rate depreciated until Slovenia joined the ERM II in 2004, then stabilised, and remained stable until the volatility reappeared during the crisis. From the perspective of the recent dynamics in the exchange rate, the main period of interest is April to July 2017, when the nominal effective exchange rate appreciated by 2.1%.

Figure 2 illustrates the time-varying impulse response of the consumer price index excluding energy and food to a 2.1% appreciation in the nominal effective exchange rate. An exogenous shock in the amount of 2.1% is triggered in the model in April 1995, October 1998, March 2009 and July 2017. The first three years represent periods of notable past appreciations, and are included in the figure for the purpose of illustrative comparison.[5] According to the results of the analysis, the response of prices to change in the exchange rate depends on the timing of the exogenous shock occurrence. The response to the appreciation in 1995 is more intense: a 2.1% appreciation is followed after one year by a fall in prices of approximately 0.33%, while the response to the appreciation occurring in 2017 had halved. Consumer prices excluding energy and food responded to the 2.1% appreciation in July 2017 with a more moderate decline than in previous years. Taking account solely of the effect of the exchange rate appreciation, it is estimated that prices would have fallen by 0.16% by July 2018 (after one year), and by 0.25% by July 2020 (after three years). The impact of the shock is then expected to wane, and prices are forecast to begin slowly returning to their original levels.

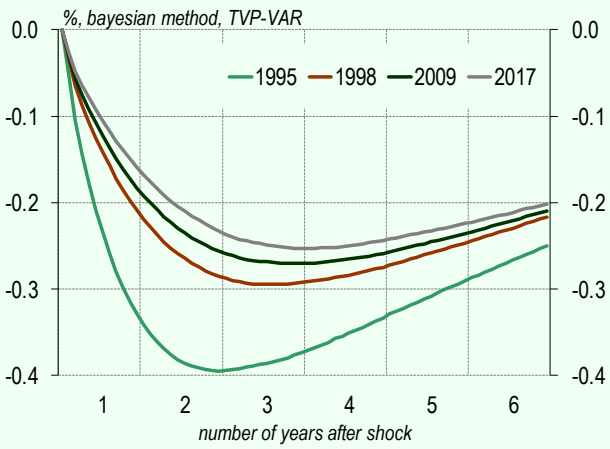
The weakened link between the exchange rate and inflation is indicative of the Slovenian economy's increased resilience to exchange rate shocks, which means that the recent appreciation will not be reflected in such a sharp decline in inflation as would once have been the case. The reduced responsiveness of prices to a shock in the exchange rate is most likely the result of a shift to an environment of lower and more stable inflation. According to endogenous theory, the decision of firms on how much of the change in their own costs and in

**Figure 1: Consumer price index excluding food and energy and nominal effective exchange rate index**




*Source: IMF, OECD.*

**Figure 2: Response of the consumer price index excluding food and energy to a 2.1% appreciation in different years**




*Note: The Consumer Price Index (CPI) was used due to a longer time series compared to the HICP.*
*Source: Bank of Slovenia.*

competitors' prices, resulting from exchange rate fluctuations, to pass through into their own prices depends on the expected persistence of the aforementioned changes. Because the expected persistence is lower in an environment of low and stable inflation, firms pass through a smaller proportion of the changes into their own prices. As a result, the appreciation in the exchange rate has a smaller impact on inflation.

[1] Over the first eight months of this year the euro rose by 12.2% against the US dollar, 7.5% against the Russian ruble, 7.4% against the pound sterling, and 6.6% against the Chinese yuan and the Swiss franc. Currencies that rose against the euro include the Serbian dinar (3.8%), the Polish zloty (3.4%), the Czech koruna (3.4%), the Croatian kuna (1.9%) and the Hungarian forint (1%).

[2] The analysis is based on Sosič, N. (2017). Exchange rate pass-through to domestic prices in Slovenia: a time-varying parameter VAR analysis. Master's dissertation, Ljubljana: University of Ljubljana, Faculty of Economics.

[3] The endogenous variables are included in the model in the following order: industrial production index (index 2010 = 100; seasonally adjusted data; source: OECD), consumer price index excluding energy and food (index 2010 = 100; source: OECD), exchange rate (nominal effective exchange rate index for Slovenia compared with the currencies of a broad group of 42 countries; index 2010 = 100; source: European Commission), short-term interest rate (source: IMF). The exchange rate shock is identified using zero restrictions and sign restrictions: it is assumed in the model that industrial production and core inflation do not respond to an exogenous appreciation shock in the exchange rate contemporaneously, while the interest rate declines in line with the expansionary monetary policy.

[4] The key limitations include the assumption of symmetric responses, the presence of a minimal set of endogenous variables in the model, and the questionable relevance of the chosen time series. The last point applies in particular to the interest rate, which since the beginning of the quantitative easing policy has no longer been the most representative monetary policy instrument, and a measure of the effective exchange rate that does not include all of Slovenia's major trading partners.

[5] The nominal effective exchange rate appreciated by 8.5% between December 1994 and April 1995. An appreciation of the same magnitude occurred between July and October 1998, and the next large appreciation (5%) was recorded between October 2008 and March 2009. Despite the larger appreciations in the aforementioned periods, a shock in the amount of 2.1% is applied in all periods in the analysis for the comparison purposes.

public services are rising. Prices of communication services rose in the spring, while housing rents and prices of health insurance have also risen in recent months. The higher average year-on-year growth in services prices in Slovenia is in line with the faster growth in private consumption and the more favourable situation on the labour market compared with the euro area overall.

## Industrial producer prices

**The rise in import prices in the early part of the year was followed by growth in industrial producer prices on the domestic market.** After falling for more than three years, industrial producer prices on the domestic market have moved into positive growth this year. The year-on-year rate of growth averaged 1.1% over the first eight months of the year, while import prices rose by 3.8% over the same period. Of the broad economic categories, the highest year-on-year growth is being recorded by commodity prices and prices of capital goods, while energy prices are still recording negative year-on-year growth. In the production chain, the low positive growth in producer prices of consumer non-durables and the fall in prices of durables are having an impact on the dynamic in industrial producer prices in retail.

# 8 Selected Themes

## 8.1 Productivity of the Slovenian economy by sector, and comparison with the EU

*In terms of per capita GDP in purchasing power, Slovenia has trailed the EU overall by almost 20% in recent years, which is attributable to the productivity gap as measured by GDP per employee. The gap was narrowing gradually before the crisis, but widened again during the recession as a result of the decline in economic activity, which was significantly larger than the average across the EU. During the crisis the largest decline in productivity compared with the EU was in construction, while the smallest was in industry. The latter is the only one of the observed sectors where productivity relative to the EU has in recent years exceeded its pre-crisis level. Industry is also the sector that has contributed most to Slovenia's reduction of the productivity gap with the EU. Productivity mostly moves in line with GDP or value-added, as a result of relatively low growth in employment. Value-added and productivity have been growing again since 2014, although productivity growth has been outpaced by growth in value-added, primarily as a result of faster employment growth. Nominal productivity increased by 4% in the first half of the year, primarily as a result of high growth in value-added. This is evidence that productivity is profoundly influenced by the length and strength of economic cycles.*

*In addition to the actual depth of the crisis, another reason for the slow catch-up with the EU average is that the potential for conditional convergence has mostly been exploited. The dynamic of specialisation across individual countries is expected to slow down, as the static allocative efficiency in Europe is thought to have been exhausted. Slovenia's integration into European trade chains is still producing positive effects, as the transfer of productivity and of research and development is still underway, although the convergence process is weaker and less automatic. To increase productivity growth in Slovenia it is therefore necessary to better tailor the education system to the requirements of the market, to encourage the introduction of advanced technologies, and to improve the institutional framework. Productivity growth is key to long-term economic growth, and catch-up with more advanced EU Member States.*

### Productivity gap with the EU average

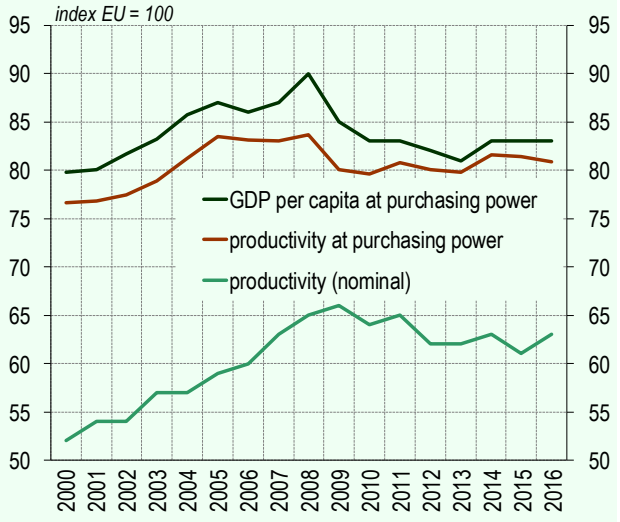
**In terms of per capita GDP in purchasing power, in recent years Slovenia has been just under 20% behind the EU average, which can be explained by a gap in productivity as measured by GDP per employee.** The gap gradually narrowed before the crisis: productivity went from 77% of the EU average in 2000 to 84% in 2008. Productivity in Slovenia later fell to below 80% of the EU average, and had converged merely to 81% by 2016. The analysis compared Slovenia's nominal productivity as measured by nominal value-added per employee with nominal productivity in the EU, in aggregate and by sector.[1] Similar movements are seen in productivity measured in purchasing power, namely convergence from 52% of the EU average in 2000 to 66% before the

[1] The reason that internationally comparable purchasing power figures were not used is that the purchasing power indicator is constructed on the basis of GDP composition (Office for National Statistics, 2007). It is therefore better to take nominal productivity in the comparison of individual sectors. The measurement of this indicator by means of value-added per employee calculated on the basis of national accounts has certain weaknesses, which are examined in the analysis. For example, value-added in the real estate activities sector mostly consists of imputed rents (almost 90% in 2016), which means that the dynamics in value-added in the sector differ from the dynamics in value-added in tradable sectors, however it has a disproportionately large impact on overall productivity. Wages have a significant impact on nominal productivity in mostly public services, which makes comparability with productivity in tradable sectors more difficult.

crisis, a sharper fall in Slovenia's productivity during the crisis, and renewed convergence in recent years that has been slower than the pre-crisis era.

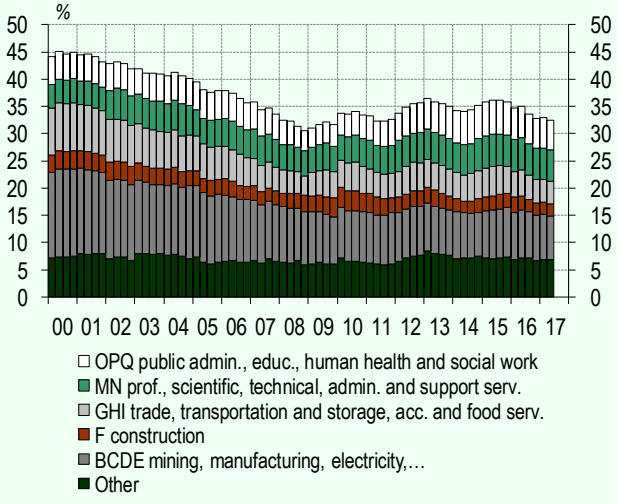
**The analysis focused on the five sectors and groups of sectors that contributed most to the increase or decline in value-added or employment.** These are industry, construction, the combination of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities, the combination of professional, scientific and technical activities and administrative and support service activities, and public services. Of these sectors, the closest nominal convergence with the EU before the outbreak of the crisis was recorded by wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities (which reached more than 80% of the EU average). The largest decline in productivity after 2008 relative to the EU occurred in construction (from 74% of the EU average at the beginning of 2008 to 56% of the EU average at the beginning of 2016), while the smallest decline was recorded by industry (from 61% of the EU average in the second half of 2008 to 59% of the EU average at the beginning of 2010). Industry is the only one of the observed sectors where productivity relative to the EU has in recent years exceeded its pre-crisis level. Industry is also the sector that has contributed most in an absolute sense to Slovenia's reduction of the productivity gap with the EU. Other significant contributions to the reduction of the gap came from the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities, while professional, scientific and technical activities and administrative and support service activities, and mostly public services acted to widen the gap. Compared with the EU, developments in productivity in Slovenia have been much more volatile, while average growth over the observation period was 1.4 percentage points higher in Slovenia.[2]

**Figure 8.1.1: Productivity and GDP per capita**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.1.2: Contributions to the nominal productivity gap with the EU by sector**




*Source: SORS, Eurostat, Bank of Slovenia calculations.*

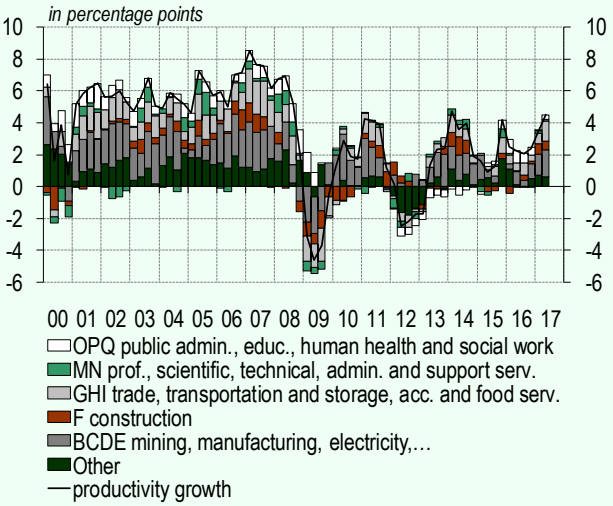
**Developments in nominal productivity depend on the responsiveness of the labour market to changes in economic activity.** This is a consequence of measuring productivity as value-added per employee. For the most

**Figure 8.1.3: Nominal added value, employment and productivity (total economy)**


*Source: SORS, Bank of Slovenia calculations.*

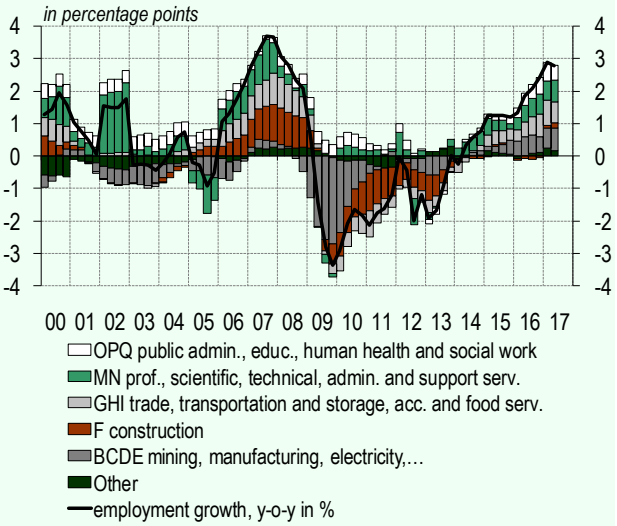
[2] Average growth is measured from 2001 inclusive.

**Figure 8.1.4: Estimated contributions to year-on-year growth in nominal productivity by sector**




*Source: SORS, Eurostat, Bank of Slovenia calculations.*

**Figure 8.1.5: Contributions to employment growth by sectors**

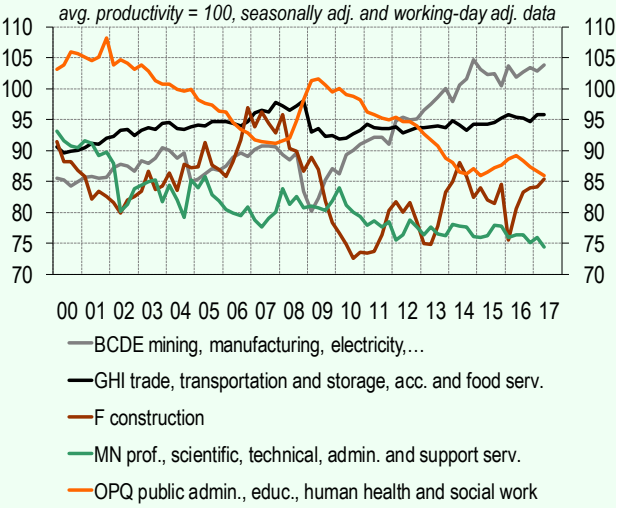



*Source: SORS – national accounts, Bank of Slovenia calculations.*

part productivity growth was relatively aligned with developments in value-added, as employment growth was relatively low. The exceptions were 2006 to 2008, 2009 to 2013 and the period since mid-2014. In the first and last of these, productivity growth was lower than growth in value-added as a result of high employment growth, which averaged 2.5% over the first period as a result of the booming economic outlook and overheating economy, and averaged 1.6% over the last period as a result of the economic recovery after the crisis and the consequent filling of positions lost in the crisis. Between 2009 and 2013 productivity growth exceeded growth in value-added, or declined by less, as a result of the fall in employment, which averaged 1.5% in annual terms over the aforementioned period, as a result of the labour market's response to the crisis.

**Productivity grew over the majority of the observation period, but declined in 2009 and in 2012 and 2013, i.e. in the years of intensive contraction in GDP.** The largest contributions to nominal productivity growth, which averaged 5.9% before the crisis, came from industry, and the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food services. Alongside construction, these sectors also contributed most to the 3% decline in productivity in 2009. The productivity growth that followed was primarily based on industry. The renewed decline was primarily the result of falling productivity in other sectors more closely tied to

**Figure 8.1.6: Deviations from overall productivity in the economy**




*Source: SORS National Accounts, Bank of Slovenia calculations.*

domestic demand, which were hit by fiscal austerity measures in 2012. Productivity growth since mid-2014 has averaged 2.6%, and is based on industry and the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities.

## Industry

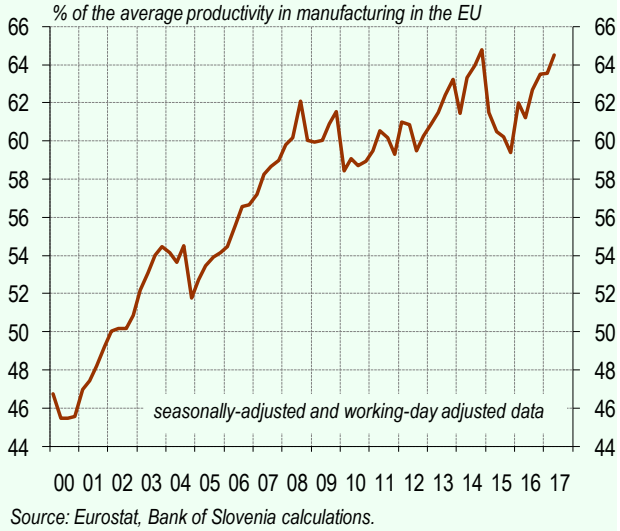
**Nominal productivity in industry has converged to the EU average, from 46% of the average in 2000 to 64% in the first half of 2017.** The convergence process was faster before the crisis, and later slowed, although in contrast to certain other sectors it is still in progress.

Compared with the EU, developments in productivity in Slovenia have been much more volatile, while average growth over the observation period was just over 2 percentage points higher in Slovenia.

**Productivity growth in the observation period mostly outpaced growth in value-added, with the exception of the period since mid-2015.** Productivity growth has recently been outpaced by growth in value-added as a result of faster employment growth, which is at its highest level since measurement began. Employment in industry declined for the majority of the time, in connection with the restructuring of the economy and the collapse of labour-intensive sectors (most notably textiles, food, leather and wood processing) and downsizing in connection with the strengthening of the competitive position. The high employment growth since 2014 is probably temporary, as it is the result of above-average lay-offs in the crisis and the filling of positions during the new upturn.

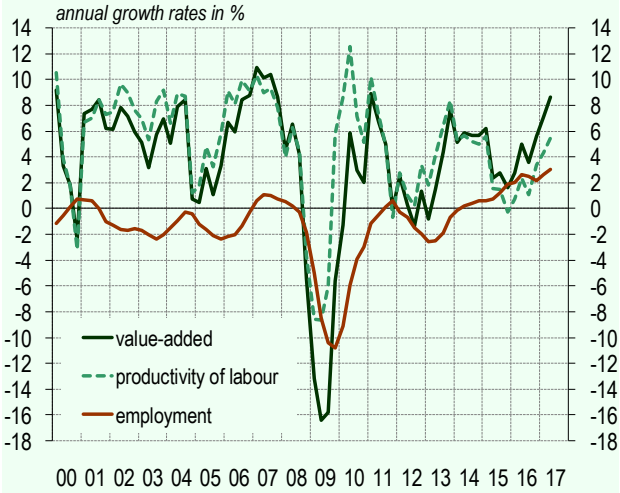
**Value-added and productivity in industry are primarily driven by foreign demand, as firms in this sector generate the vast majority of their turnover on foreign markets.** Productivity in industry stood at around 85% of overall productivity at the beginning of the observation period, and had converged to 91% by 2008. Partly owing to the dependence on foreign markets, in the first wave of the crisis in late 2008 productivity in industry declined by more than overall productivity,[3] as the global trade crisis meant that exports declined more sharply than domestic demand. However, it subsequently recovered more quickly as a result of a faster revival in foreign demand than in domestic demand, which was hit hard by government austerity measures, and exceeded overall productivity by more than 3% in the first half of 2017.

**Figure 8.1.7: Nominal productivity in industry compared with the EU average**




Source: Eurostat, Bank of Slovenia calculations.

**Figure 8.1.8: Nominal value-added, employment and productivity (industry)**




Source: SORS, Bank of Slovenia calculations.

## Construction

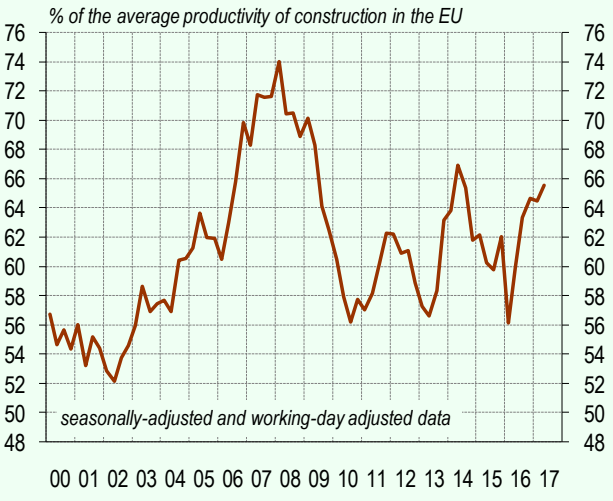
**Developments in productivity in construction are profoundly dependent on the investment cycle.** Productivity in construction converged on the EU average in the period to the beginning of 2008 (from 55% of the average in 2000 to 74%), as construction activity grew rapidly as a result of an extremely strong investment cycle in the private sector and also in the government sector and government-related firms. After the bursting of the construction bubble during the crisis, productivity declined sharply

[3] The reason that productivity in the majority of the illustrated sectors is lower than overall productivity is the level of productivity in information and communication, financial and insurance activities, and real estate activities. Productivity in the last of these strongly exceeds overall productivity, as a result of the measurement of value-added in this sector (productivity is measured by value-added per employee), where it mostly consists of imputed rents (almost 90% in 2016), which means that the dynamics in value-added in the sector differ from the dynamics in value-added in tradable sectors (SORS, 2007). Productivity in information and communication and in financial and insurance activities is up to double the average productivity in approximate terms. Compared with the EU, nominal productivity in information and communication converged from 56% of the average in 2000 to 62% at the end of 2008. This was followed by divergence, which resulted in productivity in the sector standing at 54% of the EU average in the first half of 2017. Compared with the EU, nominal productivity in financial and insurance activities converged from 63% of the average in 2000 to 74% in 2008, followed by divergence. Productivity in financial and insurance activities stood at 56% of the EU average in the first half of 2017.

and stood at 65% of the EU average in the first half of 2017, a level comparable to that from the beginning of the period of the overheating economy in mid-2006. The convergence process until 2008 was therefore followed by a divergence process, which was temporarily interrupted mainly by the concentrated exploitation of EU funds in 2013 and 2014. Productivity in construction has been strengthening again this year: construction investment is increasing again, significantly more than the rise in employment. Compared with the EU, developments in productivity in construction in Slovenia have been much more volatile, while average growth over the observation period was 1.3 percentage points higher in Slovenia.

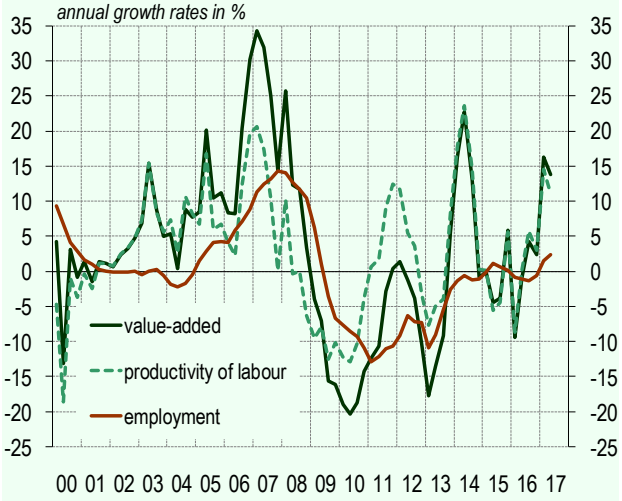
**During the period of the overheating economy and the double-dip recession, productivity in construction deviated significantly from developments in value-added.** These are the periods of 2005 to 2008, and 2009 to 2013. In the first period productivity growth was lower than growth in value-added until the bursting of the investment bubble in 2008, as employment growth averaged almost 9% over this period. The high employment growth was the result of the strong outlook in construction on account of the construction of motorways, other infrastructure and residential real estate, where the high demand was related to favourable financing conditions in the wake of a fall in real interest rates (Bank of Slovenia, 2008). In the second period the decline in productivity was smaller than the decline in value-added; productivity growth was higher owing to the fall in employment, which averaged 7.2% over this period, as a result of the deep crisis in construction in which the vast majority of construction firms collapsed.

**Figure 8.1.9: Nominal productivity in construction compared to the EU average**




Source: Eurostat, Bank of Slovenia calculations.

**Figure 8.1.10: Nominal value-added, employment and productivity (construction)**




Source: SORS, Bank of Slovenia calculations.

**During the crisis productivity in construction was significantly behind overall productivity in the Slovenian economy.** Productivity in construction stood at 89% of overall productivity at the beginning of the observation period, and exceeded 90% in the pre-crisis period. Productivity in construction declined much more during the crisis, as the shock after the bursting of the investment bubble was stronger than the shocks in foreign demand and domestic final consumption, while the adjustment in employment in the early part of the crisis was outpaced by the decline in value-added. Value-added in construction has been declining since 2009, with the exception of spikes in the periods of 2013 to 2014, and the second half of 2016 to the first half of 2017. Changes in employment have been small relative to changes in activity since 2013, for which reason movements in productivity have aligned with movements in value-added. Productivity remains significantly below its pre-crisis level, and stands at just 85% of overall productivity in the economy in the first half of 2017.

## Wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities

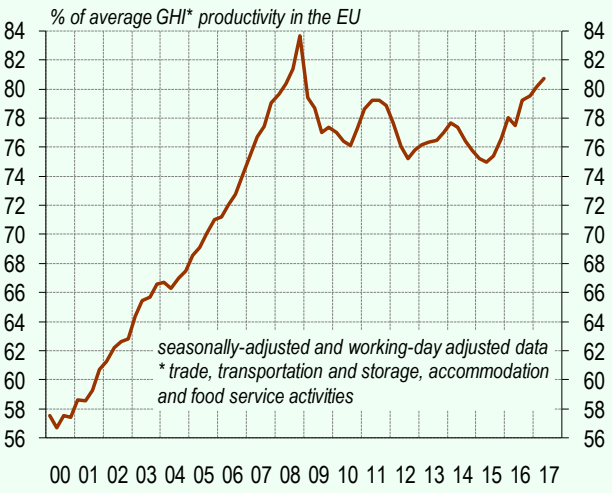
**Productivity in the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities was closest to average productivity across the EU.** Productivity in this combined sector converged from 57% of the EU average in 2000 to 84% at the end of 2008. Productivity fell sharply in the crisis, but began converging on the EU average again in mid-2015, although this convergence process was slower than during the pre-crisis period. Productivity relative to the EU average in the first half of 2017 was lower than its pre-crisis level, at just over 80%. Compared with the EU, developments in productivity in Slovenia have been much more volatile. Like in industry, its average growth over the observation period was more than 2 percentage points higher than the average across the EU.

**Productivity in the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities was also greatly affected by developments in economic activity.** In the period of 2005 to 2008 and the period since mid-2014 productivity growth was lower than growth in value-added as a result of high employment growth, which averaged almost 3% over the former and just over 2% over the latter. Growth in value-added and employment in both periods was tied to growth in domestic demand and foreign demand. In the period of 2010 to 2011 productivity growth exceeded growth in value-added, as a result of the fall in employment, which amounted to 2.4% over the aforementioned period. This is evidence that employment usually reacts to developments in value-added with a lag. Value-added in this combined sector declined as a result of links with the sectors that were hit hardest by the crisis, and the shock in private consumption.

**Figure 8.1.12: Nominal value-added, employment and productivity (Sectors G, H and I)***

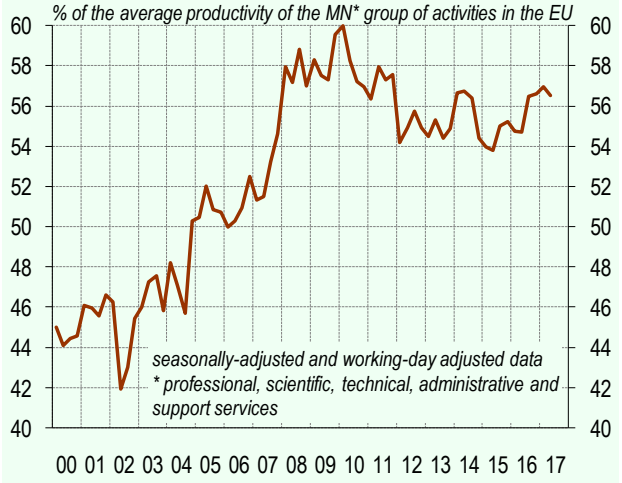

Source: SORS, Bank of Slovenia calculations.

**Figure 8.1.11: Nominal productivity in Sectors G, H and I compared with the EU average**




Source: Eurostat, Bank of Slovenia calculations.

**Figure 8.1.13: Nominal productivity in Sectors M and N compared with the EU average**




Source: Eurostat, Bank of Slovenia calculations.

**Productivity in the combined sector of wholesale and retail trade and repair of motor vehicles and motorcycles, transportation and storage, and accommodation and food service activities is comparable to overall productivity in the economy.** It stood at around 90% of overall productivity at the beginning of the observation period, and had converged to 98% by 2008. Productivity in the combined sector declined by more than average during the crisis, then resumed convergence in 2010, reaching 96% of overall productivity in the first half of 2017. Of the major sectors, this combined sector is second in terms of the level of productivity, immediately behind industry.

## Professional, scientific and technical activities and administrative and support service activities

**Relative to the EU, productivity in professional, scientific and technical activities and administrative and support service activities is lower than before the crisis.** Productivity in this combined sector stood at 45% of the EU average in 2000, but had risen to 60% by 2010. Productivity subsequently fell, resumed convergence in 2015, and reached 57% of the EU average in the first half of 2017. The convergence in recent years has been slower than in the pre-crisis period. Compared with the EU, developments in productivity in Slovenia have been much more volatile, while average growth over the observation period was 1.6 percentage points higher in Slovenia.

**Compared with the other sectors observed, developments in productivity were less aligned with developments in value-added, primarily as a result of greater volatility in employment.** Particularly noteworthy is the jump in employment in 2002, as a result of contract-based workers being classed as employees and workers on intellectual service contracts being classed as self-employed as of 2002.[4] Growth in value-added over this period was high, and comparable to employment growth, while productivity growth was negative. A significant increase in employment was also seen in the period of 2006 to 2008. This was the result of high economic growth in connection with the strong economic cycle in Slovenia and in the rest of the world. Growth in value-added again outpaced productivity growth during this period. A similar pattern has been seen in recent years.

**Figure 8.1.14: Nominal value-added, employment and productivity (Sectors M and N)***


Source: SORS, Bank of Slovenia calculations.

**In contrast to other sectors, which converged on overall productivity in the economy at least in certain periods, a trend of divergence was seen in professional, scientific and technical activities and administrative and support service activities.** Productivity in this combined sector stood at approximately 92% of overall productivity at the beginning of the observation period, but at just 75% at the end. Productivity in this combined sector is thus increasing more slowly than in the economy overall.

## Public services

**Relative to the EU average, productivity in public services is at its pre-crisis level, while its development was profoundly affected by changes in the wage system and austerity measures.** Productivity in public services converged on the EU average, from 68% of the average in 2000 to 79% in the first half of 2009. The sharp increase in 2008 and 2009 was primarily the result of a larger rise in wages as a result of the elimination of wage disparities in the public sector.[5] This was followed

[4] The level of self-employment in this sector stood at 11.3% in 2001, 17% in 2002, and 26.2% in the first half of 2017.
[5] This was the result of the method for measuring nominal productivity in mostly public services (Sectors O, P and Q). The measurement is made quarterly on the basis of developments in employment and, in particular, wages, which hinders comparability with productivity in tradable sectors (SORS, 2007).

**Figure 8.1.15: Nominal productivity in public services compared with the EU average**


Source: Eurostat, Bank of Slovenia calculations.

**Figure 8.1.16: Nominal value-added, employment and productivity – (public services)***


Source: SORS, Bank of Slovenia calculations.

by divergence caused by austerity measures, which mainly acted to reduce wages, but also partly reduced employment. A period of convergence resumed in 2015, when the austerity measures began to be removed. Compared with the EU, developments in productivity in Slovenia have been much more volatile, while average growth over the observation period was 0.3 percentage points higher in Slovenia.

**Productivity growth over the majority of the period has been slightly lower than growth in value-added, as a result of relatively high employment growth.** Productivity and value-added only declined in the period of 2012 to 2014, when employment in these sectors also fell alongside the reduction in wages brought by austerity measures.

**Public services also saw a trend of divergence from overall productivity in the economy.** Productivity in public services stood at approximately 105% of overall productivity at the beginning of the observation period. Then divergence followed until 2008, when wages were raised in public services to eliminate wage disparities, as a result of which productivity exceeded overall productivity in early 2009. This was again followed subsequently by divergence because of austerity measures, and productivity in public services stood at 86% of overall productivity in the first half of 2017. Here it should be noted that it is difficult to compare productivity between tradable sectors and mostly public services, because wage developments have a profound impact on the calculation of productivity in the latter, while wages in public services converged with average wages in the private sector over the observation period as a result of slower growth. This slower growth has an accounting impact on the divergence of productivity from the overall productivity in the economy.

## Potential factors in the productivity gap

**The convergence of productivity with the EU average slowed during the crisis, as the convergence process became weaker and less automatic, while the decline in GDP was also significantly more pronounced.** Stehrer states that another possible explanation for the slowdown in catch-up is that the potential for conditional convergence[6] has mostly been exploited, and that the country is caught in the middle-income trap.[7] This happens when a country loses its competitive advantage in exports because wages are rising. This does not apply to Slovenia, as Slovenia's exports are growing more quickly than those of the most advanced EU economies. At the same time the country is still unable to economically track more advanced economies in markets with higher value-

[6] When countries differ in fundamental attributes, the Solow model forecasts conditional convergence. This means that living standards will only converge in groups of countries with similar attributes. For example, a low-income country with a low saving rate can converge on a wealthier country with a low saving rate, but can never catch up with wealthy countries with a high saving rate (Solow, 1957).
[7] The middle-income trap is a theoretical situation of economic development when a country that reaches a certain level of income persists at this level.

added. The dynamic of specialisation across individual countries is expected to slow, as the static allocative efficiency[8] in Europe is thought to have been exhausted. Slovenia's integration into European trade chains since the crisis is still producing positive effects, as the transfer of productivity and of research and development is still underway. The effect of this transfer also depends on the absorption capacity (own research and development, human capital, etc.) of the country (Stehrer, 2017).

**The barriers to productivity growth include a weak institutional framework, and knowledge-related factors.** Slovenia has made important shifts in these two areas, but too little to be able to track its most advanced trading partners, let alone in a period of rapid technological advancement and globalisation. One issue in the area of knowledge is insufficient capacity to keep pace with technological advancement. This is related to an education system that is not tailored enough to the requirements of the market, which is evidenced by adult skills that are below the OECD average,[9] and insufficient willingness on the part of managers to introduce advanced technologies. Economic policy to increase productivity must therefore focus on these areas. Another reason why productivity growth is extremely important to the maintenance of high economic growth is the expected contraction in the working-age population as a result of the ageing population (IMAD, 2017).

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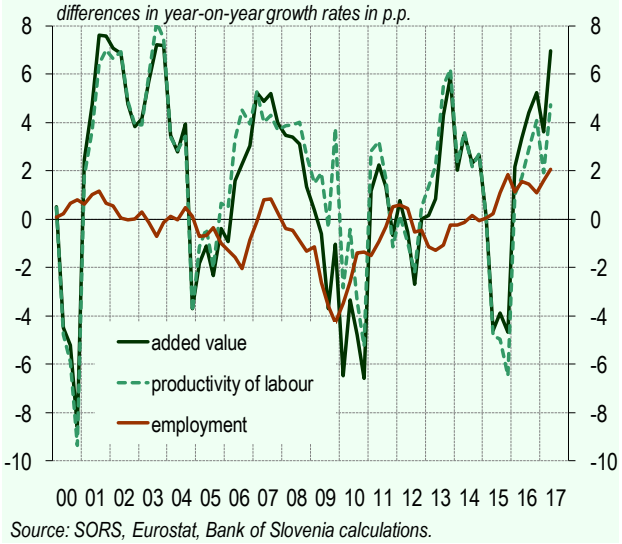
## Appendix: Differences between Slovenia and the EU in the growth of nominal value-added, productivity and employment at the level of the entire economy and in selected activities

**Figure 8.1.17: Differences in growth between Slovenia and the EU (total economy)**


Source: SORS, Eurostat, Bank of Slovenia calculations.

**Figure 8.1.18: Differences in growth between Slovenia and the EU (industry)**




Source: SORS, Eurostat, Bank of Slovenia calculations.

[8] Static allocative efficiency is the best distribution of resources in an economy at a given moment.
[9] According to the results of the 2014 PIAAC survey of adult skills, adults in Slovenia achieve results that are below the average of OECD countries in the areas of literacy, numeracy and problem-solving in technology-rich environments (OECD, 2016).

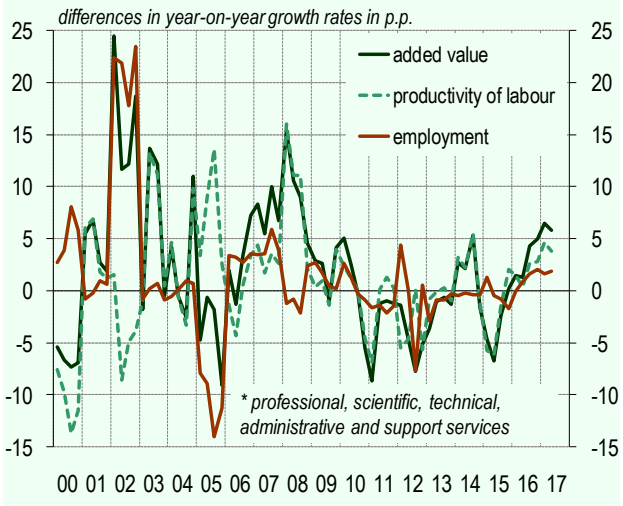
**Figure 8.1.19: Differences in growth between Slovenia and the EU (construction)**


*Source: SORS, Eurostat, Bank of Slovenia calculations.*

**Figure 8.1.20: Differences in growth between Slovenia and the EU (Sectors G, H and I)***


*Source: SORS, Eurostat, Bank of Slovenia calculations.*

**Figure 8.1.21: Differences in growth between Slovenia and the EU (Sectors M and N)***




*Source: SORS, Eurostat, Bank of Slovenia calculations.*

**Figure 8.1.22: Differences in growth between Slovenia and the EU (public services)***


*Source: SORS, Eurostat, Bank of Slovenia calculations.*

# 8.2 Estimating overheating patterns – the case of Slovenia

*Early warning frameworks can be an important tool with considerable value to policy makers by informing them about potential vulnerabilities, thus assisting in the design and implementation of pre-emptive actions before the onset of a costly crisis. This study uses quarterly data for the Slovenian economy from 2000q1 or as early as possible until the most recent available. Several macroeconomic and financial indicators are examined through a multi-step procedure which seeks to determine the best performing ones in correctly identifying the pre-2008 overheating period. The results show that 10 indicators from those examined could provide informative signals 1 to 3 years in advance. Finally, the framework gives an indication about the current status of the economy and points to some areas that would warrant more close monitoring.*

## Introduction

**Considering the fact that financial crises and their resolution can have considerably adverse impact on society's well-being, researchers in academia and policymaking institutions have tried to develop frameworks and identify indicators that could provide warning signals in advance of the occurrence of such events when preventive measures can be effectively implemented.** In particular, Slovenia has experienced a long and deep recession partly due to external factors, but predominantly because of domestic reasons that led to overheating of the economy, which was followed by a bust period, predominantly in investment. This study aims to develop a forward-looking framework which can provide policy makers with early warning signals about the risk of the Slovenian economy being in an excessive and unsustainable growth path. Current findings show that Slovenian economy is indeed in an expansion period but the risk of overheating is still relatively low. Nevertheless, certain indicators have been growing fast for an extended period and require closer monitoring.

## A brief review of methodological approaches

**The literature on the development of early warning systems can be divided in two broad classes by the type methodological approach used.** The first one is the signalling (non-parametric) approach. This approach examines the behavior of individual variables around crisis episodes and tries to extract signals defined in terms of specific thresholds. Non-parametric methods are used to extract the trend for each variable (Hodrick-Prescott filter, moving averages) and deviations from that trend above a specific threshold signal the occurrence of a crisis within a certain horizon. This approach has the advantage of being transparent, straightforward to apply and is feasible in a data constrained environment. Some representative studies from this class are those of Kaminsky & Reinhart (1999), Borio & Lowe (2002), Borio & Drehmann (2009), Ito et al., (2014). The second class consists of multivariate (parametric) methods. Under this approach, information from many variables is incorporated into one single indicator denoting the probability of a crisis occurring in a specific horizon. Most models are developed by employing logit/probit regressions (Demirgüç-Kunt & Detragiache, 1998; 2005; Bussière & Fratzscher, 2006) but other choices range from Markov switching models (Abiad, 2003) to machine learning methods (Holopainen & Sarlin, 2016; Joy et al., 2017). The advantage of this approach is that it provides a unifying framework and combines information from many indicators into a single measure. Nevertheless, this comes at a cost of being considerably more data demanding (in terms of number of observations as well as crisis events) and computationally complex. It is not a coincidence that the majority of the studies using that approach are multi-country studies and use data from as early as the 1970's.

**Table 8.2.1: Variables tested from the perspective of their early warning capabilities**

| | Variable | Transformation / units | Date range |
|---|---|---|---|
| 1 | real GDP | y-o-y in % | 2000q1 - 2017q1 |
| 2 | current account position | % of nominal GDP | 2000q1 - 2017q1 |
| 3 | trade balance | % of nominal GDP | 2000q1 - 2017q1 |
| 4 | gross foreign debt | y-o-y difference of share in GDP, pp. | 2002q1 - 2017q1 |
| 5 | total gross-fixed investment | % of nominal GDP | 2000q1 - 2017q1 |
| 6 | construction investment | y-o-y in %, real | 2000q1 - 2017q1 |
| 7 | core inflation (excl. energy, food, alcohol and tobacco) | difference between y-o-y growth in SI and EA, pp. | 2000q1 - 2017q1 |
| 8 | prices of used dwellings | y-o-y in % | 2001q1 - 2016q4 |
| 9 | credit to private sector | % of nominal GDP | 2000q1 - 2017q1 |
| 10 | growth of loans to NFCs and households | y-o-y in % | 2000q1 - 2017q1 |
| 11 | SBI TOP | y-o-y in % | 2000q1 - 2017q1 |
| 12 | compensation of employees relative to nominal GDP | difference between y-o-y growth in wage bill and nominal GDP, pp. | 2000q1 - 2017q1 |
| 13 | compensation of employees excluding OPQ relative to GDP | difference between y-o-y growth in wage bill (excl. OPQ) and nominal GDP, pp. | 2000q1 - 2017q1 |
| 14 | nominal ULC in the economy | difference between y-o-y growth in SI and EA, pp. | 2000q1 - 2017q1 |
| 15 | survey unemployment rate | y-o-y in % | 2001q1 - 2017q1 |
| 16 | uncertain economic conditions | value of seasonally adjusted indicator | 2000q1 - 2017q1 |
| 17 | economic sentiment indicator - total economy | value of seasonally adjusted indicator | 2000q1 - 2017q1 |
| 18 | expected total demand – manufacturing | seasonally adjusted balance of answers in pp. | 2005q1 - 2017q1 |
| 19 | order books expectations – construction | seasonally adjusted balance of answers in pp. | 2005q1 - 2017q1 |
| 20 | expected orders - retail trade | seasonally adjusted balance of answers in pp. | 2005q1 - 2017q1 |
| 21 | expected demand - services other than retail trade | seasonally adjusted balance of answers in pp. | 2005q1 - 2017q1 |

*Source: ECB, Eurostat, Bank of Slovenia, Bank of Slovenia calculations.*

## Data and methodological framework

**The development of the overheating identification framework is based on a multi-step statistical procedure which aims to identify the most informative indicators that were able to provide a warning signal during the overheating period preceding the 2008q4 event.** The above 21 variables are examined in terms of their early warning signal issuing performance. The earliest data range from 2000q1 until 2017q1, as presented in Table 8.2.1. Data prior to 2000q1 are not used because the transition process of the previous years affects the behaviour of the various variables.

**The short time span and the fact that only one crisis event due to overheating is included in the dataset pose significant challenges.** In a single country context and given these limitations, the most appropriate methodology for the development of an early warning framework is the univariate/signalling (non-parametric) approach. Under this approach, a signal is issued whenever an indicator exceeds a certain threshold above or below its past trend.

**The trend for each variable is extracted using simple moving averages in three different windows; a 6 quarter window (MA6), an 8 quarter window (MA8) and a 12 quarter window (MA12).** Thus, for each variable 3 different trends are considered for further analysis. This trend extracting method is transparent, robust and applicable even in the case of data constrained applications. The deviation of each variable from its past trend is defined as:

$$RMS_{y,m} = \sqrt{\frac{1}{N-1}\sum_{i=1}^{N}\left(y_t - y_t^{trend\ ,m}\right)^2}$$

where $N$ is the number of observations, $y_t$ is the value of variable $y$ at time $t$ and $y_t^{trend,m}$ is the trend of variable $y$ estimated using method $m$. Of course, $m$ refers to each of the three moving averages used (MA6, MA8, MA12). The "normal conditions" range of each variable is defined as $\varepsilon$ times its RMS around its past trend. Three different thresholds $\varepsilon$ are examined; 1 RMS; 1.25 RMS and 1.5 RMS. In total, 189 (21 variables 3 trend extracting methods 3 thresholds $\varepsilon$) indicators are considered in the analysis, with the term "indicator" denoting a specific combination of trend extracting method/threshold for each variable. It should be emphasized that overheating is implicitly defined as excessive deviation from past trend.

**Three statistical measures are used to identify the optimal indicator for each variable.** Here, optimality refers to the highest ability of giving an early warning signal prior to the 2008q4 event, while at the same time displaying the lowest acceptable number of false alarms. In particular, the early warning period is defined as the time between 2005q4 and 2007q4, i.e. 12 – 4 quarters in advance of 2008q4. This timeframe is commonly used by the literature (e.g. Sarlin, 2013; Behn et al., 2013; Behn et al., 2016) and it leaves enough time for the policymakers to investigate closely and take appropriate action if needed.

**The measures used to assess the signalling performance of the various indicators are Accuracy, policymaker's loss function L (Sarlin, 2013) and the AUROC (Area Under Receiver Operating Characteristic) curve.** All these measures are based on the following contingency matrix. Each observation can be allocated in one of the four quadrants of Table 2. If a signal issued by a specific indicator is followed by the occurrence of a crisis 4 to 12 quarters ahead, then this is considered as a True Positive (TP). However if it is not, then this is considered a False Positive (FP). Conversely, if no signal is issued but a crisis occurred 4 – 12 quarters in the future, then this is classified as a False Negative (FN). Similarly, if no signal is issued and there is no event in the given horizon, then this is regarded as a True Negative (TN). Two types of errors can be distinguished from Table 2. Type 1 errors are associated with missing a crisis and are defined as FN/(TP+FN), while Type 2 errors denote false alarms and are defined as FP/(FP+TN).

**Accuracy is defined as the ratio of correct signals (TP + TN) over the total number of signals issued before the crisis event in 2008q4.**

$$Accuracy = \frac{TP + TN}{TP + TN + FP + FN}$$

The closer the Accuracy of an indicator is to 1, the better that indicator is. The threshold applied for considering an indicator for further analysis is having an Accuracy ≥ 65%. By applying this condition, variables with low performing indicators (i.e. combinations of trend extracting method/threshold with Accuracy < 65%) are excluded from the analysis. The second measure for assessing the performance of an indicator, is the policy maker's loss function which is initially introduced by Bussière and Fratzscher (2008) and later extended by the works of Alessi and Detken (2011) and Sarlin (2013). The policy maker's loss function $L$ is defined as:

$$L = \mu P_1 \cdot T_1(\varepsilon) + (1 - \mu) P_2 \cdot T_2(\varepsilon)$$

where $\mu \in [0,1]$ is the policy maker's preference parameter, $T_1$ and $T_2$ are Type 1 and Type 2 errors respectively. $P_1$ is the ratio of the number of periods in which a signal should be issued, while $P_2$ is its complementary, $P_2 = 1 - P_1$.

**The preference parameter $\mu$ indicates the type of errors that a policy maker is more averse to making.** Larger values of $\mu$ emphasize aversion towards missing a crisis (Type 1 errors), whereas smaller values emphasize aversion toward false alarms (Type 2 errors). For a perfectly balanced policy maker μ would assume the val-

**Table 8.2.2: Contingency matrix**

| | Event (at period = t) | No event (at period = t) |
|---|---|---|
| Signal (at period = [t-12, t-4]) | True Positive (TP) | False Positive (FP) |
| No signal (at period = [t-12, t-4]) | False Negative (FN) | True Negative (TN) |

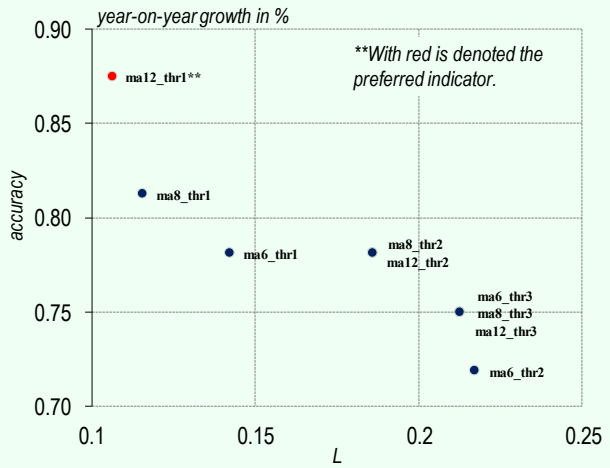
*Source: Eurostat, Bank of Slovenia calculations.*

ue of 0.5. In the early works using *L*, the values of μ for horizons similar to those examined in this study are set to below 0.5. However, despite the fact that they also advocate the use of $\mu$'s below 0.5, Alessi and Detken (2011) note that "the recent financial crisis might have increased the average [value of the preference parameter]". Recent studies (Behn et al., 2013; Behn et al., 2016; Ito et al., 2014) use values above 0.8, thus putting more weight in avoiding Type 1 errors. In this study the preference parameter is set to $\mu$ = 0.85.

**For each variable, the indicator that exhibits the highest Accuracy (conditional on being greater than 65%) with the lowest *L* is considered for further analysis.** An example using real GDP growth indicators is presented in the respective graph. The performance of the indicators examined for the case of real GDP growth in terms of Accuracy and loss function *L* is presented. All of them exhibit an Accuracy of above 70%, however one of them has the highest Accuracy and the lowest L of close to 0.1 (marked with red). This indicator corresponds to the pair of MA12 as a trend extracting method using the threshold with index number 1 (i.e. 1 RMS) around that trend. Therefore, for the variable of real GDP growth this indicator is kept for further analysis.

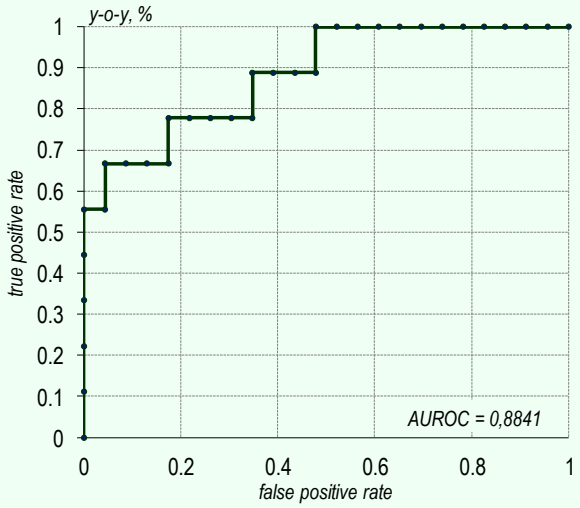
**The final statistical measure used is the AUROC curve.** This measure is used in the empirical literature on early warning system development (Drehmann & Juselius, 2014) and assesses the discriminatory power of a signalling method. The closer the value of the AUROC curve is to 1, the higher the discriminatory power of that method or indicator. The threshold applied for the final consideration of an indicator is exhibiting a value of AUROC curve greater than 0.7. An example of the AUROC curve of the aforementioned indicator for real GDP growth is shown. As shown in the respective graph, the indicator considered for real GDP growth (MA12/1 RMS) exhibits a high discriminatory power with the area under ROC curve being around 0.88.

**Figure 8.2.1: Accuracy vs L for all indicators*, considered for the variable of real GDP growth**




*Note*: Trend extracting method/threshold combinations.*
*Source: Eurostat, Bank of Slovenia calculations.*

**Figure: 8.2.2: The AUROC curve for the indicator (MA12/1 RMS) for real GDP growth**




*Source: Eurostat, Bank of Slovenia calculations.*

**Since there is only one period of overheating in the sample that is followed by a crisis, the previous analysis focuses on assessing the signalling performance of the various indicators prior to that event.** Therefore, the "calibration" of the framework is based on that period and conclusions regarding the present situation are made under the assumption that similar conditions will result in similar outcomes in the future.

## Addressing the "post-crisis bias"

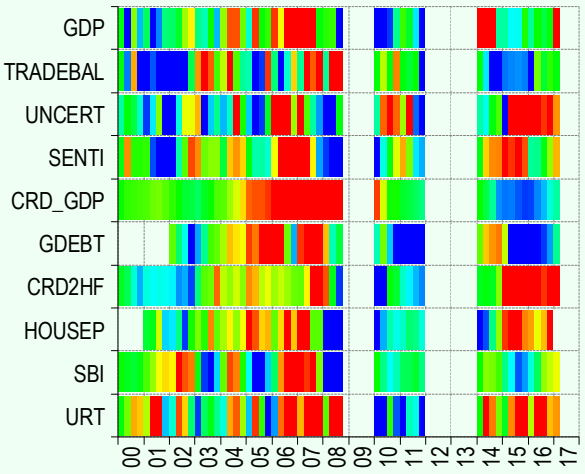
**Before proceeding further with the analysis, the "post-crisis bias" is dealt.** The effect of the conditions prevailing during crises in the development of early warning systems is known as the "post-crisis bias" in the literature (Bussière & Fratzscher, 2006). The fact that the behaviour of the indicators examined is very different during tranquil times as compared to recovery episodes can lead to an important bias. Especially in the case of this study,

trend extracting methods are affected by crisis events, resulting in incorrect classification of recoveries as overheating episodes. Crisis events affect the framework in two ways; first by pushing trends substantially downwards, thus misclassifying subsequent upward movements as overheating periods. Second, crises add significant variation in the sample, therefore thresholds must be lowered in order to correctly identify pre-crisis overheating periods. Consequently, recoveries surpass that low threshold and are incorrectly classified. This problem can be mitigated by excluding the data around crisis periods as in (Demirgüç-Kunt & Detragiache, 1998). The crisis dates can be determined using two approaches. The first one is by expert judgement since, ex post, dating of the event is fairly clear. Another approach is using a Markov-switching model approach to estimate the probabilities of being in a given state (expansion/recession) from the data. The expert judgement approach used in this study results in excluding observations from 2008q4 to 2009q4 and from 2012q1 to 2013q4. The dates determined by the Markov-switching model approach are very similar to the previous ones (2008q4 – 2010q1, 2012q2 – 2013q3) and do not materially change the results.

## Empirical results

**The final output is presented in a form of a heatmap.** Warm colours denote an excessively expansionary evolution and cold colours denote an excessively contractionary one. It should be noted again that overheating is defined as excessive deviation from past trend. As seen in the heatmap graph, one of the advantages of this approach over others combining information into one single indicator is that it provides detailed information about the status of each of the included variables. From the 21 variables examined, 10 meet the described performance conditions. These are unemployment rate growth (URT), uncertain economic conditions indicator (UNCERT), the ratio of trade balance to GDP (TRADEBAL), economic sentiment indicator (SENTI), stock market index growth (SBI), real GDP growth (GDP), house prices growth (HOUSEP), growth of loans to NFCs and households (CRD2HF), the ratio of gross foreign debt to GDP (GDEBT) and the ratio of credit to private sector to GDP (CRD_GDP). The blank areas are the excluded observations during the recent crisis events.

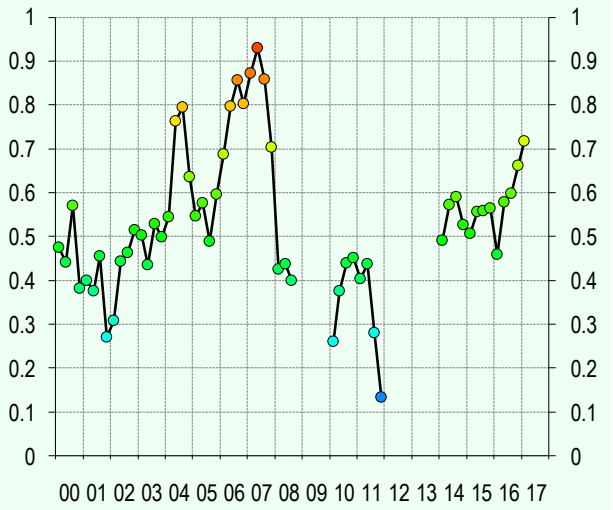
**Figure 8.2.3: The overheating heatmap of Slovenia**




*Source: ECB, Eurostat, Bank of Slovenia, Bank of Slovenia calculations.*

**One can observe that in 2017q1 several variables fall within the normal conditions range.** Some of them such as TRADEBAL and SBI are in the green area of the colormap, whereas others are located either in the cold-coloured region such as GDEBT and CRD_GDP or in the warm-coloured region such as URT, SENTI and UNCERT, yet still within the boundaries of normal conditions. Three variables are beyond their respective thresholds and thus require further investigation and closer monitoring. These variables are GDP, HOUSEP and CRD2HF. From these variables, GDP is preceded by a series of green coloured patches which signals that it was previously moving closely to its trend. On the contrary, HOUSEP and CRD2HF are preceded by several yellow/orange or red patches indicating that these variables have been excessively expanding for some time. The interpretation of these signals, given the forward looking (4 – 12 quarters) nature of the framework, is that these variables have been growing at an excessive pace and if this behaviour continues for a prolonged period it could potentially have some undesired effects. This warrants closer monitoring and investigation through more specific tools, designed to study the house and credit markets respectively before a firm conclusion can be drawn.

Figure 8.2.4: Composite (average) overheating indicator




*Source: ECB, Eurostat, Bank of Slovenia, Bank of Slovenia calculations.*

**Finally, an overall picture of the status of the Slovene economy can be presented by averaging the signals of every indicator into a composite one.** The graph of the composite indicator summarize the detailed picture presented in the heatmap graph. The composite indicator ranges from 0 (excessive contraction) to 1 (excessive expansion) and follows the same colouring convention as the heatmap graph. It can be seen that prior to the crisis of 2008q4 its value is at considerably high levels (around 0.9), while at present is slightly above the green area. To have a clearer view on the current status, the range of the individual indicators forming the composite one is also plotted. It can be seen that the individual indicators are distributed almost symmetrically around the average, which shows that the result is not driven by few extreme values, thus reinforcing the conclusion about the currently low risk of the economy overheating.

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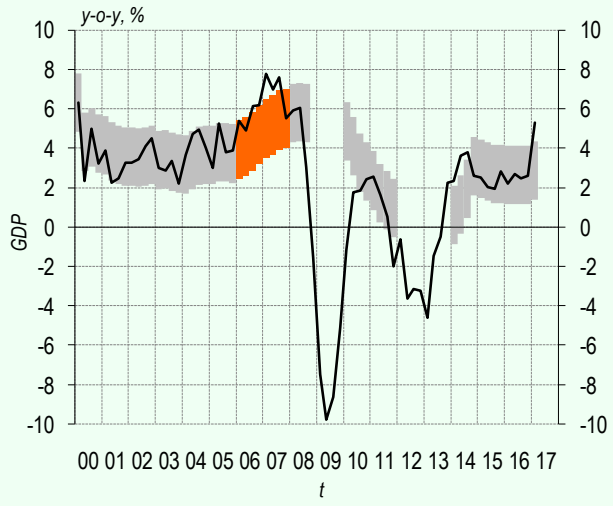
## Appendix: Estimating overheating patterns — the case of Slovenia

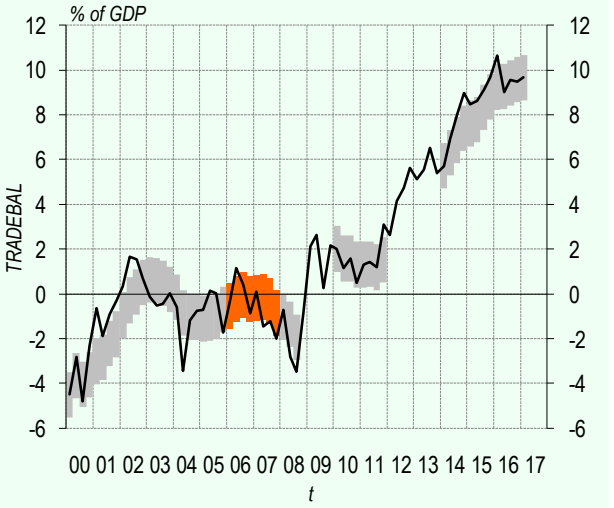
In this appendix is presented the evolution of the 10 surviving variables determined by the multi-step statistical procedure described in the main text. In addition, their normal conditions range (grey shaded areas), the optimal trend extracting method and threshold used are displayed. With orange is marked the early warning period, from 2005q4 until 2007q4.

**Figure 8.2.5: Real GDP**



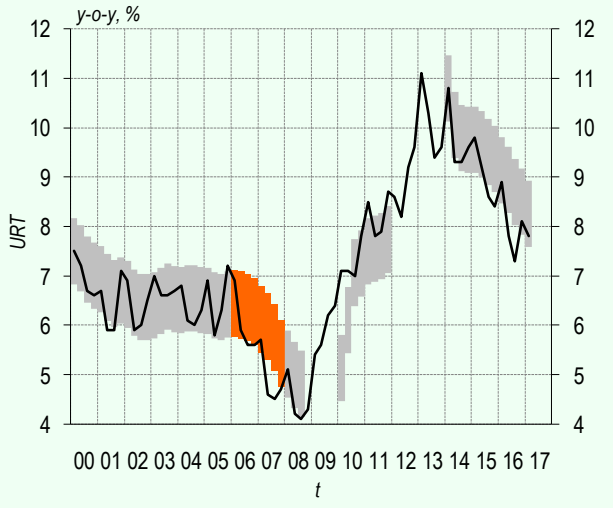

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.7: Trade balance**



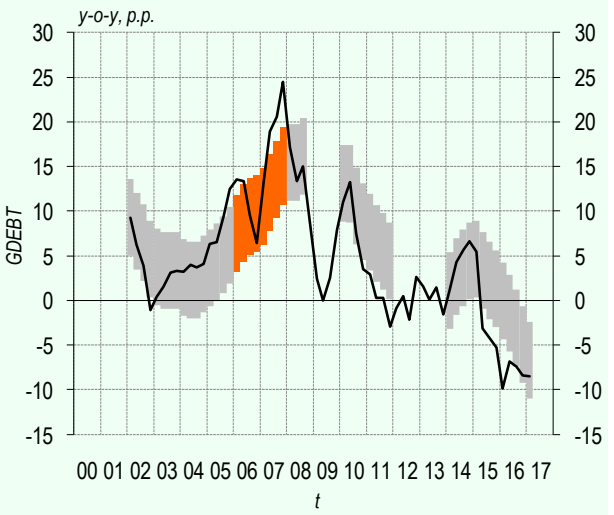

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.6: Unemployment rate**



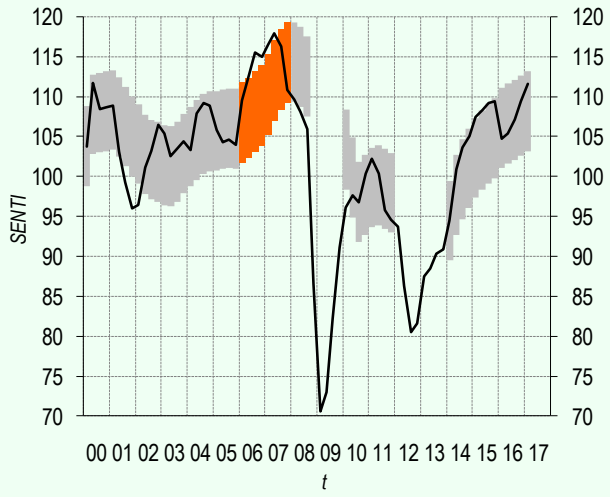

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.8: Gross foreign debt / GDP**



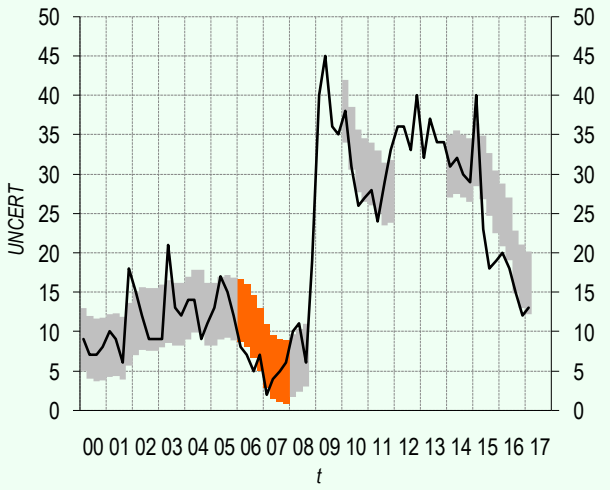

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.9: Economic sentiment indicator (total economy)**



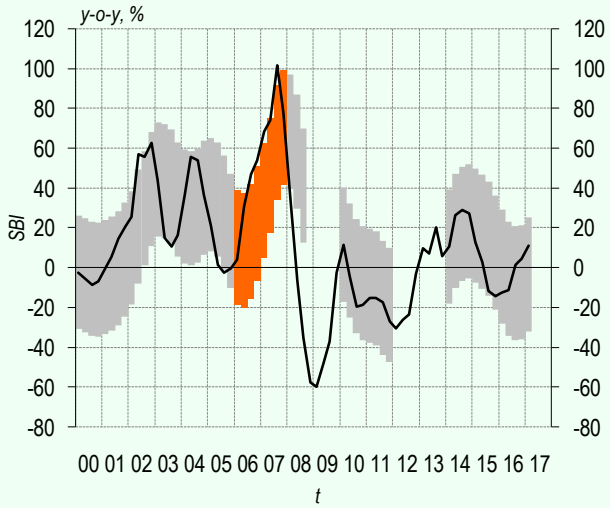

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.10: Uncertain economic conditions indicator**



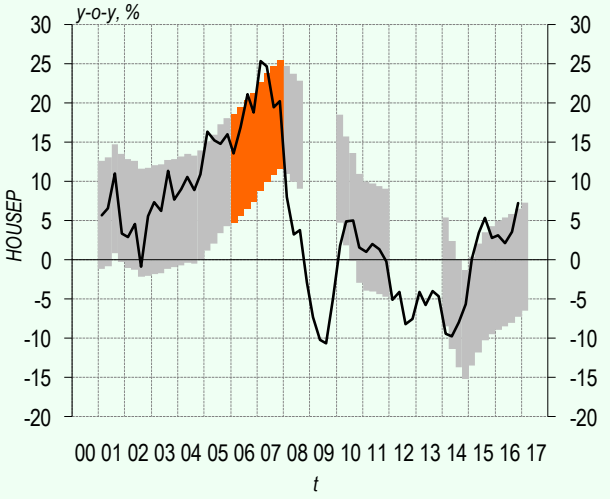

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.11: SBI TOP**



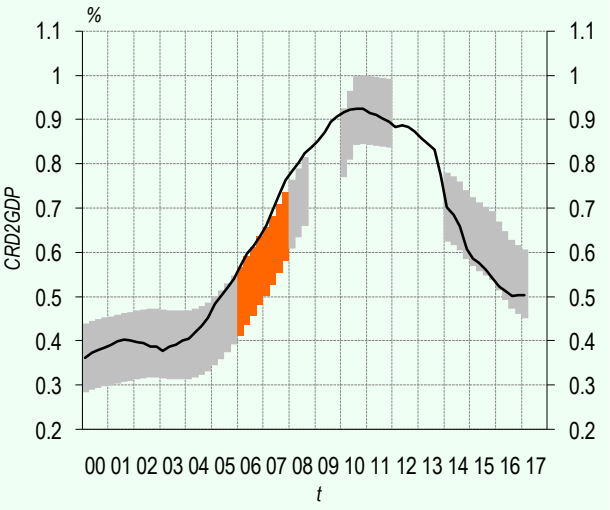

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.12: Prices of used dwellings**



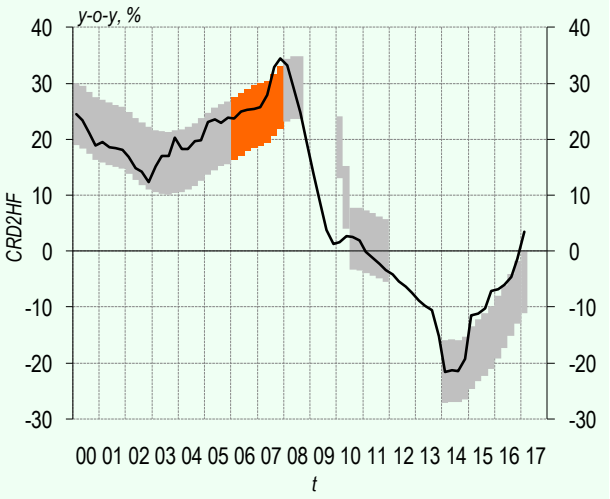

*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.13: Credit to private sector / GDP**




*Source: Eurostat, Bank of Slovenia calculations.*

**Figure 8.2.14: Loans to NFCs and households**




*Source: Bank of Slovenia.*

# 8.3 The evolution of income convergence patterns in Europe with focus on Slovenia

*This study examines the evolution of income convergence patterns among Central and Eastern European Countries (CEEC), periphery countries and the Euro Area. The analysis shows that although a convergence process was taking place in the years before the global financial crisis, it has slowed down or even reversed. The former is the case among CEE countries where the convergence process towards euro area average continues, though at a decreased pace. On the contrary, when periphery countries are also considered, the results show a stalling of the convergence process or even point to the direction of divergence.*

## Why is real convergence important?

**As economic growth should serve as a tool for increasing living standards, especially in catching-up economies, sustainable real convergence should be in the centre of economic policies.** In addition, sustainable real convergence is a key element for the smooth functioning of monetary policy in a currency union. However, many studies have reported that despite some initial evidence of convergence before the global financial crisis of 2008, the process has been weakened or even derailed since then (Borsi & Metiu, 2015; ECB Economic Bulletin, 2015; Kammourieh, 2010; Merler, 2017). In particular, a recent analysis by the ECB (ECB Economic Bulletin, 2015) found "some evidence of divergence among the early adopters of the euro" between 1999 and 2014. Moreover, the catching up process among the early adopters of the euro (Euro Area 12) has "rapidly reversed" in the post crisis period with the evidence of even temporary convergence being scarce. On an EU28 level though, there is some evidence on real convergence, mainly driven by the catching up of CEEC economies. Therefore, this study will focus on CEECs providing some initial exploration of the convergence process among them and the euro area.

## Theoretical underpinnings

**The analytical framework that provides the theoretical underpinnings when thinking of convergence is that of the Optimum Currency Area (OCA) developed by Mundell (1961), McKinnon (1963) and Kenen (1969).** This framework examines the benefits and costs of countries sharing a common currency. Under the OCA theory, countries are more suited to belonging in a monetary union if they meet specific structural conditions related to the convergence of their economies. The main criteria that need to be satisfied are laid down by the early developers and include price and wage flexibility, mobility of factors of production, financial market integration, high degree of economic openness, diversification in production and consumption, similarities of inflation rates, fiscal and political integration (see Mongelli, 2002).

**An advancement of the early OCA theory is the "OCA endogeneity" line of contributions.** By studying various monetary unions that occurred in the past, Frankel and Rose (1998) demonstrated that monetary integration leads to significant deepening of bilateral trade. Thus, euro area may turn into an OCA after the launch of monetary integration even if it was not an OCA before, or "countries which join EMU, no matter what their motivation may be, may satisfy OCA properties ex post even if they do not ex ante!" (Frankel & Rose, 1998).

## Some criticism regarding the function of Euro Area as an OCA

**In the view of several US academics, Euro Area countries, as a group, failed the OCA tests (Jonung & Drea, 2009).** For example, Euro Area shows little labour mobility, lacks of a supranational fiscal arrangement comparable to the US Federal Budget which can buffer asymmetric economic shocks and has no political union. In addition, there is a widespread view that the Maastricht convergence criteria focus mainly on macroeconomic convergence, rather than the structural conditions identified by the OCA theory.

## The empirical framework

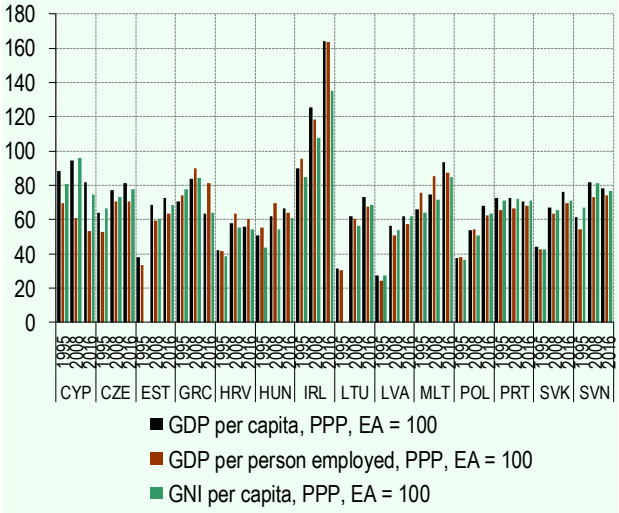
**In the growth-empirics literature, one can distinguish between two standard and complementary measures of convergence; beta convergence (β-convergence) and sigma convergence (σ-convergence) (Barro & Sala-i-Martin, 1992).** Sala-i-Martin (1996) defines β-convergence as the negative relation between the growth rate of income and the initial level of income in a group of economies. The former type of convergence implies that lower income economies tend to grow faster compared to high income ones, i.e. they are in a process of catching-up. The latter type of convergence reflects the dispersion of income in a group of economies over time. A decreasing dispersion indicates that these economies are (sigma) converging.

## Empirical evidence on the evolution of real convergence

**The empirical analysis focuses on the evolution of income convergence patterns among Central and Eastern European Countries (CEEC), periphery countries and the Euro Area.** The following groups of countries are considered; the first group of countries consists of Croatia (HRV), Czech Republic, (CZE), Estonia (EST), Hungary (HUN), Latvia (LVA), Lithuania (LTU), Poland (POL), Slovakia (SVK) and Slovenia (SVN) while the second includes Cyprus (CYP), Greece (GRC), Ireland (IRL), Malta (MLT) and Portugal (PRT). The indicators used are GDP per capita (at PPP constant 2011 international USD), GDP per person employed (at PPP constant 2011 USD) and GNI per capita (at PPP current international USD). All variables are collected from the World Bank's World Development Indicators database. Each indicator ranges from 1995 until 2016 which is the most recent available. The snapshot of the studied indicators at three specific years illustrates their evolution; 1995, which is the earliest observation; 2008 which is the year of the onset of the global financial crisis; and 2016 which is the last available observation. All values are scaled with Euro Area being equal to 100.

**The heterogeneity among the countries examined is evident.** While many countries have similar levels income, as proxied by the three indicators, few stand apart from the rest. This is more pronounced in 1995 when Ireland and Cyprus enjoyed the highest level of income and substantially different from that of Latvia, Lithuania, Estonia and Poland, which had the lowest. The global financial crisis of 2008 had a very diverse impact on the various economies, ranging from a clear disruption in their growth trends to a mild effect on them. The economies most affected by the global financial crisis are those of Greece, Cyprus and to some extent Croatia where the previous upward trends are reversed. In most economies, the effect of the crisis was to slow down the pace of their income growth compared to the Euro Area, with the case

**Figure 8.3.1: GDP per capita, GDP per employee and GNI per capita**



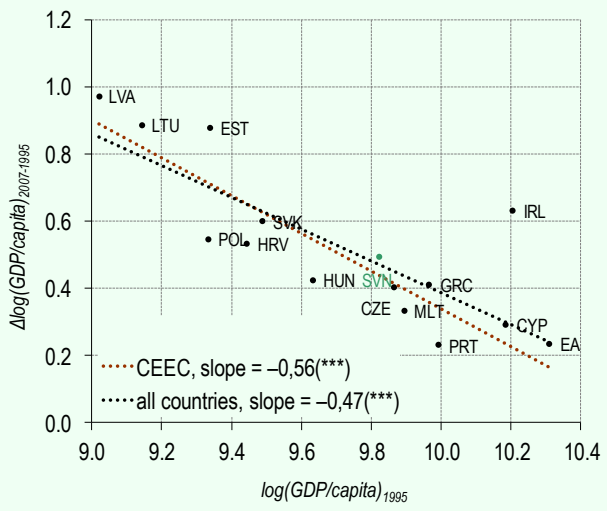

*Source: WDI, Bank of Slovenia calculations.*

of Portugal resulting in an almost static pattern. Slovenia experienced a substantial increase in income levels from 1995 to 2008 increasing by approximately 20 basis points in every indicator. However, that trend was interrupted by the crisis, which resulted in a marginal increase (in GDP per employee) or even decrease in the levels of income in 2016 compared to those of 2008. Finally, some countries managed to absorb the effects of the crisis and exhibit growing income levels in 2016 such as Ireland, Lithuania, Malta and Poland.

**The evolution of convergence patterns is examined in two sub-periods.** The first one begins at 1995 and ranges until 2007 which is the year before the global financial crisis and when many of the countries under study adopted the Euro. The second sub-period begins at 2007 until the most recent available data, in 2016. The results on the evolution of β – convergence patterns of income are presented in the following graphs.

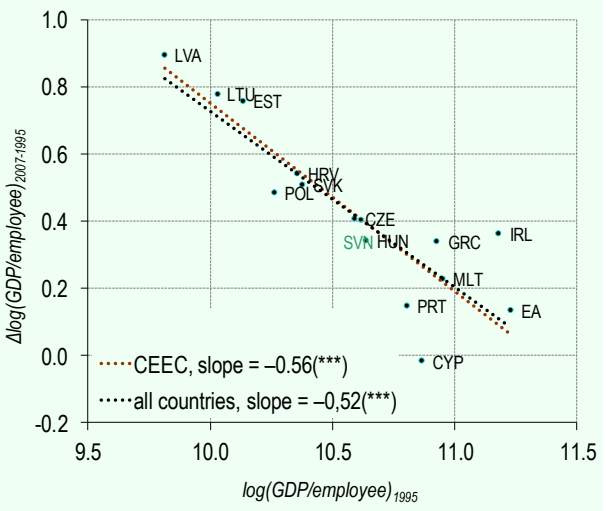
**The results presented in the graphs exhibit two main and fairly robust patterns across the three indicators.** The first one is that until 2007 a significant income convergence process took place both in CEECs and across the full sample of countries. The regression lines' coefficients are highly statistically significant and their magnitudes are comparable between the two groups of countries. With the exception of Cyprus, which experienced a small decrease in its GDP/employee levels, all countries exhibit an increase (at various degrees) in income in

**Figure 8.3.2: Beta–convergence (1995–2007)**



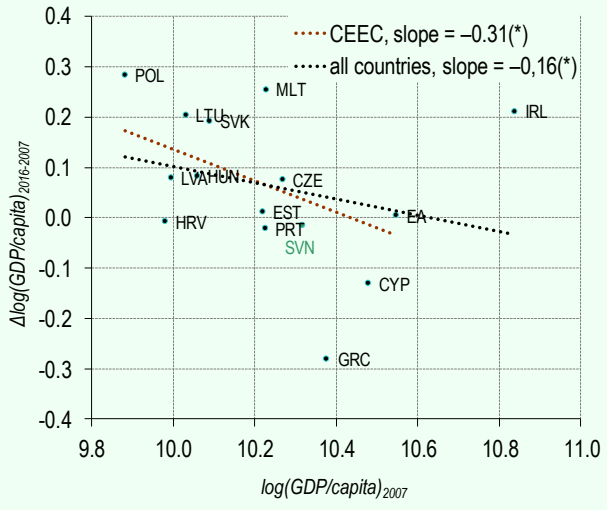

*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.4: Beta–convergence (1995–2007)**



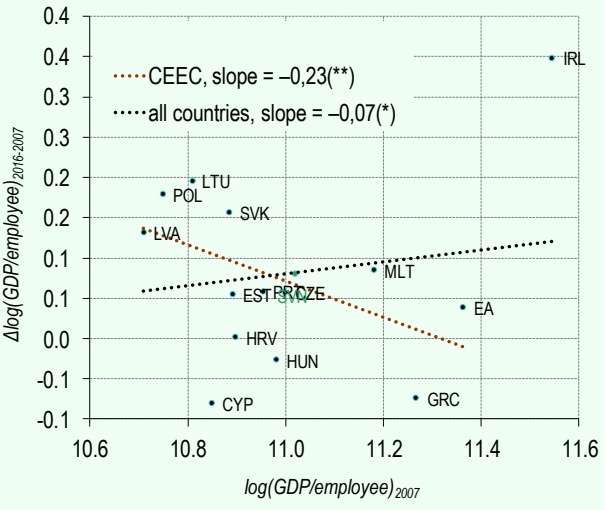

*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.3: Beta–convergence (2007–2016)**



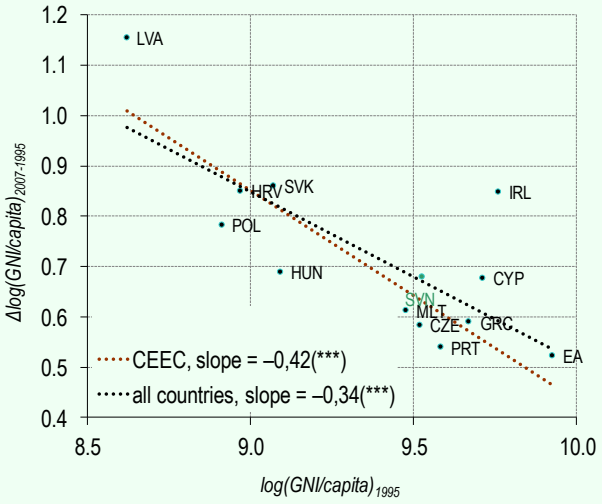

*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.5: Beta–convergence (2007–2016)**



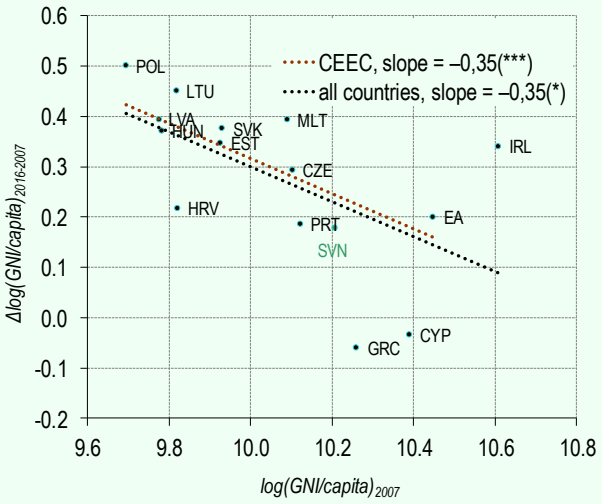

*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.6: Beta–convergence (1995–2007)**



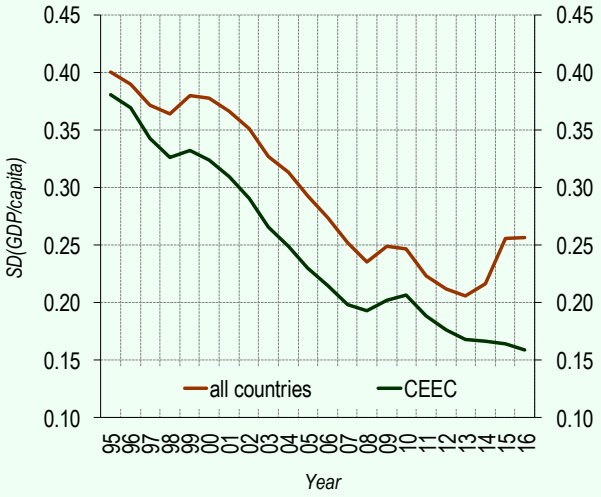

*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.7: Beta–convergence (2007–2016)**



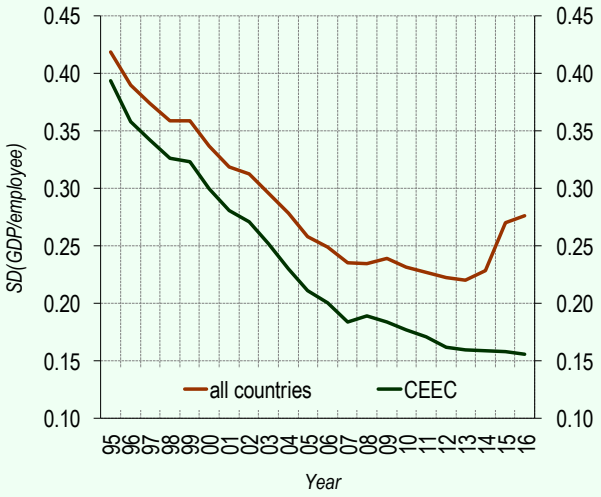

*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.8: Sigma–convergence (1995–2016)**




*Source: WDI, Bank of Slovenia calculations.*

**Figure 8.3.9: Sigma–convergence (1995–2016)**

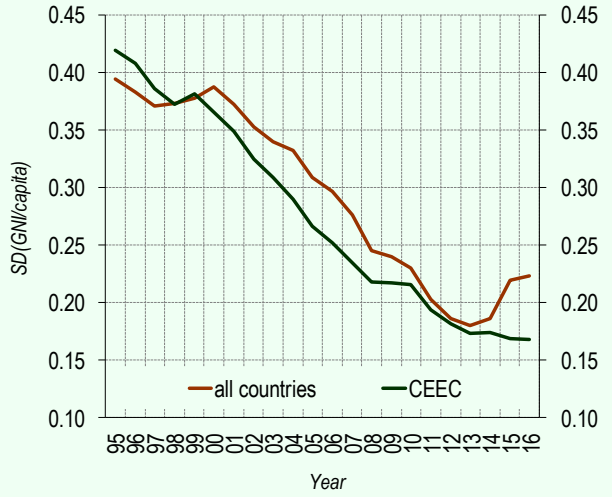



*Source: WDI, Bank of Slovenia calculations.*

2007 compared to that in 1995. The second pattern is the derailing of that process after 2007. As is evident from the respective graphs, the convergence in GDP/capita and GDP/employee has been severely weakened in the case of CEECs and even reversed in the case of periphery countries. This is also manifested in the regression coefficients which are smaller in magnitude and have lower statistical significance compared to the ones in the first sub-period. For the CEECs the regression coefficients are still statistically significant, although at a lower level. However, when the full sample of countries is considered then these turn not to be significantly different from zero. Despite that, this pattern is not so pronounced for the GNI/capita indicator, the results exhibit nevertheless a lower statistical significance and are smaller in magnitude for the case of CEECs. During that sub-period in many countries income dropped substantially below its 2007 levels (Greece and Cyprus, every indicators) while for many others it remained stagnant or declined marginally (Croatia, Estonia, Portugal, and Slovenia, GDP/capita; Croatia and Hungary, GDP/employee).

**A detailed examination of the graphs reveals that Slovenia is usually placed either close to euro area average or belongs to the group of countries positioned in the middle rather the extreme of the plots.** This could be due to the higher ranking of the Slovene economy compared to the other new member states (NMS). In addition, in line with the snapshot of the evolu-

Figure 8.3.10: Sigma–convergence (1995–2016)




Source: WDI, Bank of Slovenia calculations.

tion of the various indicators, it is found that the convergence process in Slovenia is severely affected by the recent crises with income remaining mostly stagnant at 2007 levels. Another interesting result is that the country that is most closely positioned to Slovenia is Czech Republic, both in levels of income as well as in its growth patterns.

**The results reveal another aspect of real convergence among the countries examined.** Despite some disruption in the σ – convergence process due to the global financial crisis in 2008, the process continued in the group of CEECs. However, this is not the case when all countries are considered. Especially after 2012, the results point to an ever increasing dispersion in income in every indicator. This reflects the heterogeneous impact of the recent crises on each of the periphery countries. Therefore, some countries managed to mitigate the impact of the shocks (such as Malta and Portugal), others were severely affected (Greece and Cyprus) and as the results regarding beta convergence also show, Ireland has considerably improved its income levels compared to 2007. The outcome of this diverse impact is an increased dispersion in current income and therefore a reversal in the σ – convergence pattern.

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# 9 Statistical Appendix

*The appendix cites a selection of statistics drawn up by the Bank of Slovenia, for which it is responsible. They cover financial institutions and markets, international economic relations, and financial accounts.*

*The broader selection of statistics disclosed in the tables of the statistical appendix are available in the Bank of Slovenia bulletin and on the statistics pages of the Bank of Slovenia website, where there is also a link to the data series.*

*The concise methodological notes for the statistics are given in this appendix, while more detailed explanations are given in the appendix to the Bank of Slovenia bulletin.*

**Table 9.1: Consolidated balance sheet of monetary financial institutions**

| *EUR million* | 2013 | 2014 | 2015 | 16Q4 | 17Q1 | Jun.17 | Jul.17 | Aug.17 |
|---|---|---|---|---|---|---|---|---|
| 1.1. Claims of the Bank of Slovenia | 4,771 | 7,278 | 5,410 | 6,544 | 6,735 | 6,882 | 6,931 | 7,090 |
| 1.2. Claims of other MFIs | 5,165 | 6,680 | 8,266 | 8,100 | 8,203 | 8,417 | 8,298 | 8,473 |
| **1. Claims on foreign sectors (foreign assets)** | **9,936** | **13,958** | **13,676** | **14,643** | **14,939** | **15,299** | **15,229** | **15,563** |
| 2.1. Claims of the Bank of Slovenia on central government | 233 | 263 | 2,327 | 4,618 | 4,823 | 5,173 | 5,297 | 5,485 |
| 2.2.1.1. Loans | 1,083 | 1,149 | 1,298 | 1,506 | 1,396 | 1,184 | 1,006 | 1,002 |
| 2.2.1.2. Securities | 5,480 | 6,105 | 5,814 | 4,767 | 4,633 | 4,515 | 4,518 | 4,487 |
| 2.2.1. Claims on central government | 6,563 | 7,254 | 7,112 | 6,273 | 6,029 | 5,699 | 5,524 | 5,489 |
| 2.2.2.1. Loans | 581 | 671 | 622 | 579 | 588 | 573 | 572 | 563 |
| 2.2.2.2. Securities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.2.2. Claims on other general government | 581 | 671 | 622 | 579 | 588 | 573 | 572 | 563 |
| 2.2. Claims of other MFIs on general government | 7,144 | 7,926 | 7,734 | 6,852 | 6,617 | 6,272 | 6,096 | 6,053 |
| 2.3.1.1. Loans | 14,135 | 11,213 | 10,040 | 9,306 | 9,311 | 9,398 | 9,421 | 9,425 |
| 2.3.1.2. Securities | 767 | 524 | 462 | 405 | 410 | 403 | 403 | 403 |
| 2.3.1. Claims on nonfinancial corporations | 14,902 | 11,737 | 10,502 | 9,711 | 9,720 | 9,800 | 9,824 | 9,828 |
| 2.3.2. Households and non-profit institutions serving households | 8,917 | 8,762 | 8,856 | 9,154 | 9,305 | 9,447 | 9,476 | 9,541 |
| 2.3.3.1. Loans | 1,460 | 1,087 | 898 | 865 | 871 | 904 | 897 | 891 |
| 2.3.3.2. Securities | 303 | 408 | 534 | 543 | 351 | 350 | 350 | 351 |
| 2.3.3. Claims on nonmonetary financial institutions | 1,763 | 1,495 | 1,432 | 1,408 | 1,222 | 1,254 | 1,247 | 1,241 |
| 2.3. Claims of other MFIs on other non-MFIs | 25,582 | 21,995 | 20,790 | 20,272 | 20,247 | 20,502 | 20,547 | 20,610 |
| **2. Claims on domestic non-MFIs** | **32,959** | **30,183** | **30,850** | **31,743** | **31,686** | **31,947** | **31,940** | **32,147** |
| **3. Remaining assets** | **3,670** | **3,771** | **3,119** | **2,192** | **1,890** | **1,710** | **1,626** | **1,541** |
| **Total assets** | **46,565** | **47,912** | **47,646** | **48,578** | **48,515** | **48,956** | **48,795** | **49,251** |
| 1.1. Bank of Slovenia | 1,054 | 10 | 16 | 1,267 | 531 | 478 | 613 | 660 |
| 1.2. Other MFIs | 8,241 | 7,409 | 5,920 | 5,094 | 4,823 | 4,744 | 4,271 | 4,551 |
| **1. Obligations to foreign sectors (foreign liabilities)** | **9,294** | **7,419** | **5,936** | **6,362** | **5,354** | **5,222** | **4,883** | **5,211** |
| 2.1.1.1. Banknotes and coins (after 1.1.2007 ECB key) | 4,189 | 4,673 | 4,956 | 5,160 | 5,110 | 5,216 | 5,244 | 5,238 |
| 2.1.1.2. Overnight deposits at other MFIs | 8,832 | 10,441 | 13,057 | 15,471 | 16,241 | 16,475 | 16,940 | 16,937 |
| 2.1.1.3.1. Non-monetary financial institutions | 15 | 44 | 9 | 69 | 62 | 22 | 4 | 17 |
| 2.1.1.3.2. Other government sector | 28 | 28 | 53 | 62 | 79 | 127 | 123 | 128 |
| 2.1.1.3. Overnight deposits at the Bank of Slovenia | 43 | 71 | 63 | 131 | 140 | 149 | 127 | 145 |
| 2.1.1. Banknotes and coins and overnight liabilities | 13,065 | 15,185 | 18,075 | 20,761 | 21,491 | 21,839 | 22,311 | 22,320 |
| 2.1.2.1. Deposits at the Bank of Slovenia | - | 1 | 1 | 0 | 0 | #SKLIC! | #SKLIC! | 0 |
| 2.1.2.2. Deposits at other MFIs | 9,804 | 9,363 | 7,837 | 6,864 | 6,561 | 6,198 | 6,217 | 6,115 |
| 2.1.2. Time deposits | 9,804 | 9,364 | 7,838 | 6,864 | 6,561 | 6,198 | 6,217 | 6,115 |
| 2.1.3. Deposits reedemable at notice up to 3 months | 209 | 379 | 315 | 464 | 540 | 591 | 578 | 595 |
| 2.1. Banknotes and coins and deposits up to 2 years | 23,078 | 24,929 | 26,229 | 28,089 | 28,592 | 28,628 | 29,106 | 29,029 |
| 2.2. Debt securities, units/shares of money market funds and repos | 80 | 42 | 56 | 102 | 68 | 76 | 76 | 79 |
| **2. Banknotes and coins and instruments up to 2 years** | **23,157** | **24,971** | **26,285** | **28,190** | **28,660** | **28,704** | **29,183** | **29,108** |
| **3. Long-tern financial obligations to non-MFIs** | **1,498** | **1,598** | **1,550** | **1,510** | **1,456** | **1,500** | **1,499** | **1,498** |
| **4. Remaining liabilities** | **15,783** | **17,229** | **15,378** | **14,100** | **14,581** | **15,022** | **14,571** | **14,796** |
| **5. Excess of inter-MFI liabilities** | **-3,168** | **-3,305** | **-1,504** | **-1,584** | **-1,536** | **-1,492** | **-1,341** | **-1,362** |
| **Total liabilities** | **46,565** | **47,912** | **47,646** | **48,578** | **48,515** | **48,956** | **48,795** | **49,251** |

**Table 9.2: Balance sheet of the Bank of Slovenia**

| *EUR million* | 2013 | 2014 | 2015 | 16Q4 | 17Q1 | Jun.17 | Jul. 17 | Aug. 17 |
|---|---|---|---|---|---|---|---|---|
| 1.1. Gold | 89 | 101 | 100 | 112 | 119 | 111 | 110 | 113 |
| 1.2. Receivable form IMF | 369 | 392 | 367 | 361 | 338 | 324 | 352 | 350 |
| 1.3. Foreign cash | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.4. Loans, deposits | 373 | 3,031 | 699 | 588 | 317 | 247 | 241 | 238 |
| 1.5. Securities | 3,844 | 3,651 | 4,141 | 5,380 | 5,859 | 6,096 | 6,125 | 6,286 |
| 1.6. Other claims | 96 | 103 | 103 | 103 | 103 | 103 | 103 | 103 |
| **1. Claims on foreign sectors (foreign assets)** | **4,771** | **7,278** | **5,410** | **6,544** | **6,735** | **6,882** | **6,931** | **7,090** |
| 2.1. Claims on central government | 233 | 263 | 2,327 | 4,618 | 4,823 | 5,173 | 5,297 | 5,485 |
| 2.2.1. Loans | 3,682 | 1,098 | 901 | 714 | 1,152 | 1,150 | 1,152 | 1,150 |
| 2.2.2. Other claims | 3 | 3 | 44 | 99 | 99 | 99 | 99 | 97 |
| 2.2. Claims on domestic monetary sector | 3,685 | 1,101 | 946 | 813 | 1,251 | 1,248 | 1,250 | 1,247 |
| 2.3. Claims on other domestic sectors | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **2. Claims on domestic sectors (domestic assets)** | **3,919** | **1,366** | **3,275** | **5,433** | **6,076** | **6,424** | **6,549** | **6,734** |
| **3. Remaining assets** | **2,200** | **2,317** | **1,685** | **973** | **725** | **524** | **438** | **336** |
| **Total assets** | **10,890** | **10,961** | **10,370** | **12,950** | **13,536** | **13,829** | **13,918** | **14,160** |
| **1. Banknotes and coins (ECB key from 1.1.2007 on)** | **4,189** | **4,673** | **4,956** | **5,160** | **5,110** | **5,216** | **5,244** | **5,238** |
| 2.1.1.1.1. Overnight | 1,503 | 1,526 | 1,634 | 2,252 | 3,009 | 2,482 | 2,636 | 2,628 |
| 2.1.1.1.2. With agreed maturity | 605 | - | - | - | - | - | - | - |
| 2.1.1.1. Domestic currency | 2,108 | 1,526 | 1,634 | 2,252 | 3,009 | 2,482 | 2,636 | 2,628 |
| 2.1.1.2. Foreign currency | - | - | - | - | - | - | - | - |
| 2.1.1. Other MFIs | 2,108 | 1,526 | 1,634 | 2,252 | 3,009 | 2,482 | 2,636 | 2,628 |
| 2.1.2.1.1. Overnight | 364 | 2,718 | 1,730 | 1,949 | 2,660 | 3,538 | 3,332 | 3,382 |
| 2.1.2.1.2. With agreed maturity | 1,350 | - | - | - | - | - | - | - |
| 2.1.2.1. In domestic currency | 1,714 | 2,718 | 1,730 | 1,949 | 2,660 | 3,538 | 3,332 | 3,382 |
| 2.1.2.2. Foreign currency | 73 | 94 | 60 | 78 | 55 | 51 | 49 | 49 |
| 2.1.2. General government | 1,787 | 2,812 | 1,789 | 2,027 | 2,715 | 3,589 | 3,381 | 3,431 |
| 2.1.3.1. Non-financial corporations | - | - | - | - | - | - | - | - |
| 2.1.3.2. Non-monetary financial institutions | 17 | 45 | 11 | 69 | 62 | 22 | 4 | 17 |
| 2.1.3. Other domestic sectors | 17 | 45 | 11 | 69 | 62 | 22 | 4 | 17 |
| 2.1. Domestic sectors | 3,912 | 4,383 | 3,434 | 4,348 | 5,786 | 6,093 | 6,022 | 6,076 |
| 2.2. Foreign sectors | 1,054 | 10 | 16 | 1,267 | 531 | 478 | 613 | 660 |
| **2. Deposits** | **4,966** | **4,393** | **3,450** | **5,615** | **6,317** | **6,571** | **6,634** | **6,736** |
| 3.1. Domestic currency | - | - | - | - | - | - | - | - |
| 3.2. Foreign currency | - | - | - | - | - | - | - | - |
| **3. Issued securities** | **0** | **0** | **-** | **-** | **-** | **-** | **-** | **-** |
| **4. SDR allocation** | **241** | **257** | **275** | **275** | **274** | **263** | **259** | **258** |
| **5. Capital and reserves** | **1,339** | **1,440** | **1,472** | **1,691** | **1,603** | **1,606** | **1,590** | **1,720** |
| **6. Remaining liabilities** | **156** | **197** | **218** | **209** | **232** | **173** | **190** | **208** |
| **Total liabilities** | **10,890** | **10,961** | **10,370** | **12,950** | **13,536** | **13,829** | **13,918** | **14,160** |

**Table 9.3: Balance sheet of other monetary financial institutions**

| *EUR million* | 2013 | 2014 | 2015 | 16Q4 | 17Q1 | Jun.17 | Jul.17 | Aug.17 |
|---|---|---|---|---|---|---|---|---|
| 1.1.1. Cash | 282 | 292 | 294 | 322 | 305 | 329 | 312 | 337 |
| 1.1.2. Accounts and deposits at the Bank of Slovenia, other cl | 2,108 | 1,526 | 1,634 | 2,252 | 3,009 | 2,482 | 2,636 | 2,628 |
| 1.1.3. Securities of the Bank of Slovenia | - | - | - | - | - | - | - | - |
| 1.1. Claims on Bank of Slovenia | 2,390 | 1,818 | 1,928 | 2,574 | 3,315 | 2,812 | 2,949 | 2,965 |
| 1.2.1. Loans | 2,432 | 1,719 | 1,264 | 1,061 | 935 | 950 | 927 | 923 |
| 1.2.2. Debt securities | 363 | 378 | 245 | 256 | 265 | 116 | 70 | 72 |
| 1.2.3. Shares and other equity | 117 | 61 | 62 | 2 | 2 | 2 | 2 | 2 |
| 1.2. Claims on other MFI's | 2,912 | 2,158 | 1,572 | 1,319 | 1,202 | 1,068 | 999 | 997 |
| 1.3.1. Loans | 26,176 | 22,883 | 21,714 | 21,410 | 21,470 | 21,506 | 21,372 | 21,422 |
| 1.3.2. Debt securities | 5,702 | 6,352 | 6,050 | 5,030 | 4,730 | 4,608 | 4,611 | 4,580 |
| 1.3.3. Shares and other equity | 849 | 685 | 759 | 685 | 664 | 660 | 660 | 661 |
| 1.3. Claims on nonmonetry sectors | 32,727 | 29,920 | 28,524 | 27,125 | 26,863 | 26,774 | 26,643 | 26,662 |
| **1. Claims on domestic sectors (domestic assets)** | **38,028** | **33,897** | **32,024** | **31,018** | **31,381** | **30,654** | **30,591** | **30,625** |
| 2.1.1. Cash | 23 | 29 | 34 | 38 | 35 | 45 | 46 | 41 |
| 2.1.2. Loans | 1,697 | 2,839 | 2,767 | 2,628 | 2,546 | 2,315 | 2,225 | 2,367 |
| 2.1.3. Debt securities | 372 | 498 | 1,027 | 1,165 | 1,157 | 1,231 | 1,234 | 1,282 |
| 2.1.4 Shares and other equity | 559 | 572 | 567 | 567 | 567 | 577 | 577 | 579 |
| 2.1. Claims on foreign monetary sectors | 2,651 | 3,938 | 4,395 | 4,398 | 4,306 | 4,168 | 4,082 | 4,268 |
| 2.2.1. Loans | 2,530 | 2,135 | 1,597 | 1,155 | 1,120 | 1,094 | 1,069 | 1,059 |
| 2.2.2. Debt securities | 1,378 | 1,878 | 1,870 | 2,151 | 2,382 | 2,764 | 2,831 | 2,829 |
| 2.2.3. Shares and other equity | 273 | 329 | 405 | 396 | 395 | 391 | 316 | 316 |
| 2.2. Claims on foreign nonmonetary sectors | 4,181 | 4,342 | 3,871 | 3,701 | 3,897 | 4,249 | 4,216 | 4,204 |
| **2. Claims on foreign sectors (foreign assets)** | **6,833** | **8,279** | **8,266** | **8,100** | **8,203** | **8,417** | **8,298** | **8,473** |
| **3. Remaining assets** | **1,455** | **1,399** | **1,314** | **1,074** | **1,065** | **1,142** | **1,056** | **1,073** |
| **Total assets** | **46,315** | **43,575** | **41,603** | **40,191** | **40,649** | **40,213** | **39,945** | **40,170** |
| 1.1.1. Deposits, loans from the Bank of Slovenia | 3,682 | 1,098 | 901 | 714 | 1,152 | 1,150 | 1,152 | 1,150 |
| 1.1.2. Deposits, loans from other MFIs | 2,440 | 1,733 | 1,301 | 1,123 | 986 | 1,003 | 984 | 978 |
| 1.1.3. Debt securities issued | 150 | 93 | 38 | 18 | 22 | 16 | 16 | 16 |
| 1.1. Laibilities to monetary sectors | 6,272 | 2,924 | 2,240 | 1,855 | 2,160 | 2,169 | 2,151 | 2,143 |
| 1.2.1.1. Overnight | 8,542 | 10,129 | 12,661 | 15,038 | 15,744 | 15,983 | 16,375 | 16,477 |
| 1.2.1.2. With agreed maturity | 12,214 | 12,481 | 10,604 | 9,076 | 8,689 | 8,284 | 8,080 | 8,050 |
| 1.2.1.3. Reedemable at notice | 221 | 449 | 474 | 615 | 647 | 678 | 677 | 706 |
| 1.2.1. Deposits in domestic currency | 20,977 | 23,059 | 23,739 | 24,729 | 25,080 | 24,945 | 25,132 | 25,233 |
| 1.2.2. Deposits in foreign currency | 441 | 463 | 599 | 632 | 652 | 638 | 794 | 623 |
| 1.2.3. Debt securities issued | 256 | 176 | 84 | 38 | 24 | 22 | 23 | 24 |
| 1.2. Liabilities to nonmonetary sectors | 21,674 | 23,698 | 24,422 | 25,400 | 25,757 | 25,605 | 25,950 | 25,879 |
| **1. Obligations to domestic sectors (domestic liabilities)** | **27,946** | **26,622** | **26,661** | **27,254** | **27,917** | **27,773** | **28,101** | **28,022** |
| 2.1.1. Deposits | 4,538 | 3,551 | 2,578 | 2,084 | 1,954 | 1,856 | 1,869 | 1,872 |
| 2.1.2. Debt securities issued | 1,200 | 1,344 | 975 | 710 | 699 | 602 | 328 | 328 |
| 2.1. Liabilities to foreign monetry sectors | 5,738 | 4,895 | 3,553 | 2,794 | 2,653 | 2,458 | 2,197 | 2,200 |
| 2.2.1. Deposits | 2,054 | 2,052 | 1,954 | 1,738 | 1,662 | 1,778 | 1,566 | 1,844 |
| 2.2.2. Debt securities issued | 32 | 25 | 27 | 23 | 23 | 23 | 23 | 23 |
| 2.2. Liabilities to foreign nonmonetary sectors | 2,086 | 2,077 | 1,981 | 1,761 | 1,685 | 1,800 | 1,589 | 1,866 |
| **2. Obligations to foreign sectors (foreign liabilities)** | **7,824** | **6,972** | **5,535** | **4,555** | **4,338** | **4,259** | **3,786** | **4,066** |
| **3. Capital and reserves** | **3,906** | **4,512** | **4,676** | **4,841** | **4,846** | **4,719** | **4,780** | **4,819** |
| **4. Remaining liabilities** | **6,641** | **5,469** | **4,731** | **3,540** | **3,549** | **3,462** | **3,279** | **3,263** |
| **Total liabilities** | **46,315** | **43,575** | **41,603** | **40,191** | **40,649** | **40,213** | **39,945** | **40,170** |

## Table 9.4: Interest rates of new loans and deposits in domestic currency to households and nonfinancial corporations

| *in % on annual level* | 2013 | 2014 | 2015 | 2016 | Jun.17 | Jul.17 | Aug.17 |
|---|---|---|---|---|---|---|---|
| **1. Interest rates of new loans** | | | | | | | |
| 1.1. Loans to households | | | | | | | |
| Households, revolving loans and overdrafts | 8.53 | 8.20 | 8.01 | 7.84 | 7.84 | 7.82 | 7.85 |
| Households, extended credit | 8.06 | 8.02 | 7.84 | 7.73 | 7.74 | 7.73 | 7.75 |
| Loans, households, consumption, floating and up to 1 year initial rate fixation | 5.04 | 5.01 | 4.19 | 4.23 | 4.31 | 4.28 | 4.33 |
| Loans, households, consumption, over 1 and up to 5 years initial rate fixation | 7.21 | 7.00 | 5.64 | 5.66 | 5.75 | 5.80 | 5.73 |
| Loans, households, consumption, over 5 years initial rate fixation | 7.19 | 7.07 | 5.28 | 6.12 | 6.19 | 6.20 | 6.15 |
| C. loans, households, consumption, floating and up to 1 year initial rate fixation | 4.76 | 4.47 | 3.82 | 3.47 | 4.18 | 3.51 | 3.64 |
| C. loans, households, consumption, over 1 and up to 5 years initial rate fixation | 6.74 | 6.60 | 5.61 | 5.27 | 5.03 | 5.33 | 5.23 |
| C. loans, households, consumption, over 5 year initial rate fixation | 7.15 | 6.53 | 5.58 | 5.05 | 5.12 | 5.21 | 5.31 |
| APRC, Loans to households for consumption | 8.00 | 8.28 | 7.42 | 7.55 | 7.78 | 7.62 | 7.68 |
| Loans, households, house purchase, floating and up to 1 year initial rate fixation | 3.14 | 3.18 | 2.22 | 2.04 | 2.04 | 2.01 | 2.01 |
| Loans, households, house purchase, over 1 and up to 5 years initial rate fixation | 5.54 | 5.65 | 3.87 | 3.58 | 3.37 | 2.74 | 3.48 |
| Loans, households, house purchase, over 5 and up to 10 years initial rate fixatio | 5.40 | 5.06 | 3.16 | 2.49 | 2.63 | 2.72 | 2.72 |
| Loans, households, house purchase, over 10 years initial rate fixation | 5.17 | 4.87 | 3.16 | 2.56 | 2.70 | 2.80 | 2.85 |
| C. loans, households, house purchase variabel and up to years initial rate fixatio | 3.11 | 3.16 | 2.21 | 2.02 | 1.98 | 1.99 | 1.98 |
| C. loans, households, house purchase, over 1 and up to 5 years initial rate fixati | 5.90 | 5.41 | 2.63 | 2.12 | 2.78 | 2.45 | 2.39 |
| C. loans, households, house purchase, over 5 and up to 10 years initial rate fixa | 5.34 | 5.03 | 3.04 | 2.38 | 2.43 | 2.45 | 2.43 |
| C. loans, households, house purchase, over 10 years initial rate fixation | 5.71 | 4.87 | 3.12 | 2.53 | 2.66 | 2.77 | 2.81 |
| APRC, Loans to households for house purchase | 3.48 | 3.55 | 2.85 | 2.58 | 2.77 | 2.75 | 2.77 |
| Loans, households, other purposes, floating and up to 1 year initial rate fixation | 5.69 | 5.11 | 3.51 | 3.49 | 3.87 | 4.16 | 3.86 |
| Loans, households, other purposes, over 1 and up to 5 years initial rate fixation | 6.51 | 5.96 | 5.93 | 5.28 | 5.50 | 5.75 | 5.25 |
| Loans, households, other purposes, over 5 years initial rate fixation | 6.42 | 6.44 | 7.79 | 5.92 | 5.54 | 6.71 | 7.11 |
| 1.2. Loans to nonfinancial corporations (S.11) | | | | | | | |
| S.11, bank overdraft | 5.53 | 5.30 | 3.45 | 2.81 | 2.43 | 2.39 | 2.38 |
| S.11, extended credit | 7.39 | 7.28 | 7.16 | 6.70 | - | - | - |
| Loans, S.11, up to EUR 0,25 million, floating and up to 3 months initial rate fixatic | 5.55 | 4.81 | 3.38 | 2.74 | 2.82 | 2.86 | 2.71 |
| Loans, S.11, up to EUR 0,25 million, over 3 months and up to 1 year initial rate f | 6.44 | 5.77 | 3.50 | 3.31 | 2.85 | 2.82 | 3.00 |
| Loans, S.11, up to EUR 0,25 million, over 1 and up to 3 years initial rate fixation | 6.57 | 5.92 | 4.23 | 4.52 | 4.10 | 3.91 | 3.93 |
| Loans, S.11, up to EUR 0,25 million, over 3 and up to 5 years initial rate fixation | 6.28 | 5.93 | 5.36 | 4.57 | 4.78 | 4.58 | 4.67 |
| Loans, S.11, up to EUR 0,25 million, over 5 and up to 10 years initial rate fixatio | 6.70 | 5.82 | 4.87 | 4.56 | 4.08 | 3.96 | 3.88 |
| Loans, S.11, up to EUR 0,25 million, over 10 years initial rate fixation | 7.58 | 5.87 | 3.34 | 2.92 | 2.73 | 2.24 | - |
| Loans, S.11, over EUR 0,25 and up to 1 million, floating and up to 3 months initia | 5.08 | 4.62 | 2.49 | 2.19 | 2.39 | 2.02 | 2.00 |
| Loans, S.11, over EUR 0,25 and up to 1 million, over 3 months and up to 1 yea | 6.00 | 5.29 | 2.57 | 2.49 | 2.45 | 2.31 | 2.45 |
| Loans, S.11, over EUR 0,25 and up to 1 million, over 1 and up to 3 years initial | 6.31 | 5.27 | 3.06 | 1.21 | 1.14 | 2.95 | - |
| Loans, S.11, over EUR 0,25 and up to 1 million, over 3 and up to 5 years initial | 5.60 | 5.97 | - | 1.70 | 1.42 | 1.55 | 1.56 |
| Loans, S.11, over EUR 0,25 and up to 1 million, over 5 and up to 10 years initia | 5.83 | 5.46 | 3.06 | 1.94 | 2.30 | 1.64 | 2.18 |
| Loans, S.11, over EUR 0,25 and up to 1 million, over 10 years initial rate fixatio | 7.50 | 6.32 | - | 2.10 | 2.20 | - | 4.85 |
| Loans, S.11, over EUR 1 million, floating and up to 3 months initial rate fixation | 4.21 | 3.94 | 2.61 | 2.61 | 2.09 | 2.52 | 2.62 |
| Loans, S.11, over EUR 1 million, over 3 months and up to 1 year initial rate fixa | 5.15 | 4.84 | 1.87 | 2.35 | 2.27 | 2.42 | 2.05 |
| Loans, S.11, over EUR 1 million, over 1 and up to 3 years initial rate fixation | 4.07 | 4.60 | 1.00 | - | 1.00 | 0.75 | - |
| Loans, S.11, over EUR 1 million, over 3 and up to 5 years initial rate fixation | 4.49 | 4.07 | - | 1.06 | 2.53 | - | - |
| Loans, S.11, over EUR 1 million, over 5 and up to 10 years initial rate fixation | 3.84 | 4.62 | 1.79 | 1.92 | 0.86 | 1.84 | - |
| Loans, S.11, over EUR 1 million, over 10 years initial rate fixation | 4.81 | 2.35 | 3.56 | 2.23 | - | - | - |
| **2. Interest rates of new deposits** | | | | | | | |
| 2.1. Households deposits | | | | | | | |
| Households, overnight deposits | 0.11 | 0.07 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 |
| Deposits, households, agreed maturity up to 1 year | 1.86 | 0.98 | 0.28 | 0.23 | 0.11 | 0.11 | 0.11 |
| Deposits, households, agreed maturity over 1 and up to 2 years | 3.46 | 1.90 | 0.70 | 0.44 | 0.29 | 0.30 | 0.36 |
| Deposits, households, agreed maturity over 2 years | 3.86 | 2.33 | 1.07 | 0.72 | 0.66 | 0.63 | 0.61 |
| 2.2. Deposits of nonfinancial corporations (S.11) | | | | | | | |
| S.11, overnight deposits | 1.22 | 0.82 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 |
| Deposits, S.11, agreed maturity up to 1 year | 1.79 | 1.30 | 0.06 | 0.05 | 0.03 | 0.02 | 0.06 |
| Deposits, S.11, agreed maturity over 1 and up to 2 years | 0.23 | 0.13 | 0.57 | 0.20 | 0.18 | 0.16 | 0.15 |
| Deposits, S.11, agreed maturity over 2 years | 1.58 | 0.63 | 1.07 | 0.49 | 0.28 | 0.27 | 0.32 |
| 2.3. Deposits redeemable at notice of households and nonfinancial sector together | | | | | | | |
| Deposits redeemable at notice, up to 3 months notice | 3.47 | 1.85 | 0.10 | 0.02 | 0.01 | 0.01 | 0.01 |
| Deposits redeemable at notice, over 3 months notice | 3.08 | 1.79 | 0.93 | 0.55 | 0.06 | 0.02 | 0.03 |

**Table 9.5: International investment position**

| *EUR million* | | 2013 | 2014 | 2015 | 16Q3 | 16Q4 | 17Q1 | 17Q2 |
|---|---|---|---|---|---|---|---|---|
| | **NET INTERNATIONAL INVESTMENT POSITION (1-2)** | **-17,087** | **-17,219** | **-15,441** | **-15,234** | **-14,900** | **-14,441** | **-13,863** |
| **1** | **ASSETS** | **33,371** | **39,558** | **42,223** | **42,232** | **42,588** | **43,341** | **43,570** |
| **1.1** | **Direct investment** | **6,813** | **6,970** | **7,252** | **7,724** | **7,739** | **7,886** | **8,066** |
| 1.1.1 | Equity | 3,795 | 3,769 | 3,959 | 4,148 | 4,121 | 4,157 | 4,171 |
| 1.1.2 | Debt instruments | 3,018 | 3,202 | 3,293 | 3,576 | 3,618 | 3,729 | 3,895 |
| **1.2** | **Portfolio investment** | **11,386** | **12,375** | **14,458** | **15,956** | **16,719** | **17,539** | **18,292** |
| 1.2.1 | Equity and investment fund shares | 2,755 | 3,193 | 3,484 | 3,501 | 3,583 | 3,840 | 3,824 |
| 1.2.2 | Debt securities | 8,631 | 9,182 | 10,974 | 12,454 | 13,135 | 13,699 | 14,468 |
| **1.3** | **Financial derivatives** | **89** | **241** | **1,266** | **849** | **1,166** | **924** | **937** |
| **1.4** | **Other investment** | **14,414** | **19,135** | **18,460** | **16,989** | **16,259** | **16,239** | **15,524** |
| 1.4.1 | Other equity | 530 | 629 | 641 | 645 | 641 | 641 | 640 |
| 1.4.2 | Currency and deposits | 5,647 | 10,737 | 10,301 | 8,405 | 8,153 | 7,488 | 6,749 |
| 1.4.3 | Loans | 4,181 | 3,729 | 3,122 | 2,842 | 2,670 | 2,596 | 2,582 |
| 1.4.4 | Insurance, pension and standardized guarantee schemes | 131 | 141 | 129 | 140 | 141 | 145 | 145 |
| 1.4.5 | Trade credit and advances | 3,636 | 3,601 | 3,737 | 4,254 | 4,038 | 4,557 | 4,681 |
| 1.4.6 | Other accounts receivable | 289 | 298 | 529 | 703 | 615 | 813 | 728 |
| **1.5** | **Reserve assets** | **669** | **837** | **787** | **715** | **705** | **754** | **751** |
| 1.5.1 | Monetary gold | 89 | 101 | 100 | 121 | 112 | 119 | 111 |
| 1.5.2 | Special drawing rights | 220 | 247 | 264 | 203 | 207 | 207 | 199 |
| 1.5.3 | Reserve position in the IMF | 149 | 145 | 104 | 189 | 154 | 131 | 126 |
| 1.5.4 | Other reserve assets | 211 | 345 | 320 | 202 | 232 | 297 | 315 |
| **2** | **LIABILITIES** | **50,458** | **56,777** | **57,664** | **57,466** | **57,488** | **57,782** | **57,433** |
| **2.1** | **Direct investment** | **10,531** | **11,837** | **13,356** | **14,700** | **14,975** | **15,267** | **15,293** |
| 2.1.1 | Equity | 7,292 | 8,186 | 9,804 | 10,872 | 11,542 | 11,746 | 11,706 |
| 2.1.2 | Debt instruments | 3,240 | 3,651 | 3,552 | 3,828 | 3,433 | 3,521 | 3,587 |
| **2.2** | **Portfolio investment** | **16,065** | **23,797** | **23,959** | **23,593** | **21,439** | **22,447** | **22,573** |
| 2.2.1 | Equity and investment fund shares | 811 | 1,030 | 1,038 | 1,076 | 966 | 1,025 | 1,066 |
| 2.2.2 | Debt securities | 15,254 | 22,767 | 22,921 | 22,517 | 20,473 | 21,422 | 21,507 |
| **2.3** | **Financial derivatives** | **690** | **247** | **163** | **163** | **139** | **118** | **97** |
| **2.4** | **Other investment** | **23,173** | **20,896** | **20,186** | **19,009** | **20,934** | **19,950** | **19,471** |
| 2.4.1 | Other equity | 23 | 28 | 32 | 37 | 35 | 36 | 36 |
| 2.4.2 | Currency and deposits | 4,165 | 3,338 | 2,965 | 2,788 | 4,148 | 3,309 | 3,374 |
| 2.4.3 | Loans | 14,759 | 13,128 | 12,851 | 11,821 | 12,155 | 11,745 | 11,222 |
| 2.4.4 | Insurance, pension and standardized guarantee schemes | 275 | 218 | 221 | 216 | 213 | 232 | 232 |
| 2.4.5 | Trade credit and advances | 3,527 | 3,427 | 3,433 | 3,469 | 3,705 | 3,886 | 3,902 |
| 2.4.6 | Other accounts payable | 183 | 500 | 408 | 410 | 402 | 468 | 442 |
| 2.4.7 | Special drawing rights | 241 | 257 | 275 | 270 | 275 | 274 | 263 |

**Table 9.6: Gross external debt**

| *EUR million* | 2013 | 2014 | 2015 | 16Q4 | 17Q1 | 17Q2 | Jul. 17 |
|---|---|---|---|---|---|---|---|
| **TOTAL (1+2+3+4+5)** | **41,644** | **47,286** | **46,627** | **44,805** | **44,857** | **44,528** | **43,225** |
| **1 GENERAL GOVERNMENT** | **15,445** | **23,392** | **24,824** | **22,953** | **23,668** | **23,422** | **22,180** |
| **1.1 Short-term, of that** | **84** | **738** | **1,507** | **1,304** | **1,036** | **740** | **610** |
| Debt securities | 45 | 228 | 15 | 22 | 22 | 55 | 55 |
| Loans | ... | 157 | 1,201 | 1,058 | 828 | 509 | 384 |
| Trade credit and advances | 28 | 21 | 35 | 42 | 35 | 47 | 48 |
| Other debt liabilities | 12 | 331 | 257 | 182 | 151 | 129 | 124 |
| **1.2 Long-term, of that** | **15,361** | **22,654** | **23,316** | **21,649** | **22,632** | **22,682** | **21,570** |
| Debt securities | 14,073 | 21,101 | 21,813 | 19,877 | 20,863 | 20,933 | 19,820 |
| Loans | 1,281 | 1,548 | 1,500 | 1,768 | 1,766 | 1,746 | 1,747 |
| **2 CENTRAL BANK** | **2,742** | **2,083** | **2,217** | **3,457** | **2,611** | **2,592** | **2,730** |
| **2.1 Short-term, of that** | **2,500** | **1,826** | **1,942** | **3,182** | **2,337** | **2,329** | **2,471** |
| Currency and deposits | 2,500 | 1,825 | 1,942 | 3,182 | 2,337 | 2,329 | 2,471 |
| **2.2 Long-term, of that** | **241** | **257** | **275** | **275** | **274** | **263** | **259** |
| Special drawing rights (allocations) | 241 | 257 | 275 | 275 | 274 | 263 | 259 |
| **3 DEPOSIT TAKING CORPORATIONS, except the Central Bank** | **7,519** | **6,591** | **5,195** | **4,117** | **3,940** | **3,944** | **3,866** |
| **3.1 Short-term** | **893** | **747** | **702** | **817** | **820** | **983** | **978** |
| Currency and deposits | 707 | 597 | 490 | 578 | 600 | 666 | 697 |
| Debt securities | 58 | ... | ... | ... | ... | ... | ... |
| Loans | 121 | 144 | 207 | 221 | 159 | 238 | 218 |
| Trade credit and advances | ... | ... | ... | ... | ... | ... | ... |
| Other debt liabilities | 7 | 6 | 5 | 18 | 61 | 79 | 63 |
| **3.2 Long-term** | **6,626** | **5,844** | **4,493** | **3,300** | **3,120** | **2,961** | **2,889** |
| Currency and deposits | 958 | 916 | 534 | 387 | 371 | 380 | 378 |
| Debt securities | 837 | 954 | 652 | 287 | 271 | 235 | 168 |
| Loans | 4,800 | 3,941 | 3,301 | 2,620 | 2,475 | 2,343 | 2,338 |
| Trade credit and advances | 3 | 4 | 7 | 5 | 2 | 3 | 3 |
| Other debt liabilities | 29 | 29 | 0 | 1 | 1 | 0 | 2 |
| **4 OTHER SECTORS** | **12,698** | **11,570** | **10,839** | **10,845** | **11,118** | **10,983** | **10,884** |
| **4.1 Short-term, of that** | **4,039** | **3,947** | **3,976** | **4,245** | **4,554** | **4,573** | **4,509** |
| Debt securities | 4 | 5 | 0 | 2 | 4 | 2 | 2 |
| Loans | 444 | 453 | 487 | 447 | 514 | 550 | 563 |
| Trade credit and advances | 3,492 | 3,396 | 3,385 | 3,643 | 3,831 | 3,835 | 3,748 |
| Other debt liabilities | 100 | 94 | 102 | 153 | 206 | 186 | 196 |
| **4.2 Long-term, of that** | **8,659** | **7,623** | **6,864** | **6,601** | **6,563** | **6,410** | **6,375** |
| Debt securities | 238 | 480 | 441 | 284 | 263 | 282 | 282 |
| Loans | 8,113 | 6,885 | 6,155 | 6,041 | 6,004 | 5,835 | 5,803 |
| Trade credit and advances | 4 | 6 | 7 | 16 | 18 | 17 | 14 |
| Other debt liabilities | 304 | 252 | 260 | 259 | 279 | 277 | 276 |
| **5 DIRECT INVESTMENT: intercompany lending** | **3,240** | **3,651** | **3,552** | **3,433** | **3,521** | **3,587** | **3,564** |
| **NET EXTERNAL DEBT POSITION** | **15,443** | **15,559** | **13,754** | **11,730** | **11,077** | **10,533** | **9,613** |

**Table 9.7: Balance of payments**

| *EUR million* | 2014 | 2015 | 2016 | 16Q4 | 17Q1 | 17Q2 | Jul. 2017 |
|---|---|---|---|---|---|---|---|
| **I. Current account** | **2,179** | **1,698** | **2,108** | **343** | **571** | **768** | **281** |
| **1. Goods** | **1,181** | **1,476** | **1,536** | **227** | **371** | **465** | **188** |
| **1.1. Export of goods** | **22,961** | **24,039** | **24,991** | **6,407** | **6,858** | **7,145** | **2,343** |
| Export f.o.b. | 22,936 | 23,940 | 24,971 | 6,393 | 6,820 | 7,100 | 2,334 |
| Coverage adjustment | -188 | -149 | -194 | -19 | -36 | -9 | -8 |
| Net export of goods under merchanting | 199 | 231 | 186 | 26 | 69 | 45 | 17 |
| Nonmonetary gold | 15 | 17 | 29 | 7 | 6 | 9 | 0 |
| **1.2. Import of goods** | **21,780** | **22,563** | **23,454** | **6,180** | **6,487** | **6,680** | **2,155** |
| Import c.i.f. | 22,580 | 23,305 | 24,112 | 6,343 | 6,686 | 6,854 | 2,219 |
| Coverage adjustment | -160 | -115 | -5 | 3 | -19 | 9 | -2 |
| Valuation adjustment | -656 | -656 | -680 | -179 | -188 | -194 | -63 |
| Nonmonetary gold | 15 | 30 | 27 | 12 | 9 | 10 | ... |
| **2. Services** | **1,697** | **1,860** | **2,174** | **526** | **520** | **638** | **237** |
| **2.1. Export of services, of that** | **5,558** | **5,866** | **6,410** | **1,699** | **1,528** | **1,736** | **691** |
| Transport | 1,529 | 1,672 | 1,854 | 501 | 486 | 513 | 174 |
| Travel | 2,060 | 2,098 | 2,190 | 487 | 451 | 566 | 296 |
| Construction services | 277 | 292 | 385 | 112 | 89 | 103 | 32 |
| Telecomm., computer and inform. services | 457 | 519 | 552 | 154 | 123 | 137 | 48 |
| Other business services | 779 | 824 | 929 | 318 | 264 | 292 | 98 |
| **2.2. Import of services, of that** | **3,862** | **4,007** | **4,236** | **1,173** | **1,007** | **1,098** | **454** |
| Transport | 814 | 851 | 922 | 272 | 245 | 250 | 84 |
| Travel | 745 | 823 | 854 | 166 | 166 | 223 | 155 |
| Construction services | 234 | 120 | 104 | 37 | 23 | 25 | 10 |
| Telecomm., computer and inform. services | 483 | 533 | 509 | 151 | 117 | 126 | 46 |
| Other business services | 1,003 | 1,024 | 1,147 | 366 | 277 | 310 | 101 |
| **3. Primary income** | **-428** | **-1,263** | **-1,294** | **-358** | **-233** | **-257** | **-113** |
| **3.1. Receipts** | **1,093** | **1,345** | **1,436** | **319** | **435** | **374** | **108** |
| Compensation of employees | 235 | 323 | 276 | 69 | 67 | 73 | 21 |
| Investment | 368 | 500 | 623 | 138 | 123 | 157 | 47 |
| Other primary income | 490 | 522 | 537 | 113 | 244 | 143 | 39 |
| **3.2. Expenditure** | **1,521** | **2,608** | **2,730** | **678** | **667** | **631** | **221** |
| Compensation of employees | 114 | 122 | 127 | 33 | 30 | 36 | 11 |
| Investment | 1,063 | 2,057 | 2,113 | 511 | 494 | 469 | 161 |
| Other primary income | 344 | 429 | 490 | 134 | 143 | 126 | 49 |
| **4. Secondary income** | **-271** | **-375** | **-309** | **-51** | **-88** | **-77** | **-32** |
| **4.1. Receipts** | **709** | **733** | **745** | **217** | **179** | **200** | **64** |
| **4.2. Expenditure** | **980** | **1,108** | **1,054** | **267** | **267** | **277** | **95** |

**Table 9.8: Balance of payments – continued**

| *EUR million* | 2014 | 2015 | 2016 | 16Q4 | 17Q1 | 17Q2 | Jul. 2017 |
|---|---|---|---|---|---|---|---|
| **II. Capital account** | **79** | **412** | **-302** | **-106** | **-47** | **-65** | **-142** |
| **1.** Nonproduced nofinancial assets | -24 | -37 | -45 | -15 | 3 | 2 | 4 |
| **2.** Capital transfers | 102 | 449 | -257 | -91 | -50 | -68 | -146 |
| **III. Financial account** | **2,251** | **1,658** | **1,129** | **156** | **355** | **534** | **235** |
| **1. Direct investment** | **-584** | **-1,269** | **-880** | **101** | **-218** | **134** | **12** |
| Assets | 155 | 292 | 431 | 142 | 155 | 213 | 60 |
| Equity and reinvested earnings | -45 | 178 | 270 | 122 | 35 | 15 | 5 |
| Debt instruments | 200 | 114 | 161 | 19 | 119 | 198 | 55 |
| Liabilities | 739 | 1,560 | 1,311 | 41 | 373 | 79 | 48 |
| Equity and reinvested earnings | 791 | 1,785 | 1,515 | 406 | 281 | 16 | 63 |
| Debt instruments | -51 | -225 | -204 | -365 | 92 | 62 | -15 |
| **2. Portfolio investment** | **-3,968** | **2,929** | **5,079** | **2,693** | **-330** | **556** | **691** |
| Assets | 426 | 2,016 | 2,073 | 817 | 738 | 877 | 190 |
| Equity and investment fund shares | 127 | 116 | -97 | -53 | 105 | 43 | -11 |
| Debt securities | 299 | 1,900 | 2,171 | 870 | 633 | 833 | 200 |
| Liabilities | 4,394 | -914 | -3,005 | -1,876 | 1,068 | 321 | -501 |
| Equity and investment fund shares | 101 | 52 | 48 | 23 | 15 | 15 | 2 |
| Debt securities | 4,293 | -966 | -3,053 | -1,899 | 1,053 | 306 | -504 |
| **3. Financial derivatives** | **-51** | **-98** | **-215** | **-44** | **-73** | **10** | **-3** |
| **4. Other investment** | **6,765** | **208** | **-2,758** | **-2,577** | **934** | **-199** | **-475** |
| **4.1. Assets** | **4,799** | **-692** | **-2,335** | **-684** | **-56** | **-599** | **-517** |
| Other equity | 84 | 10 | 0 | -2 | 0 | 0 | 0 |
| Currency and deposits | 5,037 | -516 | -2,205 | -282 | -651 | -712 | -541 |
| Loans | -299 | -408 | -203 | -111 | -49 | 7 | -8 |
| Insurance, pension and stand. guar. schemes | 8 | -8 | 10 | 1 | 3 | ... | ... |
| Trade credits and advances | -16 | -5 | 161 | -202 | 516 | 161 | 30 |
| Other assets | -14 | 235 | -96 | -87 | 125 | -55 | 3 |
| **4.2. Liabilities** | **-1,966** | **-900** | **423** | **1,893** | **-990** | **-400** | **-42** |
| Other equity | 7 | 11 | 4 | 0 | ... | 0 | ... |
| Currency and deposits | -831 | -400 | 1,175 | 1,353 | -837 | 78 | 182 |
| Loans | -1,246 | -315 | -818 | 334 | -381 | -496 | -162 |
| Insurance, pension and stand. guar. schemes | -54 | 3 | -8 | -3 | 19 | ... | ... |
| Trade credits and advances | -144 | -100 | 137 | 233 | 191 | 51 | -50 |
| Other liabilities | 302 | -99 | -67 | -24 | 18 | -34 | -12 |
| Special drawing reights (SDR) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **5. Reserve assets** | **89** | **-113** | **-97** | **-17** | **43** | **33** | **10** |
| **IV. Net errors and omissions** | **-6** | **-453** | **-677** | **-82** | **-169** | **-169** | **96** |

## Table 9.9: Non-consolidated financial assets – outstanding amounts

| *EUR million* | 2013 | 2014 | 2015 | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 |
|---|---|---|---|---|---|---|---|---|
| **Domestic sector** | | | | | | | | |
| Total | 179,497 | 186,215 | 185,902 | 184,443 | 182,795 | 183,704 | 184,478 | 188,222 |
| Monetary gold and SDRs | 309 | 348 | 363 | 312 | 326 | 325 | 320 | 326 |
| Currency and deposits | 37,061 | 46,009 | 46,593 | 44,212 | 43,249 | 43,461 | 42,485 | 43,603 |
| Debt securities | 18,319 | 19,804 | 22,828 | 23,894 | 24,827 | 26,200 | 26,103 | 26,642 |
| Loans | 49,970 | 44,453 | 39,625 | 39,422 | 38,061 | 37,340 | 37,557 | 37,926 |
| Shares | 19,529 | 20,175 | 19,713 | 19,658 | 18,670 | 18,770 | 18,765 | 19,582 |
| Other equity | 22,483 | 23,002 | 23,304 | 23,302 | 23,558 | 23,687 | 24,753 | 24,786 |
| Investment fund shares/units | 3,105 | 3,642 | 3,879 | 3,813 | 3,838 | 3,981 | 4,049 | 4,269 |
| Insurance and pension schemes | 6,541 | 7,132 | 7,406 | 7,509 | 7,599 | 7,713 | 7,737 | 7,826 |
| Other | 22,178 | 21,649 | 22,190 | 22,319 | 22,667 | 22,226 | 22,710 | 23,261 |
| **Non-financial corporations** | | | | | | | | |
| Total | 43,429 | 41,390 | 41,473 | 42,090 | 42,362 | 42,117 | 43,018 | 44,014 |
| Currency and deposits | 4,646 | 5,095 | 5,826 | 5,855 | 5,854 | 6,007 | 6,399 | 6,524 |
| Debt securities | 194 | 184 | 142 | 167 | 171 | 174 | 127 | 119 |
| Loans | 6,151 | 6,043 | 5,849 | 6,166 | 5,923 | 5,908 | 5,781 | 5,851 |
| Shares | 4,525 | 3,063 | 2,896 | 2,861 | 2,854 | 2,654 | 2,665 | 2,809 |
| Other equity | 11,806 | 11,359 | 11,472 | 11,496 | 11,746 | 11,705 | 12,185 | 12,203 |
| Investment fund shares/units | 108 | 108 | 99 | 92 | 82 | 87 | 52 | 64 |
| Insurance and pension schemes | 387 | 408 | 427 | 482 | 470 | 443 | 438 | 476 |
| Other | 15,612 | 15,132 | 14,763 | 14,971 | 15,262 | 15,139 | 15,371 | 15,966 |
| **Monetary financial institutions** | | | | | | | | |
| Total | 55,703 | 53,206 | 50,657 | 50,376 | 50,111 | 51,286 | 51,929 | 52,962 |
| Monetary gold and SDRs | 309 | 348 | 363 | 312 | 326 | 325 | 320 | 326 |
| Currency and deposits | 7,351 | 10,358 | 7,560 | 7,225 | 6,863 | 7,325 | 7,168 | 7,204 |
| Debt securities | 12,086 | 13,226 | 15,973 | 16,893 | 17,747 | 18,926 | 18,971 | 19,488 |
| Loans | 34,556 | 27,863 | 25,179 | 24,362 | 23,653 | 23,290 | 24,099 | 24,522 |
| Shares | 846 | 666 | 641 | 627 | 597 | 559 | 552 | 531 |
| Other equity | 186 | 314 | 299 | 285 | 286 | 287 | 282 | 283 |
| Investment fund shares/units | 12 | 12 | 9 | 7 | 6 | 6 | 6 | 6 |
| Insurance and pension schemes | 35 | 37 | 38 | 38 | 39 | 39 | 38 | 39 |
| Other | 322 | 382 | 595 | 625 | 595 | 529 | 495 | 563 |
| **Other financial institutions** | | | | | | | | |
| Total | 15,225 | 17,368 | 17,134 | 17,322 | 17,242 | 17,570 | 17,554 | 18,017 |
| Currency and deposits | 1,096 | 1,316 | 1,201 | 1,340 | 1,246 | 1,230 | 1,256 | 1,328 |
| Debt securities | 5,108 | 5,634 | 6,040 | 6,174 | 6,264 | 6,476 | 6,431 | 6,404 |
| Loans | 3,624 | 3,388 | 3,033 | 2,999 | 2,993 | 2,876 | 2,876 | 2,847 |
| Shares | 2,598 | 3,580 | 3,427 | 3,272 | 3,183 | 3,354 | 3,377 | 3,607 |
| Other equity | 196 | 640 | 612 | 606 | 609 | 647 | 625 | 618 |
| Investment fund shares/units | 1,672 | 1,918 | 2,001 | 1,996 | 2,034 | 2,103 | 2,140 | 2,248 |
| Insurance and pension schemes | 202 | 218 | 182 | 205 | 204 | 197 | 188 | 213 |
| Other | 731 | 675 | 639 | 729 | 710 | 687 | 661 | 753 |
| **General government** | | | | | | | | |
| Total | 28,256 | 35,645 | 37,229 | 35,069 | 33,110 | 32,315 | 30,661 | 31,309 |
| Currency and deposits | 5,985 | 10,369 | 12,358 | 10,017 | 9,221 | 8,684 | 7,060 | 7,687 |
| Debt securities | 598 | 507 | 548 | 532 | 499 | 485 | 447 | 448 |
| Loans | 4,940 | 6,469 | 4,911 | 5,180 | 4,763 | 4,542 | 4,089 | 3,924 |
| Shares | 9,091 | 10,128 | 10,048 | 10,253 | 9,470 | 9,670 | 9,828 | 10,233 |
| Other equity | 4,560 | 4,904 | 4,856 | 4,808 | 4,819 | 4,853 | 4,906 | 4,889 |
| Investment fund shares/units | 163 | 206 | 244 | 236 | 234 | 233 | 252 | 270 |
| Insurance and pension schemes | 2 | 12 | 23 | 25 | 22 | 19 | 21 | 14 |
| Other | 2,917 | 3,049 | 4,241 | 4,019 | 4,083 | 3,830 | 4,058 | 3,844 |
| **Households and NPISHs** | | | | | | | | |
| Total | 36,883 | 38,605 | 39,409 | 39,586 | 39,969 | 40,416 | 41,316 | 41,920 |
| Currency and deposits | 17,984 | 18,871 | 19,647 | 19,775 | 20,065 | 20,215 | 20,602 | 20,860 |
| Debt securities | 334 | 253 | 125 | 128 | 146 | 139 | 127 | 183 |
| Loans | 700 | 691 | 653 | 715 | 729 | 725 | 712 | 782 |
| Shares | 2,469 | 2,739 | 2,701 | 2,645 | 2,565 | 2,533 | 2,343 | 2,401 |
| Other equity | 5,734 | 5,785 | 6,066 | 6,108 | 6,098 | 6,196 | 6,755 | 6,794 |
| Investment fund shares/units | 1,151 | 1,398 | 1,528 | 1,482 | 1,483 | 1,552 | 1,600 | 1,681 |
| Insurance and pension schemes | 5,914 | 6,457 | 6,736 | 6,759 | 6,865 | 7,016 | 7,053 | 7,084 |
| Other | 2,596 | 2,412 | 1,953 | 1,975 | 2,018 | 2,040 | 2,125 | 2,135 |
| **Rest of the world** | | | | | | | | |
| Total | 51,393 | 58,303 | 58,422 | 58,913 | 58,803 | 58,460 | 58,175 | 58,245 |
| Monetary gold and SDRs | 241 | 257 | 275 | 267 | 272 | 270 | 275 | 274 |
| Currency and deposits | 4,293 | 3,497 | 3,167 | 3,710 | 3,443 | 2,972 | 4,380 | 3,471 |
| Debt securities | 15,572 | 23,282 | 23,331 | 22,966 | 22,665 | 22,902 | 20,889 | 21,644 |
| Loans | 16,697 | 15,676 | 15,304 | 14,998 | 14,787 | 14,434 | 14,403 | 14,069 |
| Shares | 3,687 | 4,556 | 4,539 | 4,886 | 5,225 | 5,259 | 5,160 | 5,326 |
| Other equity | 4,815 | 5,401 | 6,284 | 6,402 | 6,482 | 6,893 | 7,288 | 7,388 |
| Investment fund shares/units | 28 | 21 | 25 | 24 | 25 | 26 | 25 | 27 |
| Insurance and pension schemes | 275 | 218 | 221 | 232 | 244 | 216 | 213 | 232 |
| Other | 5,784 | 5,394 | 5,276 | 5,429 | 5,660 | 5,489 | 5,541 | 5,813 |

## Table 9.10: Non-consolidated liabilities – outstanding amounts

| *EUR million* | 2013 | 2014 | 2015 | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 |
|---|---|---|---|---|---|---|---|---|
| **Domestic sector** | | | | | | | | |
| Total | 197,534 | 205,223 | 202,621 | 201,129 | 199,551 | 200,691 | 200,802 | 203,911 |
| Monetary gold and SDRs | 241 | 257 | 275 | 267 | 272 | 270 | 275 | 274 |
| Currency and deposits | 35,203 | 38,457 | 39,165 | 37,570 | 36,911 | 37,691 | 38,353 | 39,232 |
| Debt securities | 25,125 | 33,538 | 34,824 | 35,000 | 35,271 | 36,322 | 33,513 | 34,128 |
| Loans | 61,027 | 54,637 | 49,917 | 49,270 | 47,702 | 46,663 | 47,048 | 47,220 |
| Shares | 20,887 | 22,274 | 21,615 | 22,101 | 21,498 | 21,532 | 21,359 | 22,151 |
| Other equity | 24,199 | 25,395 | 26,608 | 26,673 | 27,071 | 27,589 | 29,083 | 29,298 |
| Investment fund shares/units | 1,839 | 2,143 | 2,303 | 2,209 | 2,220 | 2,315 | 2,374 | 2,481 |
| Insurance and pension schemes | 6,684 | 7,209 | 7,498 | 7,604 | 7,704 | 7,790 | 7,810 | 7,914 |
| Other | 22,328 | 21,313 | 20,417 | 20,437 | 20,903 | 20,519 | 20,987 | 21,213 |
| **Non-financial corporations** | | | | | | | | |
| Total | 84,393 | 81,790 | 78,492 | 79,023 | 78,757 | 78,233 | 78,966 | 79,987 |
| Debt securities | 818 | 1,088 | 1,179 | 1,223 | 1,321 | 1,376 | 955 | 1,015 |
| Loans | 31,297 | 28,629 | 25,199 | 25,420 | 24,732 | 24,133 | 23,634 | 23,745 |
| Shares | 14,225 | 14,233 | 13,421 | 13,649 | 13,218 | 13,119 | 12,762 | 13,253 |
| Other equity | 22,453 | 23,013 | 24,039 | 24,139 | 24,475 | 24,928 | 26,319 | 26,513 |
| Other | 15,600 | 14,827 | 14,654 | 14,591 | 15,011 | 14,676 | 15,297 | 15,460 |
| **Monetary financial institutions** | | | | | | | | |
| Total | 50,512 | 48,917 | 47,006 | 47,065 | 46,883 | 48,277 | 49,224 | 50,442 |
| Monetary gold and SDRs | 241 | 257 | 275 | 267 | 272 | 270 | 275 | 274 |
| Currency and deposits | 33,048 | 34,122 | 34,012 | 34,673 | 35,072 | 36,579 | 37,528 | 38,390 |
| Debt securities | 1,667 | 1,666 | 1,149 | 847 | 820 | 800 | 801 | 781 |
| Loans | 10,427 | 7,073 | 5,574 | 4,970 | 4,360 | 4,333 | 4,330 | 4,564 |
| Shares | 3,866 | 4,399 | 4,539 | 4,729 | 4,738 | 4,721 | 4,724 | 4,791 |
| Other equity | 823 | 945 | 1,005 | 1,029 | 1,072 | 1,090 | 1,091 | 1,108 |
| Investment fund shares/units | 36 | 37 | 56 | 66 | 66 | 81 | 99 | 65 |
| Other | 404 | 419 | 396 | 484 | 484 | 403 | 375 | 469 |
| **Other financial institutions** | | | | | | | | |
| Total | 16,069 | 17,540 | 17,001 | 16,939 | 16,778 | 16,873 | 16,848 | 17,359 |
| Debt securities | 39 | 136 | 73 | 73 | 123 | 121 | 118 | 121 |
| Loans | 5,070 | 4,453 | 3,678 | 3,365 | 3,143 | 3,063 | 2,924 | 2,870 |
| Shares | 1,486 | 2,174 | 2,093 | 2,233 | 2,107 | 2,143 | 2,154 | 2,360 |
| Other equity | 472 | 947 | 964 | 992 | 1,007 | 1,049 | 1,137 | 1,143 |
| Investment fund shares/units | 1,804 | 2,106 | 2,247 | 2,143 | 2,154 | 2,234 | 2,275 | 2,416 |
| Insurance and pension schemes | 6,684 | 7,209 | 7,498 | 7,603 | 7,703 | 7,790 | 7,810 | 7,914 |
| Other | 513 | 516 | 448 | 530 | 540 | 475 | 431 | 536 |
| **General government** | | | | | | | | |
| Total | 34,194 | 44,665 | 47,816 | 45,813 | 44,804 | 44,748 | 43,032 | 43,244 |
| Currency and deposits | 2,155 | 4,335 | 5,152 | 2,897 | 1,839 | 1,112 | 825 | 842 |
| Debt securities | 22,601 | 30,647 | 32,423 | 32,857 | 33,006 | 34,025 | 31,639 | 32,211 |
| Loans | 3,448 | 3,846 | 4,738 | 4,812 | 4,694 | 4,303 | 5,122 | 4,838 |
| Shares | 1,309 | 1,469 | 1,562 | 1,489 | 1,435 | 1,550 | 1,719 | 1,747 |
| Other equity | 451 | 491 | 600 | 513 | 517 | 522 | 537 | 533 |
| Other | 4,229 | 3,878 | 3,341 | 3,245 | 3,313 | 3,236 | 3,191 | 3,072 |
| **Households and NPISHs** | | | | | | | | |
| Total | 12,367 | 12,311 | 12,306 | 12,289 | 12,329 | 12,560 | 12,732 | 12,879 |
| Loans | 10,785 | 10,637 | 10,728 | 10,702 | 10,774 | 10,832 | 11,039 | 11,203 |
| Other | 1,582 | 1,674 | 1,578 | 1,587 | 1,556 | 1,728 | 1,693 | 1,676 |
| **Rest of the world** | | | | | | | | |
| Total | 33,356 | 39,295 | 41,702 | 42,226 | 42,046 | 41,472 | 41,851 | 42,556 |
| Monetary gold and SDRs | 309 | 348 | 363 | 312 | 326 | 324 | 319 | 325 |
| Currency and deposits | 6,151 | 11,050 | 10,595 | 10,352 | 9,781 | 8,742 | 8,512 | 7,842 |
| Debt securities | 8,767 | 9,548 | 11,335 | 11,860 | 12,221 | 12,779 | 13,479 | 14,158 |
| Loans | 5,640 | 5,492 | 5,012 | 5,150 | 5,146 | 5,110 | 4,912 | 4,776 |
| Shares | 2,330 | 2,457 | 2,637 | 2,444 | 2,397 | 2,497 | 2,566 | 2,757 |
| Other equity | 3,099 | 3,008 | 2,981 | 3,031 | 2,968 | 2,992 | 2,957 | 2,877 |
| Investment fund shares/units | 1,294 | 1,520 | 1,602 | 1,628 | 1,643 | 1,692 | 1,700 | 1,815 |
| Insurance and pension schemes | 131 | 141 | 129 | 137 | 140 | 140 | 141 | 145 |
| Other | 5,634 | 5,730 | 7,049 | 7,311 | 7,425 | 7,196 | 7,264 | 7,861 |

## Table 9.11: Net financial assets

| *EUR million* | 2013 | 2014 | 15Q4 | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 |
|---|---|---|---|---|---|---|---|---|
| Domestic sector | -18,037 | -19,008 | -16,719 | -16,687 | -16,756 | -16,987 | -16,324 | -15,689 |
| Non-financial corporations | -40,963 | -40,399 | -37,019 | -36,932 | -36,395 | -36,116 | -35,948 | -35,973 |
| Monetary financial institutions | 5,191 | 4,289 | 3,651 | 3,311 | 3,227 | 3,009 | 2,706 | 2,520 |
| Other financial institutions | -844 | -172 | 133 | 383 | 465 | 696 | 706 | 658 |
| General government | -5,938 | -9,021 | -10,587 | -10,745 | -11,694 | -12,433 | -12,372 | -11,935 |
| Households and NPISHs | 24,516 | 26,294 | 27,103 | 27,297 | 27,640 | 27,856 | 28,584 | 29,041 |
| Rest of the world | 18,038 | 19,009 | 16,719 | 16,687 | 16,757 | 16,988 | 16,324 | 15,689 |

## Table 9.12: Non-consolidated transactions in financial assets – four quarter moving sum of flows

| *EUR million* | 2013 | 2014 | 2015 | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 |
|---|---|---|---|---|---|---|---|---|
| **Domestic sector** | | | | | | | | |
| Total | -1,853 | 3,656 | 1,000 | -653 | -514 | -2,758 | -1,867 | 2,640 |
| Monetary gold and SDRs | -12 | 12 | 0 | -18 | -56 | -56 | -56 | 0 |
| Currency and deposits | 777 | 8,795 | 470 | -2,342 | -808 | -3,268 | -4,118 | -625 |
| Debt securities | 993 | 646 | 3,086 | 3,726 | 3,317 | 3,485 | 2,863 | 2,648 |
| Loans | -3,799 | -4,658 | -3,120 | -2,246 | -2,356 | -2,010 | -707 | -340 |
| Shares | 139 | -824 | 181 | -79 | -521 | -513 | -353 | -80 |
| Other equity | 430 | 201 | 474 | 491 | 761 | 311 | 492 | 479 |
| Investment fund shares/units | 27 | 152 | 167 | 121 | 71 | 50 | 2 | 37 |
| Insurance and pension schemes | -23 | 182 | 178 | 106 | 110 | 137 | 138 | 128 |
| Other | -385 | -850 | -437 | -413 | -1,033 | -895 | -128 | 393 |
| **Non-financial corporations** | | | | | | | | |
| Total | 22 | -424 | 393 | 324 | -135 | -75 | 1,067 | 1,495 |
| Currency and deposits | 583 | 456 | 744 | 746 | 453 | 536 | 575 | 668 |
| Debt securities | -16 | -14 | -36 | -18 | -3 | 15 | -6 | -37 |
| Loans | -207 | 75 | -192 | -87 | -208 | -176 | -187 | -365 |
| Shares | -6 | -337 | 103 | 55 | 77 | 50 | -13 | 33 |
| Other equity | 110 | -100 | 294 | 290 | 573 | 218 | 453 | 464 |
| Investment fund shares/units | -20 | -1 | -3 | -6 | -7 | -8 | -28 | -20 |
| Insurance and pension schemes | -41 | 24 | 23 | 25 | 10 | -20 | 2 | -10 |
| Other | -381 | -528 | -539 | -681 | -1,030 | -691 | 271 | 761 |
| **Monetary financial institutions** | | | | | | | | |
| Total | -3,413 | -1,546 | -1,797 | -1,133 | 690 | 2,094 | 2,542 | 3,400 |
| Monetary gold and SDRs | -12 | 12 | 0 | -18 | -56 | -56 | -56 | 0 |
| Currency and deposits | 613 | 2,936 | -2,849 | -3,339 | -1,098 | -361 | -373 | -23 |
| Debt securities | 512 | 791 | 2,764 | 3,544 | 3,227 | 3,524 | 2,847 | 2,705 |
| Loans | -4,344 | -5,251 | -2,052 | -1,453 | -1,353 | -886 | 303 | 817 |
| Shares | -147 | -208 | 141 | 93 | -70 | -74 | -91 | -61 |
| Other equity | 148 | 155 | 14 | 29 | 26 | 35 | 56 | 38 |
| Investment fund shares/units | -13 | -4 | -2 | -2 | -2 | -2 | -2 | -1 |
| Insurance and pension schemes | -1 | 2 | 1 | 1 | 0 | 0 | 0 | 1 |
| Other | -169 | 22 | 185 | 13 | 17 | -87 | -140 | -74 |
| **Other financial institutions** | | | | | | | | |
| Total | 96 | -116 | 35 | 35 | -82 | -49 | -63 | -2 |
| Currency and deposits | -270 | 158 | -133 | 13 | -133 | -34 | 61 | -9 |
| Debt securities | 305 | 100 | 313 | 226 | 256 | 221 | 157 | 84 |
| Loans | -92 | -304 | -192 | -150 | -112 | -171 | -203 | -197 |
| Shares | 75 | -79 | 49 | -92 | -132 | -104 | -59 | 99 |
| Other equity | 13 | 26 | 15 | 10 | 5 | 10 | -35 | -28 |
| Investment fund shares/units | 74 | 59 | 31 | 31 | 47 | 38 | 28 | 24 |
| Insurance and pension schemes | -24 | 15 | -34 | -27 | -24 | -7 | 12 | 7 |
| Other | 14 | -91 | -14 | 24 | 11 | -2 | -24 | 17 |
| **General government** | | | | | | | | |
| Total | 1,390 | 4,964 | 1,405 | -813 | -2,030 | -5,877 | -6,549 | -3,619 |
| Currency and deposits | -71 | 4,356 | 1,936 | -563 | -969 | -4,333 | -5,331 | -2,338 |
| Debt securities | 191 | -131 | 58 | 32 | -111 | -234 | -112 | -93 |
| Loans | 866 | 821 | -666 | -569 | -676 | -784 | -655 | -620 |
| Shares | 271 | -123 | -69 | -52 | -316 | -315 | -57 | -69 |
| Other equity | 147 | 93 | 113 | 130 | 128 | 13 | -12 | -35 |
| Investment fund shares/units | 4 | 16 | 26 | 30 | 16 | -16 | -10 | -5 |
| Insurance and pension schemes | 0 | 2 | 0 | 0 | -5 | -13 | -1 | -5 |
| Other | -18 | -71 | 7 | 180 | -96 | -195 | -371 | -455 |
| **Households and NPISHs** | | | | | | | | |
| Total | 51 | 778 | 964 | 934 | 1,043 | 1,148 | 1,137 | 1,366 |
| Currency and deposits | -78 | 889 | 771 | 801 | 940 | 924 | 950 | 1,077 |
| Debt securities | 0 | -99 | -13 | -58 | -51 | -42 | -22 | -11 |
| Loans | -23 | 1 | -17 | 14 | -7 | 7 | 35 | 25 |
| Shares | -54 | -77 | -44 | -82 | -80 | -71 | -132 | -83 |
| Other equity | 13 | 27 | 38 | 33 | 30 | 35 | 30 | 40 |
| Investment fund shares/units | -19 | 83 | 116 | 68 | 18 | 38 | 14 | 39 |
| Insurance and pension schemes | 43 | 138 | 188 | 107 | 129 | 176 | 126 | 135 |
| Other | 169 | -183 | -76 | 51 | 64 | 81 | 135 | 143 |
| **Rest of the world** | | | | | | | | |
| Total | -782 | 3,384 | -426 | -438 | 493 | -1,607 | -1,359 | -1,230 |
| Monetary gold and SDRs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Currency and deposits | -4,186 | -805 | -350 | 371 | 406 | -24 | 1,198 | -252 |
| Debt securities | 3,784 | 4,444 | -999 | -683 | 17 | -1,645 | -2,885 | -1,616 |
| Loans | -196 | -1,142 | -595 | -1,429 | -1,655 | -1,249 | -1,019 | -939 |
| Shares | 54 | 1,040 | 335 | 499 | 692 | 718 | 619 | 491 |
| Other equity | -32 | -51 | 1,377 | 1,113 | 1,188 | 852 | 775 | 826 |
| Investment fund shares/units | 2 | -11 | 3 | 2 | 1 | 1 | 0 | 0 |
| Insurance and pension schemes | 39 | -54 | 3 | 20 | 29 | -2 | -8 | 0 |
| Other | -246 | -38 | -200 | -332 | -186 | -258 | -38 | 257 |

**Table 9.13: Non-consolidated transactions in liabilities - four quarter moving sum of flows**

| *EUR million* | 2013 | 2014 | 2015 | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 |
|---|---|---|---|---|---|---|---|---|
| **Domestic sector** | | | | | | | | |
| Total | -2,804 | 1,605 | -728 | -2,158 | -1,508 | -3,686 | -2,738 | 1,639 |
| Monetary gold and SDRs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Currency and deposits | -3,988 | 3,170 | 637 | -1,068 | -232 | -812 | -822 | 1,635 |
| Debt securities | 5,338 | 4,602 | 338 | 1,135 | 1,469 | -174 | -1,971 | -1,184 |
| Loans | -4,031 | -5,735 | -3,442 | -3,485 | -3,875 | -3,241 | -1,628 | -1,027 |
| Shares | 271 | 172 | 246 | 277 | 207 | 234 | 359 | 349 |
| Other equity | 247 | 102 | 1,883 | 1,612 | 1,898 | 1,132 | 1,149 | 1,197 |
| Investment fund shares/units | -38 | 39 | 142 | 59 | 7 | 3 | -1 | 24 |
| Insurance and pension schemes | 27 | 121 | 189 | 139 | 146 | 128 | 120 | 123 |
| Other | -629 | -866 | -721 | -827 | -1,128 | -955 | 54 | 521 |
| **Non-financial corporations** | | | | | | | | |
| Total | -1,755 | -2,339 | -1,057 | -699 | -808 | -572 | 485 | 933 |
| Debt securities | 20 | 288 | 83 | 102 | 162 | 174 | -227 | -218 |
| Loans | -1,389 | -1,965 | -2,404 | -2,130 | -2,217 | -1,622 | -778 | -787 |
| Shares | 32 | 54 | 152 | 176 | 157 | 188 | 139 | 138 |
| Other equity | 105 | 171 | 1,466 | 1,483 | 1,763 | 1,080 | 1,081 | 1,127 |
| Other | -522 | -887 | -354 | -330 | -674 | -392 | 272 | 673 |
| **Monetary financial institutions** | | | | | | | | |
| Total | -7,302 | -2,320 | -2,282 | -1,593 | 496 | 1,922 | 2,291 | 3,177 |
| Monetary gold and SDRs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Currency and deposits | -4,221 | 1,002 | -146 | 156 | 1,887 | 3,402 | 3,508 | 3,689 |
| Debt securities | -627 | 14 | -525 | -750 | -77 | -417 | -339 | -56 |
| Loans | -2,320 | -3,367 | -1,536 | -980 | -1,279 | -1,006 | -826 | -399 |
| Shares | -23 | 114 | 44 | 52 | 24 | 24 | 17 | 6 |
| Other equity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Investment fund shares/units | 12 | 0 | 19 | 31 | 12 | 20 | 43 | -1 |
| Other | -122 | -82 | -138 | -102 | -71 | -100 | -112 | -63 |
| **Other financial institutions** | | | | | | | | |
| Total | -162 | -635 | 73 | -21 | 0 | -117 | -189 | -115 |
| Debt securities | -10 | 1 | -72 | -72 | 24 | 24 | 42 | 41 |
| Loans | -350 | -694 | -461 | -174 | -241 | -309 | -348 | -380 |
| Shares | 56 | 3 | 51 | 49 | 26 | 22 | 4 | 5 |
| Other equity | 141 | -68 | 305 | 16 | 21 | 48 | 67 | 68 |
| Investment fund shares/units | -50 | 39 | 123 | 28 | -5 | -17 | -44 | 26 |
| Insurance and pension schemes | 27 | 121 | 189 | 139 | 146 | 128 | 120 | 123 |
| Other | 25 | -36 | -62 | -7 | 30 | -13 | -30 | 2 |
| **General government** | | | | | | | | |
| Total | 6,725 | 6,970 | 2,522 | 77 | -1,348 | -5,221 | -5,819 | -3,026 |
| Currency and deposits | 232 | 2,168 | 783 | -1,224 | -2,118 | -4,213 | -4,330 | -2,054 |
| Debt securities | 5,956 | 4,299 | 851 | 1,855 | 1,360 | 45 | -1,446 | -951 |
| Loans | 347 | 395 | 872 | -309 | -315 | -564 | -102 | -52 |
| Shares | 205 | 0 | 0 | 0 | 0 | 0 | 200 | 200 |
| Other equity | 0 | 0 | 112 | 113 | 113 | 3 | 2 | 2 |
| Other | -15 | 107 | -96 | -358 | -389 | -491 | -143 | -172 |
| **Households and NPISHs** | | | | | | | | |
| Total | -310 | -71 | 17 | 77 | 152 | 303 | 493 | 670 |
| Loans | -317 | -103 | 87 | 107 | 177 | 260 | 426 | 590 |
| Other | 6 | 32 | -70 | -30 | -25 | 42 | 67 | 80 |
| **Rest of the world** | | | | | | | | |
| Total | 169 | 5,435 | 1,301 | 1,067 | 1,487 | -680 | -487 | -230 |
| Monetary gold and SDRs | -12 | 12 | 0 | -18 | -56 | -56 | -56 | 0 |
| Currency and deposits | 579 | 4,821 | -517 | -903 | -170 | -2,479 | -2,098 | -2,512 |
| Debt securities | -561 | 488 | 1,749 | 1,909 | 1,865 | 2,014 | 1,949 | 2,216 |
| Loans | 36 | -65 | -274 | -190 | -136 | -18 | -98 | -252 |
| Shares | -78 | 44 | 270 | 143 | -36 | -29 | -93 | 62 |
| Other equity | 151 | 48 | -32 | -7 | 52 | 31 | 117 | 108 |
| Investment fund shares/units | 67 | 102 | 28 | 64 | 65 | 48 | 2 | 13 |
| Insurance and pension schemes | -10 | 8 | -8 | -13 | -8 | 7 | 10 | 6 |
| Other | -3 | -23 | 85 | 82 | -91 | -198 | -220 | 130 |

**Table 9.14: Net financial transactions – four quarter moving sum of flows**

| *EUR million* | 2013 | 2014 | 15Q4 | 16Q1 | 16Q2 | 16Q3 | 16Q4 | 17Q1 |
|---|---|---|---|---|---|---|---|---|
| Domestic sector | 951 | 2,051 | 1,728 | 1,506 | 994 | 927 | 872 | 1,001 |
| Non-financial corporations | 1,777 | 1,915 | 1,450 | 1,022 | 672 | 497 | 581 | 561 |
| Monetary financial institutions | 3,889 | 775 | 485 | 460 | 194 | 172 | 250 | 223 |
| Other financial institutions | 257 | 519 | -38 | 56 | -82 | 69 | 126 | 113 |
| General government | -5,334 | -2,006 | -1,117 | -889 | -681 | -656 | -731 | -593 |
| Households and NPISHs | 361 | 849 | 947 | 857 | 891 | 845 | 644 | 696 |
| Rest of the world | -951 | -2,051 | -1,728 | -1,506 | -994 | -927 | -872 | -1,001 |

# METHODOLOGICAL NOTE

## International economic relations

The balance of payments methodology and Slovenia's international investment position are based on the recommendations of the sixth edition of the IMF's Balance of Payments and International Investment Position Manual (IMF, 2009). The external debt statistics are based on the External Debt Statistics: Guide for Compilers and Users (IMF, 2014), which was also issued by the IMF and is fully compliant with the aforementioned manual.

The **balance of payments** is a statistical illustration of economic transactions between residents of a certain economy and non-residents taking place during a specific period. A transaction is an interaction between two institutional units that occurs by mutual agreement or through the operation of the law and involves an exchange of value or a transfer.

The **international investment position** is statistical statement that shows at a point in time the value of financial assets of residents of an economy that are claims on non-residents or are gold bullion held as reserve assets, and the liabilities of residents of an economy to non-residents.

The **gross external debt** is derived from the international investment position. It consists of non-contingent liabilities requiring the repayment of principal and/or interest at a specific period in the future that are simultaneously debt to a non-resident of a specific economy. The net **external debt** is derived from the difference between the claims and liabilities vis-à-vis non-residents via such instruments. The concept of external debt does not include equities or financial derivatives.

## Statistics of financial institutions and markets

The methodology for the balance sheets of financial institutions is based on the methodology of the European Central Bank (ECB) and the euro area. The data source is the statistical report by monetary financial institutions.

The features of the methodology are as follows:

- The sector of monetary financial institutions (MFIs) comprises banks, savings banks, credit unions and money-market funds.
- Loans are disclosed in gross amounts.
- The items "loans and deposits" and "debt securities" under claims and liabilities, on account of the inclusion of marketable/non-marketable securities in the items of loans and deposits and securities. According to the ECB methodology non-marketable securities are included under loans and deposits, while marketable securities are included under debt securities.
- Under the ECB methodology relations on behalf and internal relations are included in net amounts.
- The figures for certain items (loans, deposits, securities other than shares, issued debt securities) are disclosed at nominal value in accordance with the ECB requirement. The nominal value for individual instruments means the amount of principal that the obligor owes the creditor under the contract:
  - loans: outstanding principal, excluding accrued interest, commission and other costs,
  - deposits: amount committed for a fixed term, excluding accrued interest,
  - debt securities: nominal value.

The **consolidated balance sheet of monetary financial institutions** discloses the overall (consolidated) balance sheet of the Bank of Slovenia and other monetary financial institutions at the end of the month. Mutual claims and liabilities of sectors S.122 and S.121 are excluded. On the liability side of the balance sheet, liabilities to domestic sector S.1311 are excluded in certain items, and are captured under other liabilities.

The balance sheet of the Bank of Slovenia discloses the balance sheet of the Bank of Slovenia at the end of the month in accordance with ECB's methodology.

The balance sheet of other monetary financial institutions discloses the aggregate balance sheet of other monetary financial institutions, i.e. banks, savings banks, credit unions and money-market funds, at the end of the month.

The legal requirements with regard to interest rate statistics of MFIs are set out in Regulation ECB/2013/34 amended by Regulation ECB/2014/30, which defines the statistical standards according to which monetary financial institutions report their interest rate statistics. The interest rate statistics of MFIs relate to the interest rates on which a credit institution or other institution reach agreement with a client. A new operation is defined as a new agreement between a household or non-financial corporation and a credit institution or other institution. New agreements include all financial contracts whose terms first set out the interest rate on a deposit or loan, and all new negotiations with regard to existing deposits and loans.

## Financial accounts statistics

The methodological basis for compiling the financial accounts consists of the ESA 2010, which sets out common standards, definitions, classifications and accounting rules.

The financial accounts disclose the stocks and transactions recorded by individual institutional sectors in individual financial instruments as claims and liabilities.

The **institutional sectors** comprise the domestic sectors and the rest of the world. The domestic sectors comprise non-financial corporations, monetary financial institutions (central bank, deposit-taking corporations, money-market funds), other financial institutions (investment funds, other financial intermediaries, financial auxiliaries, captive financial institutions and money lenders, insurance corporations, pension funds), the general government sector (central government, local government, social security funds), households and non-profit institutions serving households (NPISHs).

**Financial instruments** comprise monetary gold and SDRs (special drawing rights), currency and deposits, debt securities, loans, shares, other equity, investment fund shares/units, insurance and pension schemes, and other instruments (financial derivatives, other accounts receivable/payable).

**Transactions** comprise the difference between increases (acquisitions) and decreases (disposals), i.e. the net transactions in an individual financial instrument.

**Net financial assets** discloses the difference between the stock of financial assets and the stock of financial liabilities, while net transactions discloses the difference between transactions in financial assets and transactions in financial liabilities.

The annual and quarterly stocks at the end of the period and the annual and quarterly transactions (four-quarter moving sums) are given in the table. The figures are unconsolidated, which means that they include claims and liabilities between units within the framework of an institutional sector.