CROATIAN NATIONAL BANK

Information on economic trends and forecasts

July 2016

1 Summary

The domestic economy continues to recover in 2016, with an anticipated real GDP growth rate of 2.3%.

Real GDP could increase by 2.3% in 2016. Notwithstanding a slightly lower projected growth rate of goods and services exports than that of the previous year, foreign demand could this year again make the largest positive contribution to economic growth. All domestic demand components are also expected to grow. Personal consumption is expected to accelerate sharply, given the stronger employment growth, a sharp decrease in the unemployment rate and favourable real gross wage trends. Capital investments are also expected to accelerate growth, generated largely by the private sector, while the pace of public investments will probably be slower than was expected. Government consumption will continue growth at low rates so that it will make an almost neutral contribution to total economic activity. The acceleration of domestic demand, coupled with a steady and relatively high increase in exports, will also boost goods and services imports so that net foreign demand could again make a slightly negative contribution. The projected GDP growth rate slightly exceeds that from the December 2015 projection, mainly due to high performance in the first three months of this year.

Economic growth is expected to accelerate slightly in 2017 and reach 2.5%.

Real GDP growth is expected to accelerate to 2.5% in 2017, still primarily due to goods and services exports. Investment activity growth could accelerate and make a contribution almost equalling that of personal consumption. The negative contribution of net foreign demand to total economic growth is expected to rise slightly.

Risks to the growth outlook are tilted to the downside.

The risks to the GDP projection are mainly negative. Such an assessment is based on the unstable domestic political situation that may adversely affect investment growth. Furthermore, should current uncertainties surrounding future economic and financial developments become embedded in household expectations, consumer optimism could decline and their consumption increase at lower rates. In addition, although the result of the UK referendum on EU membership could diminish growth perspectives in the whole of Europe, international institutions have remained reserved when it comes to the quantification of potential effects. With exports being the main generator of economic growth, any deceleration in the growth of Croatia's main trading partners could have a negative effect on domestic economic developments, while an increase in global uncertainty could adversely affect financing conditions.

Positive labour market developments accelerated in the first half of 2016.

The increase in the number of employed persons accelerated additionally in 2016 from the end of 2015 and similar trends continued during the second quarter, although at a slightly slower pace. Such positive employment dynamics had an impact on changes in unemployment, as shown by trends in the internationally comparable unemployment rate, which dropped to 14.6% in the first quarter of 2016. Employment is expected to grow at an annual rate of 1.5% in 2016. Unemployment could decrease sharply and the survey unemployment rate is expected to stand at 15%. Nominal and real wages are projected to increase annually, in line with the dynamics observed in the first five months. Favourable developments are expected to continue in 2017, although at a somewhat slower pace.

The average annual consumer price inflation rate is projected to stand at –0.9% in 2016 and accelerate to 1.2% in 2017.

As a result of a decrease in the prices of natural gas and refined petroleum product prices, energy made the largest negative contribution to inflation in 2016. Crude oil prices are expected to grow slightly towards the end of 2016. This, and a positive base effect (a decline in refined petroleum product prices in the same period in the previous year), could gradually boost overall inflation towards positive values late in the year. The average annual rate of change in food prices is expected to be slightly negative in 2016 due to the spillover effect of a decrease in global food raw material prices on domestic prices and also because of surpluses in the EU market. The average annual growth rate of the CPI excluding food and energy is estimated to slow down and remain mildly positive in 2016, counteracting to a small extent the negative contribution of energy and food prices to domestic inflation. The average annual consumer price inflation rate could rise to 1.2%, primarily due to an increase in imported inflationary pressures expected, stemming mainly from growing crude oil prices.

The current and capital account surplus is expected to decrease in 2016, primarily due to the disappearance of the effect of the conversion of Swiss franc loans.

The current and capital account surplus is expected to decrease from 5.9% of GDP in 2015 to 3.6% of GDP in 2016. If the effect of the conversion of Swiss franc loans on banks' business results in 2015 is excluded, this decrease could be very mild, generated mainly by the deterioration in the balance of trade in goods and somewhat improved business performance of foreign enterprises in Croatia. A positive impact on the current and capital account balances could come from a further increase in net exports of services, especially tourism services, and a better use of EU funds. The current and capital account surplus is expected to continue declining in the projection period. In 2016 and 2017 capital flows with other countries could be marked by a net capital outflow, largely caused by an improvement in the net external position of credit institutions, which is

expected to weaken with the gradual decline in the current and capital account surplus. Relative external debt indicators could improve considerably in the same period as a result of a decrease in the balance of gross external debt and nominal GDP growth.

Domestic lending activity is recovering amid favourable trends in financing conditions.

All sectors' domestic financing costs mostly continued to decrease in the first half of the year. Domestic lending to households and enterprises grew under such conditions. On the other hand, enterprises reduced their external liabilities in the first quarter, with the result that the overall corporate debt decreased at an annual level. Nevertheless, it is expected to edge up in 2016. Credit institution placements, which decreased for two years in a row (based on transactions) are also expected to grow. The credit growth projection is exposed to negative risks.

While maintaining the exchange rate stability, the CNB continues to pursue an expansionary monetary policy, strengthened by structural repo operations.

At the first two structural repo auctions, held in the first half of 2016, the CNB placed HRK 711.5m, with a maturity of four years, thus ensuring access to long-term kuna liquidity sources for banks. In addition, the CNB continued with regular weekly reverse repo auctions and intervened in the foreign exchange market in late May, halting the appreciation of the kuna/euro exchange rate and creating additional kuna liquidity. Monetary policy will remain expansionary towards the end of 2016 and in 2017 in an aim to produce a favourable effect on domestic financing costs and spur a recovery of lending to the economy.

With favourable fiscal developments continuing in early 2016, the total annual deficit could drop below the threshold of 3% of GDP.

MoF's cash data and CNB's financial accounts statistics show that the general government deficit continued to decrease annually in the first quarter of 2016. These trends were support not only by continued economic growth, which made a positive impact on revenue dynamics, but also by cuts on the expenditure side of the budget. The general government balance could continue to improve under such conditions and the RC could, for the first time in many years, record a general government deficit lower than 3% of GDP. General government debt decreased in absolute terms in the first three months of 2016 from the end of 2015 due to the appreciation of the kuna/euro exchange rate. GDP growth also contributed to the decrease in the relative debt indicator.

Table 1.1 Summary table of projected macroeconomic measures

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
National accounts (real rate of change, in %)										
GDP	2.1	–7.4	–1.7	–0.3	–2.2	–1.1	–0.4	1.6	2.3	2.5
Personal consumption	1.2	–7.5	–1.5	0.3	–3.0	–1.9	–0.7	1.2	2.9	2.5
Government consumption	–0.7	2.1	–1.6	–0.3	–1.0	0.3	–1.9	0.6	0.4	0.5
Gross fixed capital formation	9.2	–14.4	–15.2	–2.7	–3.3	1.4	–3.6	1.6	2.9	6.1
Exports of goods and services	0.8	–14.1	6.2	2.2	–0.1	3.1	7.3	9.2	5.7	5.5
Imports of goods and services	4.0	–20.4	–2.5	2.5	–3.0	3.1	4.3	8.6	6.6	6.7
Labour market										
Number of employed persons (average rate of change, in %)	2.3	–2.1	–4.2	–1.1	–1.2	–1.5	–2.0	0.7	1.5	1.3
Registered unemployment rate	13.2	14.9	17.4	17.8	18.9	20.2	19.6	17.0	15.6	15.3
ILO unemployment rate	8.5	9.2	11.6	13.7	15.9	17.3	17.3	16.3	15.0	14.6
Prices										
Consumer price index (average rate of change, in %)	6.1	2.4	1.1	2.3	3.4	2.2	–0.2	–0.5	–0.9	1.2
Consumer price index (rate of change, end of period, in %)	2.9	1.9	1.8	2.1	4.7	0.3	–0.5	–0.6	0.4	1.1
External sector										
Current account balance (as % of GDP)	–8.8	–5.1	–1.1	–0.7	0.0	1.0	2.1	5.1	2.7	1.9
Goods	–22.4	–16.5	–13.2	–14.3	–14.3	–15.1	–14.8	–15.1	–15.5	–16.0
Services	14.4	12.8	12.8	13.8	14.8	15.6	16.8	18.0	18.0	18.0
Primary income	–3.0	–3.6	–3.1	–2.9	–3.3	–2.0	–2.0	–0.6	–2.8	–2.9
Secondary income	2.2	2.2	2.4	2.7	2.8	2.6	2.1	2.9	2.9	2.8
Current and capital account balance (as % of GDP)	–8.7	–5.0	–1.0	–0.6	0.1	1.2	2.3	5.9	3.6	3.1
Gross external debt (as % of GDP)	84.3	101.1	104.2	103.7	103.0	105.6	108.4	103.7	96.9	91.3
Monetary developments (rate of change, in %)										
Total liquid assets – M4	4.1	–1.0	1.9	5.6	3.6	4.0	3.2	5.1	3.4	3.7
Total liquid assets – M4[a]	3.8	–0.8	0.7	4.6	3.9	3.6	2.4	5.0	3.4	3.7
Credit institution placements to the private sector	10.7	–0.6	4.7	4.8	–5.9	–0.5	–1.6	–2.9	–2.5	1.2
Credit institution placements to the private sector[b]	8.7	–0.3	2.3	3.5	–1.2	1.0	–1.5	–2.2	0.8	1.5

[a] Exchange rate effects excluded. [b] Rates of change are calculated on the basis of data on transactions (see Annex 1 Introduction of data on transactions in monetary developments analysis in Bulletin 221).
Note: Estimate for 2016 and projection for 2017 are derived from the data available until early July 2016.
Sources: CBS, MoF and CNB.

2 Global developments

Global economic growth could accelerate slowly in 2016 and in 2017, after having decelerated in the previous year. However, global growth expectations were revised downwards from the previous projection to 3.2% in 2016 and 3.5% in 2017. Expectations are slightly lower both for developing and emerging market countries, as well as for developed countries. Growth in developing and emerging market countries was at its lowest level in the last few years, primarily because of a slowdown in the Chinese economy and the escalation of political and economic crises in some large markets. Developments in early 2016 suggest only a slight improvement in economic trends in this group of countries, where rigid financing conditions and accumulated imbalances continue to weigh on the short-term outlook. Thanks to a long period of low global raw material prices, importing countries managed to create additional room for domestic consumption growth. However, such prices constrain exporting countries' investment potential and growth. Stable economic growth in developed countries stems from strong domestic demand, which compensates for weak global demand, although in many of these countries the limited room for active economic policy results in a bearish medium-term outlook. Additionally, the recent UK referendum vote to withdraw from the European Union agitated global financial markets and could further limit the growth of European economies.

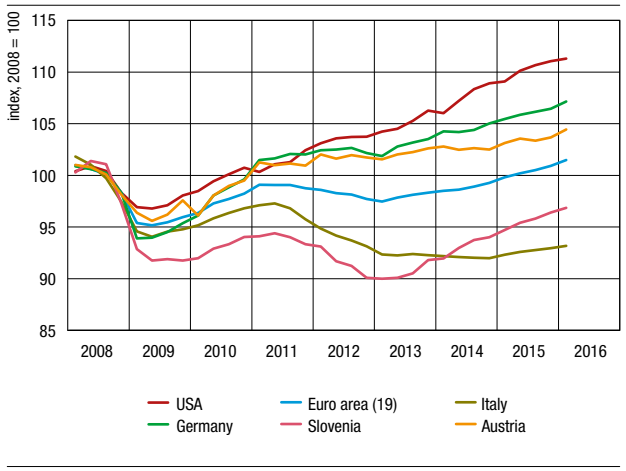
In the developed markets, the euro area stood out in terms of recovery of economic growth in 2015 (the rate was 1.6%, the highest in the last five years). This was mainly due to the strengthening of growth in Spain and France and to the end of the recession in Italy, brought about by economic policy incentives, as well as to external factors, such as low energy prices. A relatively dynamic growth rate was sustained in the first quarter of 2016 (0.6% up from the previous quarter) and positive developments are expected to continue in the remaining part of 2016 and 2017, although with no additional momentum. Germany, Spain and France are expected to make the largest contribution and the economic upturn would be further facilitated if Greece came out of its long-term recession. Expectations are that growth will continue to be driven by low energy product prices, a weak euro exchange rate, strongly accommodative monetary policy and mild fiscal expansion. The Investment Plan for Europe will also contribute to the strengthening of the private sector's investment activity, once the implementation of a large number of projects starts. Under such conditions, consumer price inflation is expected to converge gradually towards slightly higher levels, although more slowly than expected (the expected inflation rate is 1.3% until the end of 2017). However, there are downside risks to the economic growth outlook, especially those related to the possible disappearance of the favourable effects of the exchange rates and low energy prices, coupled with heightened uncertainty about the forthcoming exit of the

Table 2.1 Global economic developments

	2014	2015	2016		2017
			Current projection	Δ Previous projection	Current projection
GDP (real rate of change, in %)					
World	3.4	3.1	3.2	–0.4	3.5
Euro area	0.9	1.6	1.5	–0.1	1.6
USA	2.4	2.4	2.4	–0.4	2.5
Developing countries and emerging market countries	4.6	4.0	4.1	–0.4	4.6
Central and Eastern Europe	2.8	3.5	3.5	0.5	3.3
China	7.3	6.9	6.5	0.2	6.2
Main trading partners of the Republic of Croatia	1.3	1.8	1.8	–0.2	2.0
Italy	–0.3	0.8	0.9	–0.4	1.2
Germany	1.6	1.5	1.6	0.0	1.6
Slovenia	3.0	2.9	1.9	0.1	2.0
Austria	0.4	0.9	1.2	–0.3	1.4
Bosnia and Herzegovina	1.1	2.8	3.0	0.0	3.2
Serbia	–1.8	0.7	1.8	0.3	2.3
Prices					
Euro area HICP[a]	0.4	0.0	0.2	–0.8	1.3
Oil prices (USD/barrel)[b]	98.9	52.4	44.6	–24.9	50.9
Oil prices (year-on-year rate of change)	–9.1	–47.1	–14.8	–26.5	14.1
Raw materials prices (excl. energy) (year-on-year rate of change)	–4.0	–17.5	–6.0	–5.3	–1.7
EURIBOR 3M (end of year)[c]	0.08	–0.13	–0.28	–	–
EUR/USD exchange rate (average)[d]	1.33	1.11	1.12	0.00	1.11
EUR/CHF exchange rate (average)[d]	1.21	1.07	1.10	0.05	1.12

[a] ECB, June 2016. [b] Bloomberg, *Brent crude oil futures*. [c] Bloomberg. [d] *Foreign Exchange Consensus Forecast* (June 2016).
Source: IMF (*World Economic Outlook*, WEO), April 2016.

Figure 2.1 Gross domestic product of selected economies
seasonally adjusted data, constant prices



Sources: Eurostat and BEA.

United Kingdom from the European Union and a possible deterioration of foreign trade or a drop in investments. The refugee crisis also poses a major challenge to European economies, but also gives them an opportunity for growth.

The growth of the US economy in 2015 is estimated at 2.4%, with the same dynamics expected for 2016. Preliminary data indicate that growth decelerated to a low of 0.2% in the first quarter, the weakest growth performance in the last few quarters. The main reasons for the mentioned slowdown included the weakening of personal consumption, a decline in private investments, especially in non-residential investments, and deterioration in foreign trade, continuing for several successive quarters as a result of the weakening of price competitiveness. However, low energy prices and favourable labour market conditions, combined with the improved balance sheet of the household sector and real estate price growth, should provide a basis for solid growth in personal consumption and residential investments, which are of great significance for the overall economy. A mildly expansionary fiscal policy and the postponed tightening of monetary policy should also give additional support to sound economic growth.

Economic growth in developing and emerging market economies was 4.0% in 2015, the lowest rate since 2009. Growth expectations for 2016 (4.1%) were significantly moderated from the previous projection due to some large markets' weaker performance in the beginning of the year. Growth is expected to accelerate at a more rapid rate (4.6%) no sooner than in 2017, once raw material prices stabilise, Brazil and Russia exit the recession and structural adjustments in some countries continue. The Chinese economy is expected to continue the long-lasting economic slowdown. Due to the end of investment expansion and the convergence towards more sustainable growth rates based on consumption and services, Chinese economic growth fell below 7% in 2015, for the first time in the last 25 years. The decline in investments was accompanied by a drop in Chinese exports, the first in several years. As developments in the first quarter of 2016 were similar, Chinese economic growth is expected to slow down to 6.5% towards the end of the year.

Croatia's main trading partners

The growth rate of the German economy is expected to remain unchanged in 2016 from 2015, at 1.5%. The economy grew at a rate of 0.7% in the first quarter compared with the previous period, based on strong domestic demand, which compensated for the deceleration of foreign demand. Domestic demand continued to be stimulated by an expansionary monetary policy and, to a lesser extent, fiscal policy, as well as by low energy product prices. Favourable labour market conditions and a more dynamic real estate market boosted household disposable income. Similar trends are expected to continue in 2017, with the constrained growth of foreign demand continuing to weigh on economic growth. Germany is also the largest European trading partner of the United Kingdom and as such exposed to considerable uncertainty over a possible slowdown in export and investment growth.

The Italian economy exited the debt crisis-induced recession in 2015, growing at a rate of 0.8% and it is expected to continue a mild recovery. The recovery will be driven by personal consumption rising on the back of employment growth and an alleviation of the tax burden. Investment spending should be stimulated by both the Investment Plan for Europe and by the improved balance sheet position of the corporate sector. As in the majority of other euro area countries, the largest risk to further recovery lies in global uncertainty, export demand and continued uncertainty in the domestic market that holds back investments.

After a sluggish growth in the previous years, the Austrian economy could grow at a rate of 1.2% in 2016 under the positive influence of personal consumption, strengthened by an income tax cut, investment recovery and accelerated export growth. Austria was less affected by a slowdown in demand from emerging markets than other developed European countries because its foreign trade is mostly related to the EU and the US.

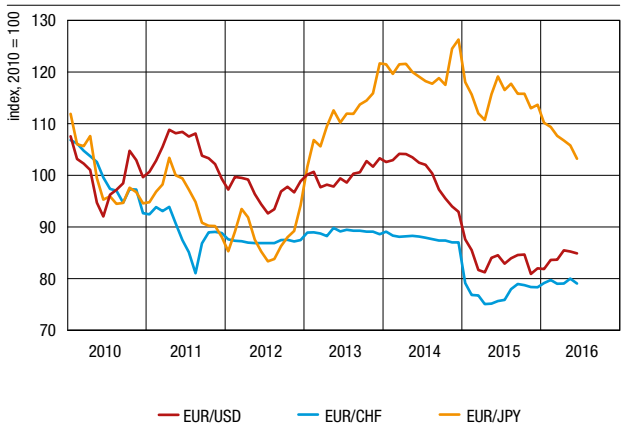
The above-average growth rate of the Slovenian economy in 2015 (2.9%) derived from export growth and a high inflow of EU funds used for public investment financing. However, this growth rate could decelerate significantly in the current year (1.9%) and remain subdued in the following period due to an expected sharp decrease in public investments caused by declining inflows of EU funds. The contributions of exports and personal consumption will remain positive.

Expectations are that the positive developments from 2015 will continue in most of Croatia's non-EU trading partners. Serbia's economic growth could accelerate to a higher than expected rate (1.8%) on the back of strong investments and exports. Having weakened for several years, personal consumption is also expected to grow as a result of increases in wages and employment. Having exceeded expectations in the previous year, economic growth in Bosnia and Herzegovina is expected to continue at a similar rate of 2.8%. The three year stand-by arrangement to be concluded by Bosnia and Herzegovina with the IMF in July 2016 is expected to have a stabilising effect on the country's public finances while the structural reforms required under the arrangement are expected to set the grounds for a faster growth in the forthcoming period.

Exchange rates and price movements

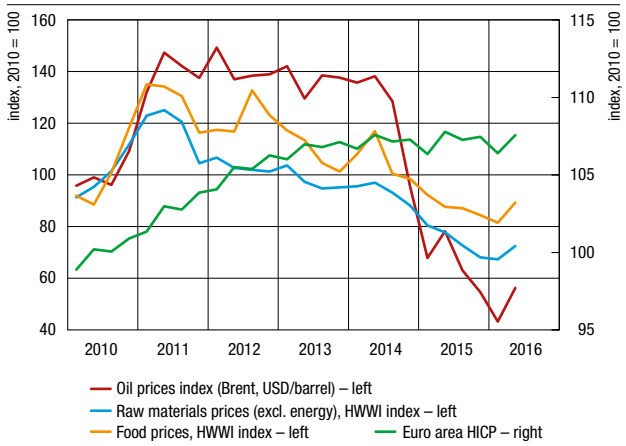
The US dollar is expected to strengthen slightly against the euro towards the end of 2016 and in the first half of 2017. In the period from the beginning of April to the middle of June 2016, the US dollar/euro exchange rate moved within a range of ±2.5% around the average value of EUR/USD 1.13, marginally exceeding the first quarter average of EUR/USD 1.10. The slight weakening of the exchange rate of the US dollar against the euro in the first half of 2016 was mainly caused by the expectations of market participants that the Fed could postpone the rise in the key interest rate due to weaker than expected US economic indicators and concerns about subdued economic growth. However, most market participants expect the Fed to

Figure 2.2 Exchange rates of individual currencies against the euro



Note: A growth in the index denotes a depreciation of a currency against the euro.
Source: Eurostat.

Figure 2.3 Prices



Note: Data for the second quarter of 2016 refers to April and May.
Sources: Eurostat, Bloomberg and HWWI.

raise the key interest rate by the end of 2016 and thus contribute to the strengthening of the dollar versus the euro, which could continue until mid-2017. The 2016 US dollar/ euro exchange rate is projected to stand at EUR/USD 1.12. In addition, following the recent United Kingdom referendum on withdrawing from the European Union, the exchange rate of the euro could be exposed to depreciation pressures, which will primarily depend on the negotiations between the European Union and the United Kingdom. The euro/Swiss franc exchange rate was stable in the first half of 2016, moving within a narrow range around its average value of EUR/CHF 1.10. The Swiss franc is expected to depreciate only slightly versus the euro by the end of the current year and in 2017.

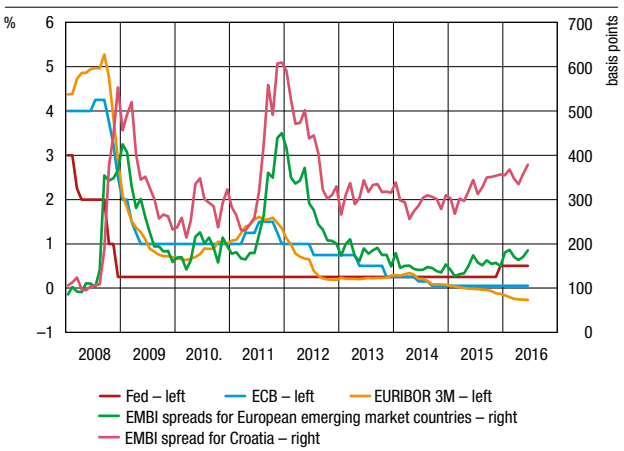
Standing at USD 52 per barrel in 2015, the price of Brent crude oil is expected to amount to USD 45 per barrel in 2016, which is about 12% higher than expected in the spot market for oil in the first quarter of 2016. The recovery of crude oil prices continued from mid-January to the second quarter of 2016. The price of Brent crude oil went up from USD 33 at the end of January to USD 47 in mid-June 2016. The oil price growth was influenced by both supply-side and demand-side factors, that is, by a continued decline in new technology oil production in the United States, as well as by decreases in oil production in Nigeria, Libya, Kuwait, Venezuela and Canada, on the one hand, and, on the other hand, a somewhat unexpected increase in demand for refined petroleum products in China, India and Russia on the other. Market expectations incorporated in spot contracts indicate that crude oil prices could continue to rise mildly towards the end of 2016 and in 2017 due to the expected narrowing of the gap between global crude oil supply and demand and a possible agreement of OPEC Member Countries to freeze the level of oil production.

Having fallen steeply in 2015, the prices of raw materials excluding energy (in US dollars) are expected to decelerate markedly in 2016 and 2017. The prices of raw materials, excluding energy, measured by the HWWI index, started to increase in February and continued growth in the following three months, albeit at a slower pace. These developments largely resulted from the growth of food product prices (soya, corn and rice) due to poor weather conditions in South American and Asian producing regions. Metal prices also increased sharply, with the prices of iron ore (up by almost one third) and zinc rising the most as a result of a drop in metal production in mines in China. Current market expectations suggest that global prices of raw materials will hold steady until the end of 2016 and decline mildly in 2017.

Interest rate trends

After the Fed for first time in nine years increased the target range for the benchmark rate from 0.25 to 0.5 percentage points in late 2015, no further changes were made in the first half of 2016. American monetary policy makers even announced that the interest rate could be raised slightly more gradually towards the end of the year than was previously planned. The interest rate rise was postponed due to concerns over the US economic slowdown early in the year amid continued heightened risks and uncertainties in financial markets. The ECB, on the other hand, further loosened its monetary policy in March 2016 by cutting the key interest rate from 0.05 percentage points to zero (in addition to reducing the marginal interest rate and the deposit interest rate by 5 and 10 percentage points respectively) while announcing that it wold keep the rate at the same or even at a lower level over the long term. In addition, the ECB's unconventional monetary measures, introduced in March 2016, included

Figure 2.4 Benchmark interest rates and the average yield spread on bonds of European emerging market countries



Note: Data for the second quarter of 2016 refer to May.
Source: Bloomberg, 17 June 2016.

increasing the monthly amount of bond purchases in the secondary market from EUR 60bn to EUR 80bn and expanding the list of eligible assets to include corporate bonds. The monthly purchases are intended to be carried out until the end of March 2107 and even longer if necessary, until price developments are consistent with the inflation target.

Despite strong fluctuations, external financing conditions for Central and Eastern European countries did not change significantly in the first five months of 2016. The Croatian government bond yield spread ranged around 350 basis points, still considerably exceeding the average spread in peer European emerging markets. In the forthcoming period, this indicator for Croatia will be heavily influenced by the stabilisation of the political situation as well as by the implementation of fiscal and other measures aimed at the improvement of the economic outlook.

3 Aggregate demand and supply

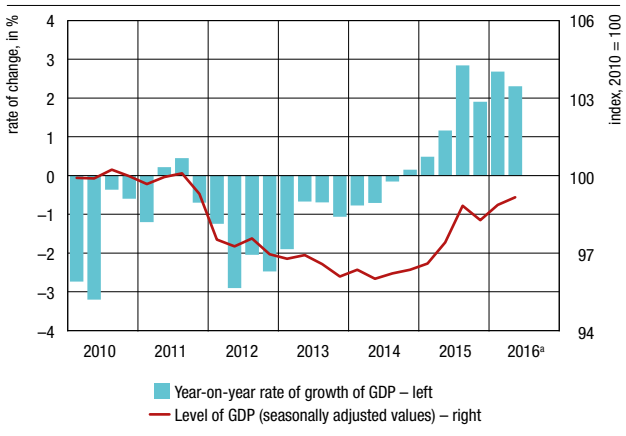
GDP is expected to grow at an annual rate of 2.3% in 2016, driven primarily by goods and services exports. Household consumption will benefit from wage increases, continued employment growth and declining energy and food prices. Investments should also make a positive contribution to aggregate growth, although the planned public investment projects could be realised at a slower pace than planned because of the political situation in the country. The strengthening of domestic demand and continued growth of total exports will probably lead to a further increase in total exports, with the result that net exports could again, after four years, make a slightly negative contribution to overall economic growth. GDP growth is expected to accelerate somewhat (to 2.5%) in 2017, mainly under the influence of a strong increase in investment.

Having dropped at the end of the previous year, real GDP increased by 0.6% in the first quarter of 2016 from the previous quarter (the annual growth rate stood at a relatively high 2.7%). Domestic demand continued to recover in the first three months of this year, with gross fixed capital investments rising the most, while exports held steady at the previous year's level. Expectations are that positive trends will continue towards the end of the year. The CNB's flash estimate indicates that real GDP could grow at a rate of 0.3% in the second quarter from the beginning of the year[1].

Real exports of goods and services remained at the level from the end of the previous year in the first quarter of 2016, but the annual growth rate remained at a high 7.1%. The quarterly slowdown in growth was above all a consequence of a drop in real exports of goods. Nominal trade in goods data show a decline in exports of energy, capital goods and durable consumer goods as well as a steady rise in exports of intermediate goods and non-durable goods, with the latter increasing for the sixth consecutive quarter. Real exports of services also edged down from the previous quarter. However, the performance of tourism was good, as shown by increases in the number of foreign tourist arrivals and nights spent and in the nominal value of revenues from tourism in the balance of payments.

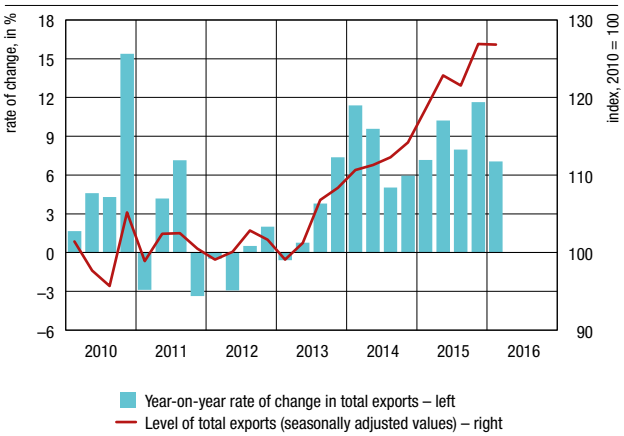
Exports of goods and services could surge annually in 2016, although the growth rate might be lower than in 2015, when both exports of goods and exports of services grew at very high rates. The steady growth in goods exports is due to the continued economic recovery of Croatia's main trading partners and an increase in the share of Croatian producers in foreign markets, the latter being due to liberalised trade rules, in effect since Croatia's accession to the European Union, and a stronger focus of domestic manufacturers on foreign markets. Exports of services, primarily tourism services, could also continue to grow, as also shown by balance of payments data and the number of foreign tourist nights spent and arrivals in the first half of the year. However, tourist services could grow at a lower annual rate than in the previous year.

Figure 3.1 Gross domestic product
real values



[a] Data for the second quarter of 2016 is the estimate derived using the CNB's Monthly indicator of real economic activity, on the basis of data published until 6 July 2016.
Source: CBS data seasonally adjusted by the CNB.

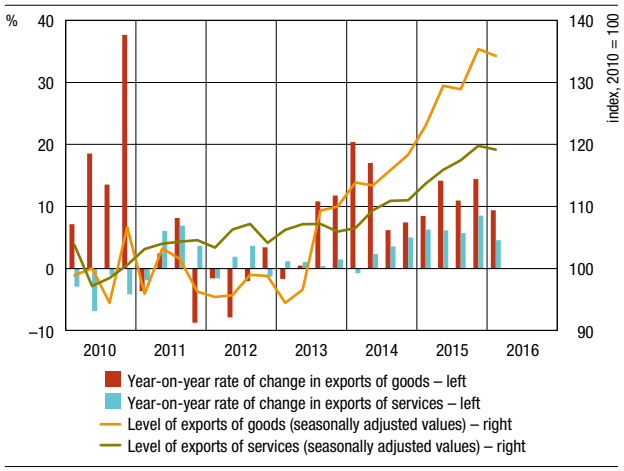
Figure 3.2 Exports of goods and services
real values



Source: CBS data seasonally adjusted by the CNB.

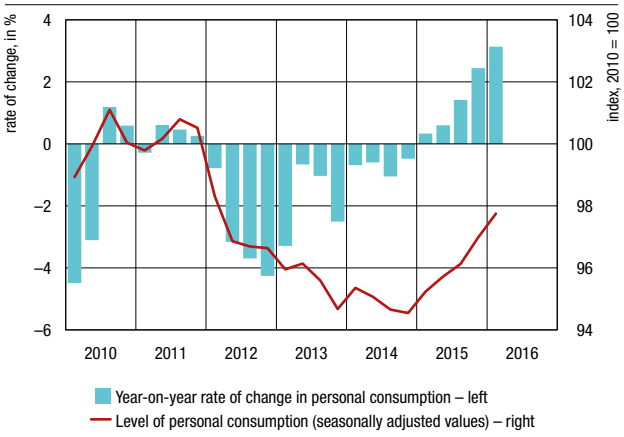
1 This estimate is based on available monthly data for April. The model is described in the paper by Kunovac, D., and B. Špalat: *Nowcasting GDP Using Available Monthly Indicators* (W-39, October 2014).

Figure 3.3 Real exports of goods and services



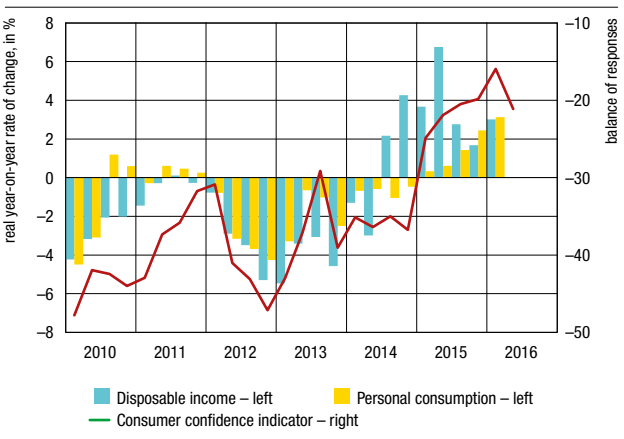
Source: CBS data seasonally adjusted by the CNB.

Figure 3.4 Personal consumption
real values



Source: CBS data seasonally adjusted by the CNB.

Figure 3.5 Determinants of personal consumption



Note: The values of the consumer confidence indicator in a month are calculated as three-member averages of monthly data.
Sources: CBS, Ipsos and CNB.

All domestic demand components (with the exception of changes in inventories), as well as goods and services exports, increased in the first quarter and contributed to the recovery of the domestic economy. Similar developments should continue in the remaining part of the year.

Personal consumption went up further in the first quarter of 2016, rising by 0.8% from the previous three months and by 3.1% annually. These high rates were due to continuing employment growth and a sharp decrease in the unemployment rate. The survey unemployment rate was down to 15.4% in the first quarter (14.6% according to seasonally adjusted data), with the number of unemployed persons falling by almost 60 000. Administrative unemployment data are also favourable: the figure of about 220 000 unemployed persons registered with the CES in late June was last recorded in mid-2008. In addition, gross wages rose at a high annual rate of 2.6% in the first quarter, with sharp wage increases both in the private and public sectors. Real wages rose even more sharply due to a decrease in the inflation rate.

Personal consumption growth will positively impact expected employment growth in the remaining part of 2016 and the annual unemployment rate could drop from 16.3% in 2015 to 15%. Real wages are expected to increase at high annual rates due to rising gross wages and a negative average inflation rate. In contrast, after the consumer confidence index increased markedly in 2015, reaching the pre-crisis level, consumer optimism declined in the first half of 2016 amid negative expectations about economic and financial prospects and the domestic political future. A further decrease in consumer optimism could push up the savings rate and adversely affect the personal consumption growth projection (for more details on the household savings rate see Box 1).

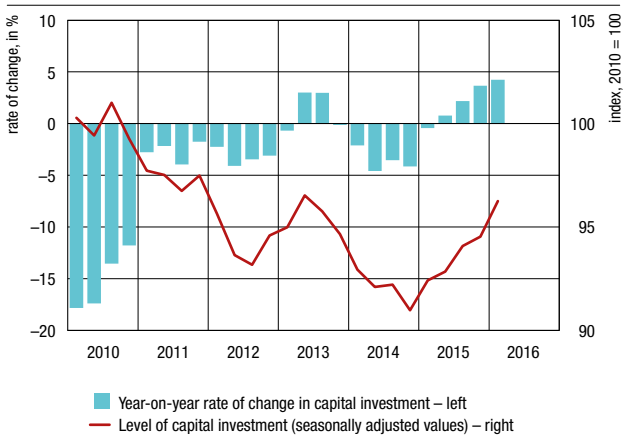
Gross fixed capital formation increased in early 2016 for the fifth quarter in a row, up at an annual rate of 4.3%. The increase resulted from strengthening construction activity (buildings and civil engineering works), suggesting positive trends in the private and public sectors. An increase in private sector investments in the first quarter of this year is also indicated by data on the growth of manufacture and imports of capital goods, which can be attributed to a rise in enterprises' investments in equipment and plants.

Capital investments are expected to accelerate annually from 2015. The acceleration should be driven by the private sector, despite a continued relatively high debt overhang of a large number of enterprises (for more details on the effect of excessive debt on corporate investment activity see Box 2 Effect of excessive corporate debt on investment activity in Croatia). Public sector investments could also rise annually due to a better use of EU funds, but their realisation could be slower than projected in the budget, partly as a result of the political situation in the country.

In early 2016, government consumption remained at the level reached in late 2015 and increased by 0.6% from the first quarter of 2015. Fiscal data and data on employment trends suggest that the increase resulted from a continued growth in employment in public and government services, as well as from an increase in intermediate consumption. Although the process of fiscal consolidation is anticipated to continue throughout the year, real government consumption could record a small increase, but it will still make an almost neutral contribution to economic growth this year.

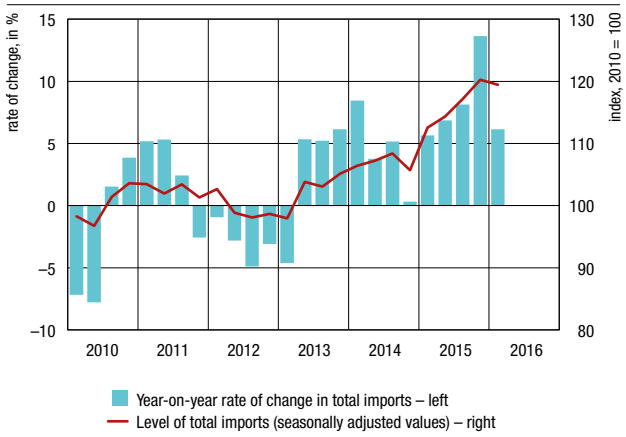
The growth of domestic demand and exports resulted in a continuing increase in imports of goods and services, which were up at an annual rate of 6.1% in the first quarter of 2106, decreasing slightly by 0.7% from the previous quarter. The quarterly decrease in total imports resulted from a decline in imports of services, whereas imports of goods decelerated significantly from the previous quarter. As shown by nominal data on trade in goods, the deceleration of imports of goods was due to

Figure 3.6 Gross fixed capital formation



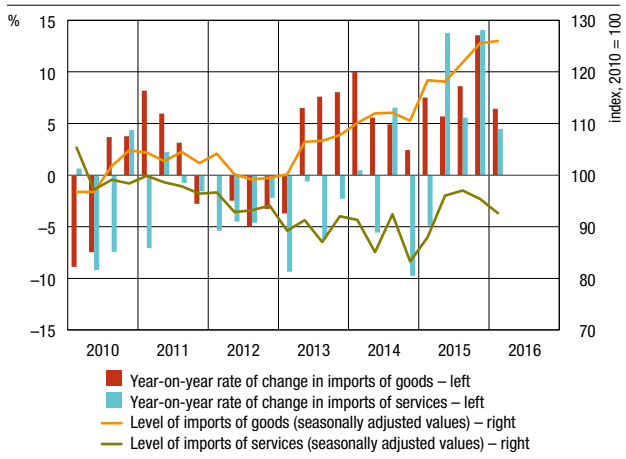
Source: CBS data seasonally adjusted by the CNB.

Figure 3.7 Imports of goods and services
real values



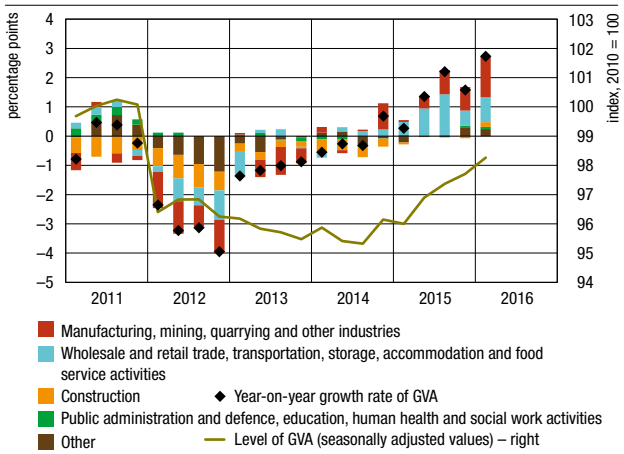
Source: CBS data seasonally adjusted by the CNB.

Figure 3.8 Real imports of goods and services



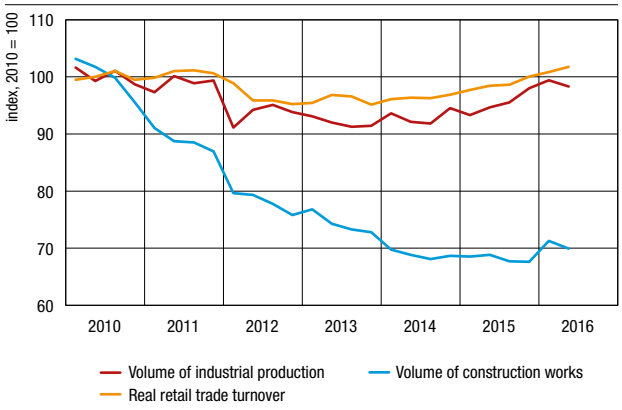
Source: CBS data seasonally adjusted by the CNB.

Figure 3.9 Change in GVA
contribution by components



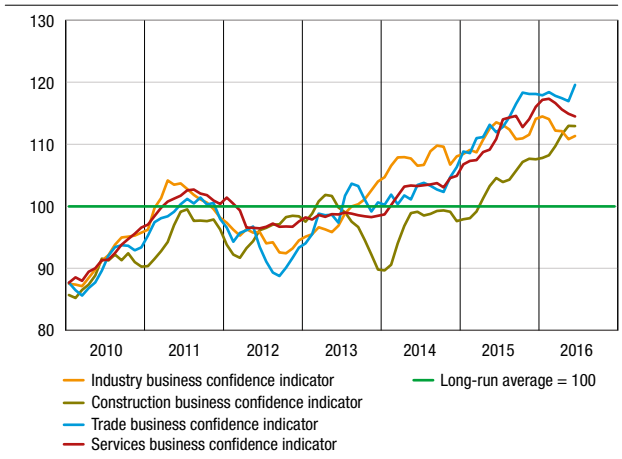
Source: CBS data seasonally adjusted by the CNB.

Figure 3.10 Short-term economic indicators



Note: Quarterly data are calculated as an average of monthly data.
Data on construction in the second quarter of 2016 refer to April, while data on industry and retail trade refer to April and May.
Source: CBS data seasonally adjusted by the CNB.

Figure 3.11 Business and consumer confidence indicators
standardised seasonally adjusted values, three-member moving averages

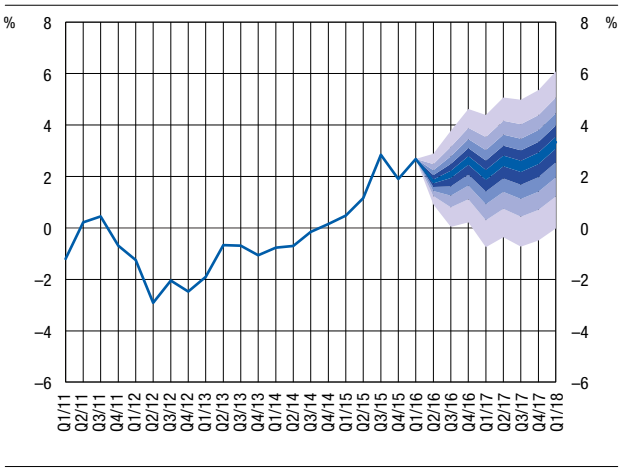


Note: The last data available refers to June 2016.
Sources: Eurostat, Ipsos and CNB.

weakening imports of oil and refined petroleum products. At the same time, imports in other main industrial groupings (MIGs) increased. Imports are expected to rise relatively significantly on the annual level in 2016, although at a lower rate than in 2015, resulting from a slowdown in exports.

GDP by output approach indicates an annual increase of 2.7% in GVA in the first quarter, resulting from favourable trends in all activities. Economic growth was primarily driven by GVA increases in manufacturing, wholesale and retail trade, transport and storage, accommodation and food service activities. GVA in construction also increased on the back of improved trends in this activity, with the result that construction contributed to overall economic growth for the first time since the end of 2008. Available monthly data suggest that industrial production fell in April and May from its average value in the previous three months, with decreases recorded in all components of the main industrial groupings, except in durable consumer goods. Construction activity declined in the same period after a high increase in the first three months of 2016, while retail trade grew slightly. As revealed by the business optimism survey for the second quarter of 2016 (seasonally adjusted data), optimism in construction continued to grow from the previous quarter's average and business optimism in trade also increased. In contrast, expectations in industry and service activities continued to deteriorate.

Figure 3.12 Projection of real GDP dynamics
year-on-year rate of growth



Sources: CBS and CNB.

Risks

It is estimated that risks to the GDP projection for the projection period are tilted to the downside. Specifically, unstable political conditions could have a stronger negative impact on investment growth than currently projected. Public investments could be realised at a slower than projected pace in 2016, while the absence of a functioning government could affect the issuance of permits to private investors and slow down their investments. A possible further decline in consumer optimism could lead to a drop in personal consumption.

Furthermore, although the outcome of the UK referendum on the exit from the European Union could diminish growth prospects in the whole of Europe, international organisations have been conservative when it comes to quantifying its potential effects. With exports being the main driver of economic growth, potentially weaker growth in Croatia's main trading partners could adversely affect domestic economic developments and heightened global uncertainty could have a negative impact on financing conditions. Finally, in the long term, EU Funds could be depleted since the UK is a net contributor to the EU budget.

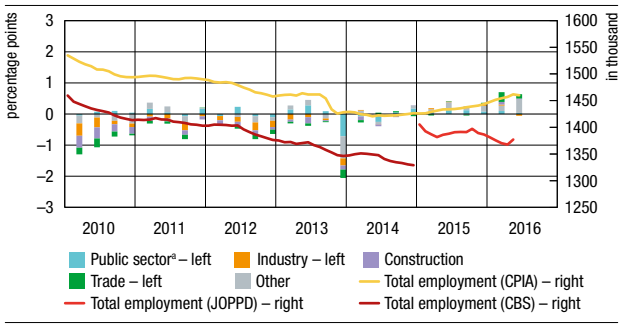
4 Labour market

The first half of 2016 saw favourable trends in the labour market. According to CPIA data, the increase in the number of employed persons accelerated markedly in the first quarter of 2016 from the end of 2015 and similar trends continued in the second quarter, although at a somewhat slower pace.[2] The increase was generated by private sector services, with the largest contribution coming from trade, whereas the contribution of other activities was negligible (Figure 4.1). Employment is expected to increase at the somewhat slower annual rate of 1.5% in the rest of 2016 and continue the trend in 2017, given that economic growth is not expected to accelerate.

The positive employment dynamics had an impact on changes in unemployment, which declined at an accelerated rate in the first half of 2016. The number of unemployed persons decreased considerably, by 5.6%, in the first quarter of 2016 from the last quarter of 2015 due to increased outflows for employment and other business activities, as well as for other reasons. Data for April and May point to the continuation of this trend (Figure 4.2), suggesting that administrative unemployment could decrease sharply on an annual basis in 2016.

In line with these developments, the administrative

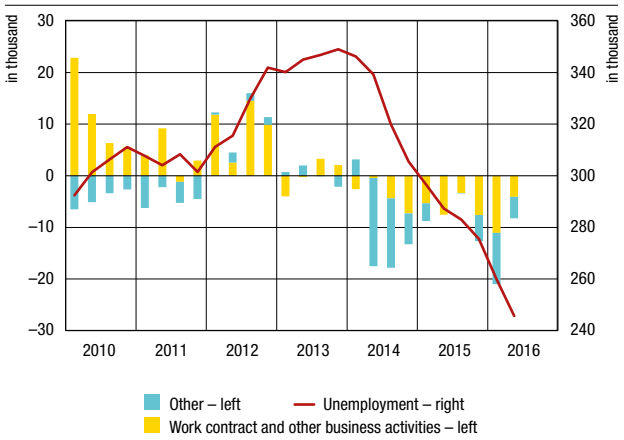
Figure 4.1 Total employment and contribution to the quarterly change in employment by sector
seasonally adjusted series



[a] Public administration and defence, compulsory social security, education and human health and social work activities.
Note: Around 20,000 insured persons were removed from the CPIA register due to administrative reasons in October 2013. The JOPPD form is now the source of data on employed persons and wages due to changes in the CBS methodology for collection and processing of data on employed persons and wages in effect as of January 2015. Structural columns show contributions by sector in accordance with CPIA data. Data on the number of employed persons according to the JOPPD form for the second quarter of 2016 refer to April and May.
Sources: CBS and CPIA data seasonally adjusted by the CNB.

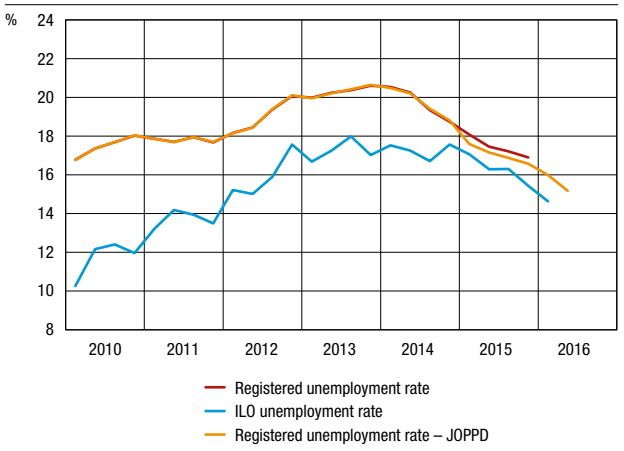
2 The CNB uses CPIA data to assess employment trends. Administrative CBS data on the number of employed persons collected on the basis of the JOPPD form point to negative employment trends in the first five months of 2016.

Figure 4.2 Total unemployment and net inflows from unemployment
seasonally adjusted series



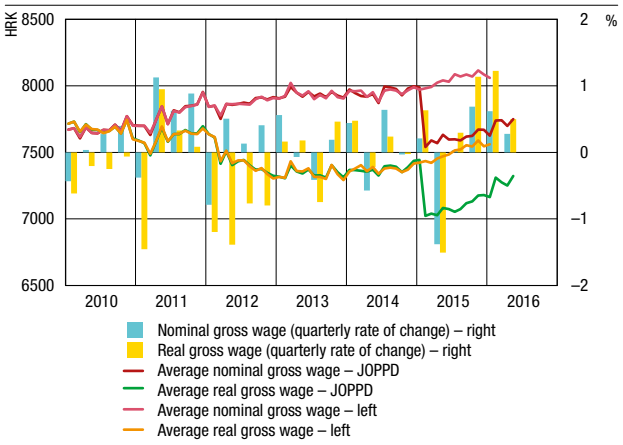
Note: Data for the second quarter of 2016 refer to April and May.
Source: CES data seasonally adjusted by the CNB.

Figure 4.3 Registered and ILO unemployment rates
seasonally adjusted series



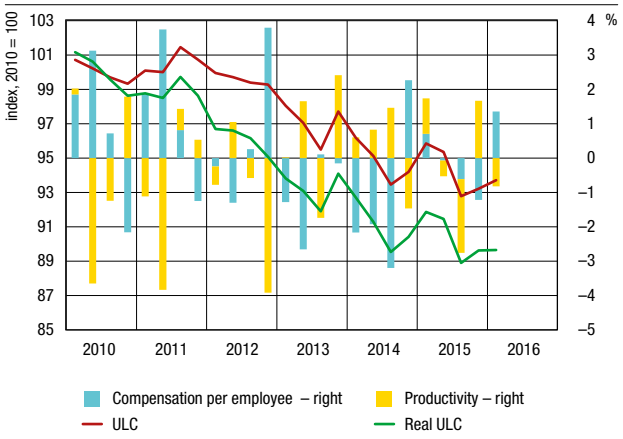
Note: Data for the second quarter of 2016 refer to April and May.
Source: CES data seasonally adjusted by the CNB.

Figure 4.4 Average gross wages
seasonally adjusted series



Note: From the second quarter of 2015, rates of change are based on the data contained in JOPPD form. Data for the second quarter of 2016 refer to April and May.
Source: CBS data seasonally adjusted by the CNB.

Figure 4.5 Compensation per employee, productivity and unit labour costs
seasonally adjusted series, levels and quarterly rates of change



Note: Productivity growth carries a negative sign.
Sources: CBS and Eurostat data seasonally adjusted by the CNB.

rate (seasonally adjusted data) fell to 14.6% from 15.4% in the last quarter of 2015. The survey unemployment rate could stand at about 15% in 2016 and decrease further in 2107.

Wages continued relatively strong growth in the first quarter of 2016, before decelerating in April and May. Nominal gross and net wages rose markedly in the first three months of 2016 from the previous quarter (Figure 4.4), with the rise primarily generated by the private sector (industry and trade), while the public sector made a perceptibly smaller positive contribution. Real wages increased at slightly higher growth rates than nominal wages in the observed period due to a fall in consumer prices, hence maintaining the increase in purchasing power. The unit labour cost, which represents a direct link between the cost of labour and productivity, grew in the first quarter of 2016 (Figure 4.5) and similar trends are expected to continue on an annual basis as the rise in wages could exceed growth in the productivity of labour.

5 Inflation

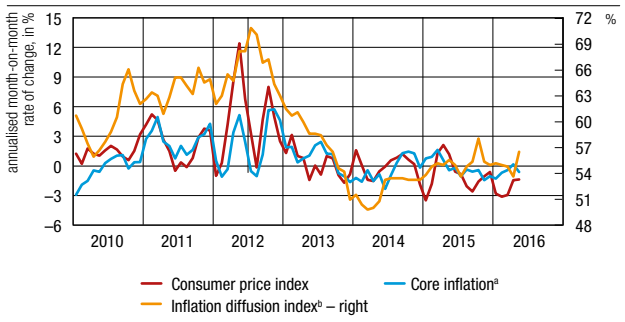
The annual consumer price inflation rate has been negative for the third consecutive year, to a large extent due to the spillover effect of a decrease in global raw material prices (crude oil, food raw materials) on domestic prices. The annual decline in consumer prices accelerated from –0.6% in December 2015 to –1.8% in May 2016, mainly as a result of a drop in the annual rate of change of energy prices and to some extent also due to decreases in the rates of change of prices of industrial products, processed food products and services. Core inflation again turned negative, falling from 0% in December 2015 to –0.8% in May, mainly because of decreases in the annual rates of change of prices of communication services, clothing, tobacco and milk and meat. Developments in domestic industrial producer prices (excluding energy) suggest that they will continue to give rise to deflation pressures as the negative annual rate of change of these prices accelerated from 0.55 in December 2015 to 1.6% in May 2016.

The indicator of current trends in overall CPI inflation (Figure 5.1) increased in the last three months, but remained negative, standing at –1.4% in May. An additional indicator of inflation pressures – the inflation diffusion index – points to a small increase in the share of products whose prices grew in a given month in the total number of products in the last three months (56.5% in May). This share is still somewhat lower than the long-term average (63%).

The largest negative contribution to the annual CPI inflation rate comes from energy. This contribution increased from 0.9 percentage points in December 2015 to 1.5 percentage points in May, primarily due to a decrease in the administrative price of natural gas. Global raw material prices started recovering in the last few months, with the price of Brent crude oil growing from USD 26 in mid-January to USD 48 in late May. Refined petroleum products contributed –0.9 percentage points to the annual inflation rate in May 2016. In addition, the contribution of the CPI excluding food and energy to annual inflation decreased from 0.4 percentage point in December 2015 to 0.1 percentage point in May. The contribution of telephone services, clothing and tobacco decreased the most. The negative contribution of food grew from 0.1 percentage point in December 2015 to 0.2 percentage point in May due to declining annual rates of change of milk, fruit and meat prices.

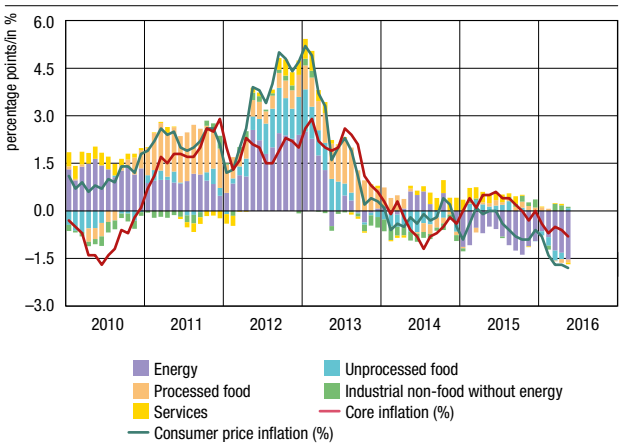
The annual inflation rate measured by the EU harmonised

Figure 5.1 Indicators of current developments in overall and core inflation and the inflation diffusion index



[a] Core inflation does not include agricultural product prices, refined petroleum product prices and administrative prices.
[b] The inflation diffusion index shows the share of the number of products whose prices increased in a given month in the total number of products and is based on the monthly rates of change derived from the seasonally adjusted components of the HICP.
Note: The month-on-month rate of change in the CPI and core inflation is calculated from the quarterly moving average of seasonally adjusted consumer price indices.
Sources: CBS, Eurostat and CNB.

Figure 5.2 Year-on-year inflation rates and contribution of components to consumer price inflation



Sources: CBS and CNB calculations.

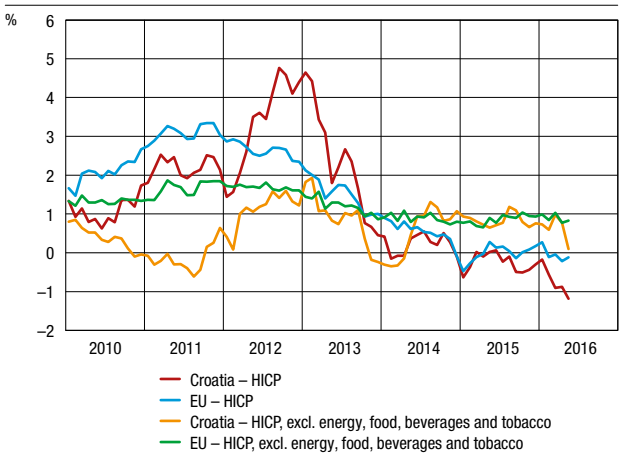
Table 5.1 Price indicators

year-on-year rate of change

	2012	2013	2014	2015	9/2015	12/2015	3/2016	4/2016	5/2016
Consumer price index and its components									
Total index	3.4	2.2	–0.2	–0.5	–0.8	–0.6	–1.7	–1.7	–1.8
Energy	10.5	3.1	0.9	–4.9	–6.6	–5.0	–7.4	–7.8	–9.1
Unprocessed food	5.8	3.8	–2.8	1.1	0.0	–0.1	–3.4	–2.2	0.9
Processed food (incl. alcoholic drinks and tobacco)	2.6	4.9	0.2	0.3	0.6	0.5	–0.1	–0.5	–0.4
Industrial non-food without energy	0.4	–0.4	–1.0	0.2	0.4	1.1	0.9	0.7	0.2
Services	0.5	0.8	0.8	0.9	1.0	0.0	0.1	0.2	–0.2
Other price indicators									
Core inflation	1.9	1.9	–0.4	0.2	0.2	0.0	–0.5	–0.6	–0.8
Index of industrial producer prices on the domestic market	7.0	0.5	–2.7	–3.9	–4.8	–4.1	–5.0	–5.8	–6.3

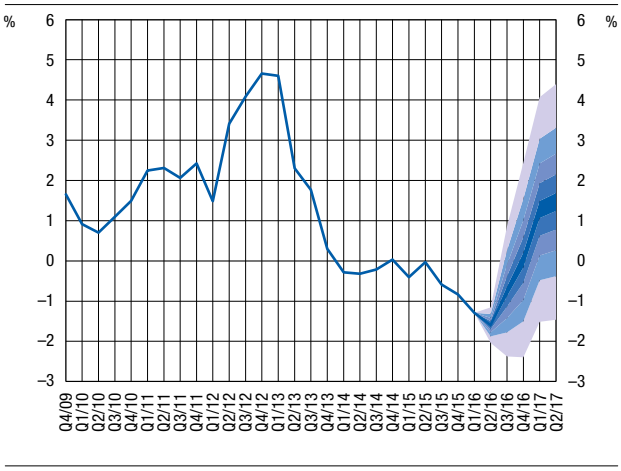
Source: CBS.

Figure 5.3 Overall and core inflation measured by the movements in the HICP in Croatia and European Union
year-on-year rate of change



Sources: CBS and Eurostat.

Figure 5.4 Projection of consumer price inflation
year-on-year rate of change



Sources: CBS and CNB calculations.

index of consumer prices (HICP) decreased from 0.2% in December 2015 to –0.1% in May 2016 (Figure 5.3). The annual inflation rate turned negative due to several factors. The negative contribution of energy prices increased due to the base effect (although global crude oil prices grew since the beginning of February 2016, they remained considerably below their level in the same period in the previous year), while the contribution of prices of unprocessed food products and market-based services (travel services) edged down. The inflation slowdown was also due to the recent appreciation of the euro, the indirect effects of the fall in oil prices on consumer prices and a slower than expected labour market recovery. Core inflation (the annual rate of change in the HICP, excluding energy, food, beverages and tobacco) fell slightly from 0.9% in December 2015 to 0.8% in May 2016 due to developments in services prices.

Inflation slowed down more quickly in Croatia than in other EU countries, with the result that the annual rate of change in Croatia's HICP decreased from –0.3% in December 2015 to –1.2% in May 2016. Inflation of the prices of industrial products, processed food products and services decelerated especially steeply. In contrast, Croatia was among the rare EU countries where the prices of unprocessed food products increased slightly their contribution to inflation. Net of the volatile components, energy, food, beverages and tobacco, Croatia's core inflation indicator declined by 0.7 percentage points, considerably more than in the EU as a whole, amounting to 0.1% in May 2016. The contribution to inflation of changes in indirect taxes fell from 0.4 percentage point in December 2015 to 0 in May 2016 (for more details see Box 3 Assessment of the effects of changes in indirect taxes on inflation).

The average annual consumer price inflation rate could drop to –0.9% (from –0.5% in 2015) in 2016. In addition to energy, food is also expected to contribute negatively. The annual decrease in energy prices resulted from a fall in the prices of natural gas and refined petroleum product prices. Crude oil prices are expected to grow slightly from June towards the end of 2016. This, and a positive base effect (a decline in refined petroleum product prices in the same period in the previous year), could gradually boost overall inflation in the direction of positive values late in the year. The average annual rate of change in food prices is projected to be mildly negative in 2016 due to the spillover effect of a decrease in global food raw material prices on domestic prices and to surpluses in the European agricultural product market. It is estimated that the average annual growth rate of the CPI excluding food and energy will slow down, but stay mildly positive in 2016, offsetting to a small extent the negative contributions of energy and food to domestic inflation.

The average annual consumer price inflation rate could rise to 1.2% in 2017, primarily due to an increase in the annual rate of change in energy prices. This should result from a positive base effect related to a steep fall in the prices of refined petroleum products and natural gas at the beginning of 2016 and the anticipated increase of average crude oil prices. Furthermore, imported inflationary pressures could mount due to the expected acceleration of inflation in the euro area. Domestic inflationary pressures are expected to build up somewhat in 2017, driven by continued economic recovery. According to the projection based on the described conditions in the domestic market and assumed positive indirect effects of increases in crude oil prices, the average annual growth rate of the CPI excluding food and energy will increase slightly in 2017. The average annual rate of change in food prices is also projected to rise.

It is estimated that the risks of lower or higher than projected inflation are balanced. The risks that might trigger lower inflation include a weaker than expected domestic demand and a sharper than expected fall in the prices of crude oil and other raw materials in the world market. Crude oil prices could decrease due to global demand weakening as a result of stifled economic growth and/or a larger than expected increase in output, especially in Iran. On the other hand, there are several risks that could lead to higher than forecast inflation, such as the possibility of a stronger growth of administratively regulated prices, unfavourable weather conditions that might result in a considerable increase in agricultural product prices, a fairly strong rise in crude oil prices (due to geopolitical tensions and/or a possible agreement of OPEC Member Countries to limit oil production) and a more pronounced depreciation of the euro versus the US dollar.

6 Foreign trade and competitiveness

The current and capital account ran a deficit in the first three months of 2016. Due to a sharper increase in net expenditures on direct equity investments and lower use of EU funds, the deficit was one fourth higher than in the same period in the previous year. An analysis of last year's cumulative value shows that the current and capital account surplus hit a historical high in the third quarter of 2015 before narrowing to 5.1% of GDP in the first quarter of 2016, among other things due to banks' expenses generated by the conversion of Swiss franc loans, estimated at about 2% of GDP.

The annual surplus in the current and capital accounts is expected to amount to 3.6% of estimated GDP, which is a small decline (5.9% of GDP) from the previous year, if the effect of the conversion of Swiss franc loans (2% of GDP) is excluded. The major adverse effect was a deterioration in the foreign trade balance brought about by a more pronounced growth in imports than in exports, but also by somewhat improved business performance of foreign enterprises in Croatia. In contrast, a positive impact on the current and capital account balances could come from a further increase in net exports of services, especially tourism services, and better absorption of EU funds. It is expected that similar trends will continue in the following year and contribute to a gradual decline in the current and capital account surplus.

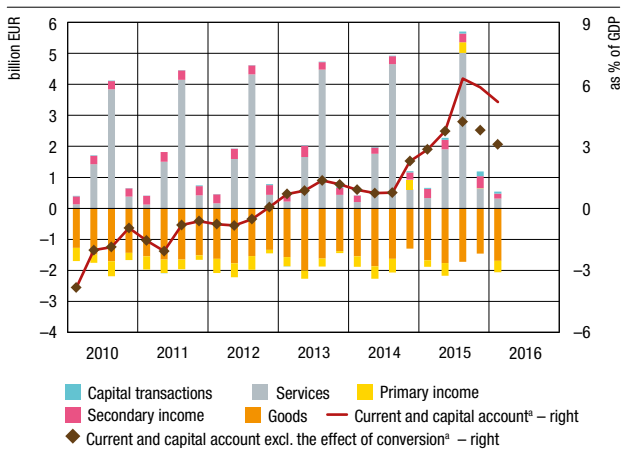
The bulk of the increase in the current account deficit in the first quarter of 2016 came from an increase in the negative balance in the primary income account stemming from a rise in expenses and a fall in income on direct equity investments. Expenses increased due to the growing profitability of foreign-owned domestic enterprises, especially those dealing with financial intermediation, the hotel business, manufacture of food products and beverages, while income declined as a result of poorer business results of foreign enterprises in domestic ownership. In contrast, interest expense of domestic sectors arising from foreign liabilities increased.

The total amount of EU funds used in the first quarter of 2016 was lower than in the same period in the previous year. Current revenues dropped especially sharply, with the result that the balance in the secondary income account deteriorated, while the amount of funds for capital projects grew, boosting the surplus in the capital transaction account. However, the amounts of EU funds paid to the National Fund's account were several fold higher than the amounts allocated to end beneficiaries, which are recorded in the secondary income and capital transaction accounts, so that the latter amounts will probably increase in the following periods that are earmarked for their allocation to end beneficiaries. If analysed cumulatively in the last one-year period, the amounts of funds paid out to end beneficiaries exceeded the payments to the EU budget by 0.5% of GDP in the first quarter of 2016 (Figure 6.2, blue line), while the net amounts of funds received from the EU were twice as high (Figure 6.2, red line).

Net exports of services declined slightly in the first quarter of 2016 from the same period in the previous year. The decline was due to the worsening of the balance of trade in other services, primarily affected by a fall in revenues from repair services and construction services, as well as by a drop in net exports of manufacturing services on physical inputs owned by others. The surplus in trade in travel services widened further, with revenues increasing by 16.2%. Better financial results in tourism were coupled with a noticeable improvement of volume indicators: arrivals of foreign tourists in commercial accommodation capacities and nights spent, which increased by 22.8% and 27.5% respectively, mainly owing to tourists from Germany, Italy and Slovenia.

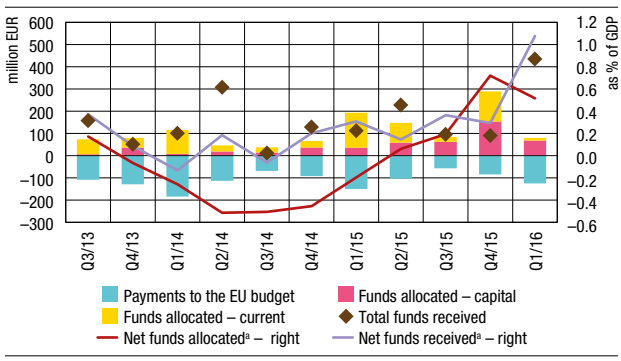
The deficit in trade in goods (as shown by foreign trade statistics) expanded slightly in early 2016 from the same period in the previous year, while annual export and import growth rates decelerated to 4.6% and 4.7% respectively. The deficit increased slightly due to a drop of 1.8% in exports of goods, coupled with a negligible increase in imports. Exports primarily decreased due to weakening exports of oil, refined petroleum products and ships. Exports of other goods, however, increased by 5.0%, above all due to a pickup in exports of capital goods (electrical machinery, apparatus and appliances) and food products (sugar and sugar preparations) as well as of road vehicles, medical and pharmaceutical products and miscellaneous finished goods. Notwithstanding a fall in imports of oil and refined petroleum

Figure 6.1 Current and capital account balance and its structure



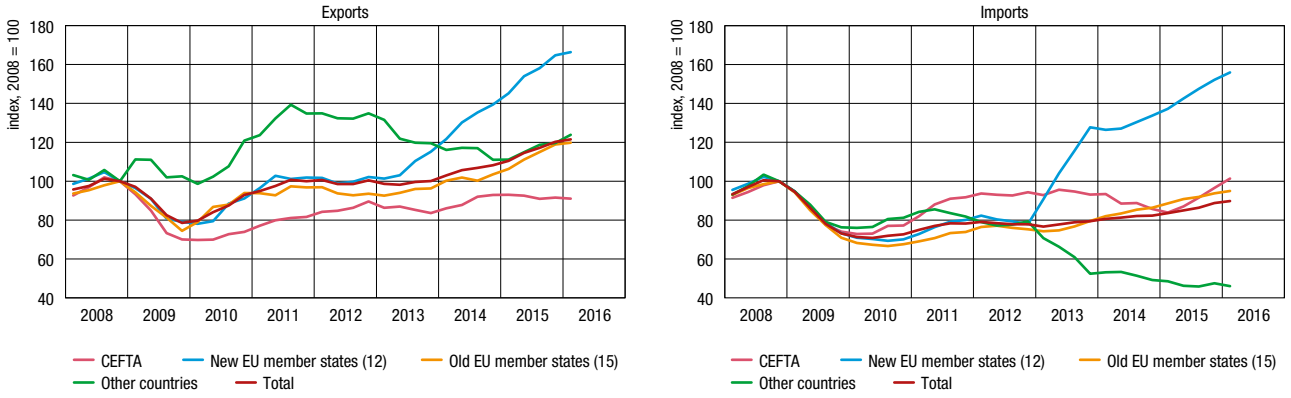
[a] Four-quarter moving average.
Source: CNB.

Figure 6.2 Transactions with the EU budget



[a] Average of the last four available quarters.
Note: As regards total funds received from EU funds, only funds allocated and paid out to end beneficiaries are recorded in the current and capital account of the balance of payments, while funds received but not allocated are recorded in the financial account. Payments to the EU budget carry a negative sign in the figure. The positive value of net received and net allocated funds is the surplus over the payments to the EU budget.
Sources: CNB and MoF.

Figure 6.3 Croatian trade in goods by economic classificaton of countries



Note: CEFTA includes Albania, Bosnia and Herzegovina, Montenegro, Macedonia, Moldova, Serbia and UNMIK/Kosovo. Data on goods exports are shown by the countries of destination. A new methodological criterion for recording the imports of goods by countries has been applied since 1 July 2013 (also applied to data for the first six months of 2013). In Extrastat, data on the imports are shown by the countries of origin of the goods, while in Intrastat data on the arrivals of goods are presented by the countries of dispatch. As a result, data on imports by countries in the period from January 2013 onward are not comparable with earlier data. Index values are calculated as four-quarter moving averages.
Source: CBS.

products, total imports of goods rose slightly in the first three months of 2016 on account of imports of ships and, especially, of other goods. Imports of other goods (excluding oil and ships) increased by 2.8%, mostly due to rising imports of manufactured goods classified chiefly by material, clothing, medical and pharmaceutical products and various finished products. Data on trends in trade in goods for April suggest that exports grew by 1.1% and imports at a slightly higher rate of 2.9%, which resulted in the widening of the deficit from the first quarter.

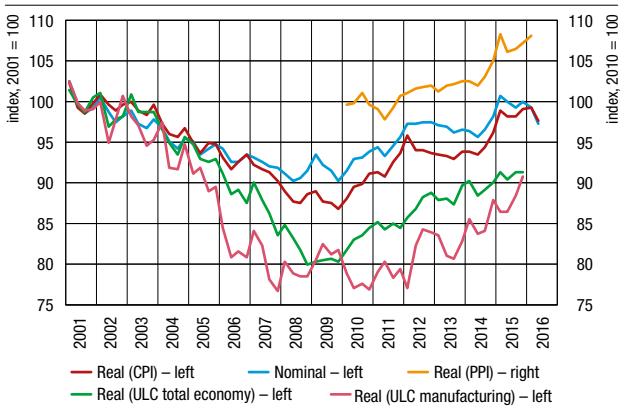
Developments in Croatia's trade in goods broken down by individual markets show that the EU market has continued to account for the bulk of the growth of exports and imports (for more details on the characteristics of Croatia's goods exports in the last three years see Box 4 Changes in the dynamics and structure of Croatian goods exports since entry to the EU). Exports to EU countries increased the most in the first quarter of 2016 from the same period in the previous year. Strong growth was recorded in exports to Germany (electrical machinery, apparatus and appliances), Italy (sugar and sugar preparations, cork and wood, medical and pharmaceutical products) and Slovenia (food products, capital equipment, cork and wood). Growth in exports to third countries accelerated as a result of increased exports of medical and pharmaceutical products and miscellaneous finished goods to the US. Exports to CEFTA countries decreased, largely as a result of a drop in exports of oil and refined petroleum products to Bosnia and Herzegovina. The growth of imports in the first quarter of 2016 was mainly driven by an increase in imports from EU countries, primarily from Germany (road vehicles), Bulgaria (miscellaneous finished goods) and Slovenia (natural and industrial gas, medical and pharmaceutical products, road vehicles). Imports from CEFTA countries also grew, with imports from Serbia (non-ferrous metals and electricity) and from Bosnia and Herzegovina (electricity) making up the bulk of the growth. Imports from third countries dropped, primarily as a result of a steep decrease in imports of oil and refined petroleum prices from Russia and Azerbaijan.

The increase in the goods trade deficit is expected to continue at the 2016 level, especially as regards the narrow aggregate that excludes ships and oil. Imports growth derives from the expected moderate recovery of domestic demand and investments, better use of EU funds and recognition of a high import dependency of the domestic economy. Nevertheless, net imports of oil and refined petroleum products will probably decrease annually due to falling global crude oil prices. Expectations of imports growth are based on the assumption of continuing economic recovery in Croatia's main trading partners and facilitated access to the EU market.

The price competitiveness of Croatian exports deteriorated in the first half of 2016 under the influence of the nominal effective depreciation of the kuna. Following a small appreciation in the first quarter, real effective kuna exchange rates deflated by consumer and producer prices appreciated considerably in April and May of 2016 from the previous quarter average. The appreciation of the nominal effective kuna exchange rate offset the effect of more positive developments in consumer and producer prices in Croatia than in its main trading partners. However, the price competitiveness of Croatia's goods exports, measured by the index of the real effective exchange rate of the kuna deflated by consumer prices, is expected to improve slightly on an annual basis in 2016 and 2017.

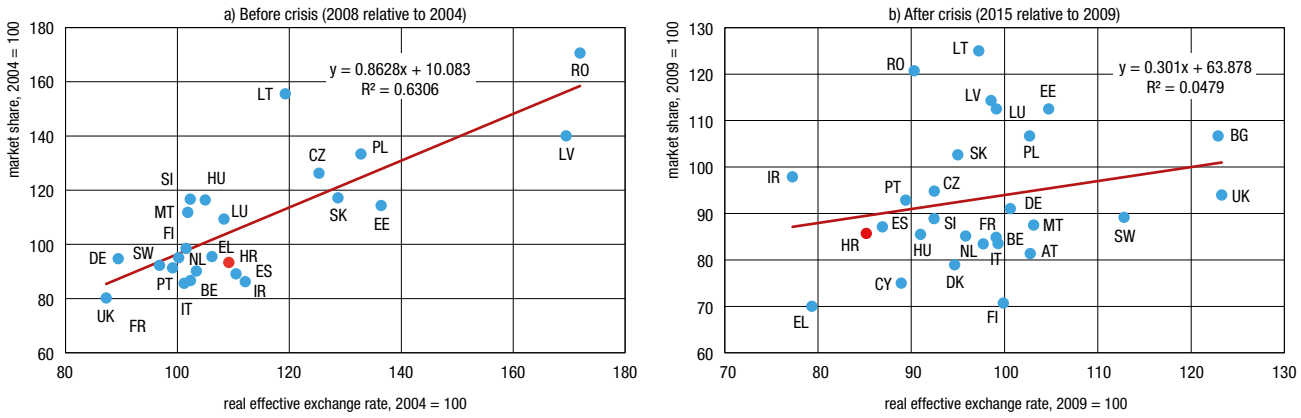
The price and cost competitiveness of Croatia's exports improved, which is only partially attributable to strong export performance in the last two years. Specifically, mild appreciation pressures on the kuna arose as early as in 2009, with the

Figure 6.4 Nominal and real effective exchange rates of the kuna



Note: Real effective exchange rate of the kuna deflated by producer prices includes the Croatian index of industrial producer prices on the non-domestic market, which is available from January 2010. A fall in the index denotes an effective appreciation of the kuna.
Source: CNB.

Figure 6.5 Changes in the market share of exports of goods and services and the real effective exchange rate deflated by ULC



Note: The market share shows the change in the share of exports of goods and services of a country in the world imports (relative to the reference year), while the real exchange rate shows the change in the index of the real effective exchange rate deflated by ULC (relative to the reference year), with a fall in the index denoting a real effective depreciation.
Source: Eurostat.

exchange rate depreciating at higher rates in real than in nominal terms, but exports did not start to grow until after Croatia's accession to the EU. Although the strengthening of exports of goods and services had an impact on the recovery of the share of Croatia's exports in the world's market, especially in 2015, this share remained lower than that in the pre-crisis period, despite a relatively significant improvement in price and cost competitiveness. Furthermore, a weak and limited effect of relatively favourable historical trends in the real effective exchange rate of the Croatian kuna, compared with trends in the currencies of Central and Eastern European countries, points to the greater significance of non-price competitiveness factors, including business environment quality, investment inflows into export-oriented sectors, geographical and production structure of exports, participation in global value chains and investments in research and development. During the pre-crisis years, exports had grown at the highest rates in the countries recording the strongest appreciation of the real effective exchange rate (Figure 6.5a), but this link vanished after the outbreak of the crisis (Figure 6.5b).

7 Financing conditions and capital flows

In the conditions of record high liquidity on the domestic and foreign financial markets financing conditions in 2016 are expected to be more favourable. The costs of financing of domestic sectors were mostly favourable in the first half of 2016 (Figure 7.1). The interest rate on one-year kuna T-bills fell from 1.48% at the end of 2015 to the historically low 0.94% in June. The average short-term kuna interest rate on bank loans was lower for all sectors than in the previous year and if compared to end-2015, the corporate sector saw the biggest improvement in financing conditions. The long-term costs of bank lending with a currency clause were also more favourable than at the end of the previous year, with the interest rate on home loans holding steady from December to April at levels higher than in 2015, as a result of the conversion of loans with a currency clause in the Swiss franc into loans with a currency clause in euro. The fall in interest rates was also spurred by lower costs of bank financing, as seen in the fall in the NRR[3] and EURIBOR. The financing conditions are expected to remain more favourable in the rest of the year. This is based on the assumption of fast stabilisation of foreign markets following the shock caused by the UK referendum decision to leave the EU. In the first days following the decision, the shock did not have any effect on the interest rates on the domestic banking market, due to the fact that the banks currently have no borrowing needs.

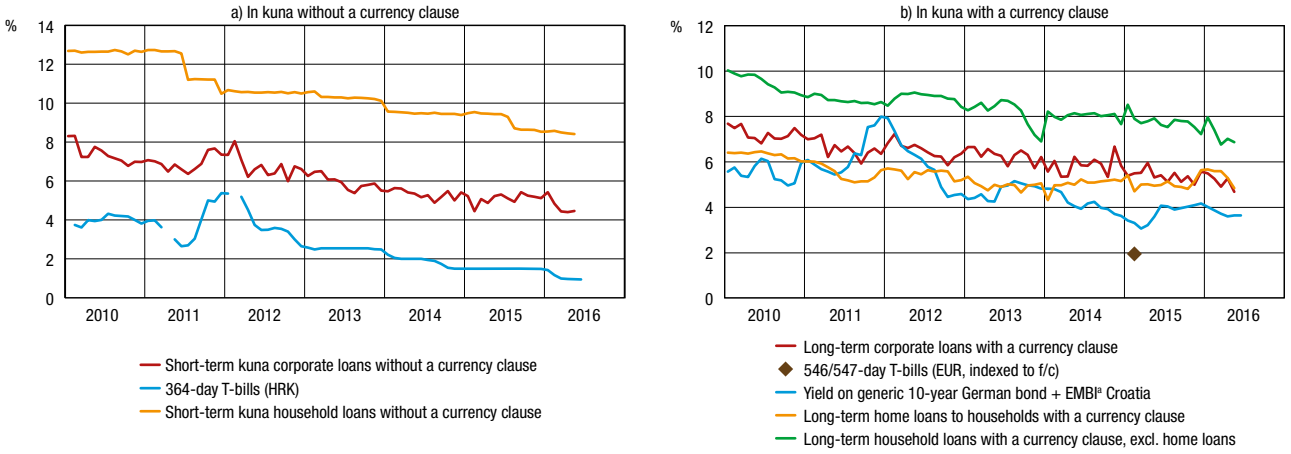
The price of government borrowing abroad, estimated by the sum of yields on the German government bond and the EMBI indicator for Croatia, fell in the first half of the year exclusively as a result of a fall in yields on long-term German borrowing. Nevertheless, the planned issue of a foreign government bond did not materialise due to political instability in the country. The yields on Croatian government bonds rose slightly towards the end of June as a result of instability in the financial markets following the decision of the United Kingdom to leave the European Union. This was accompanied by an additional fall in the yields on German government bonds, also driven by the outcome of the referendum, which led to an increase in the yield spread between Croatian and German government bonds.

Looking at the yield curve for Croatian government bonds over a longer period of time, government financing conditions were considerably more favourable from end-2013 to the first half of this year. The yield on the four-year kuna bond without a currency clause fell by approximately 2.5 percentage points, while the yield on the six-year kuna bond with a currency clause in euro fell by approximately 2 percentage points during the same period (Figure 7.2).

Credit default swaps of parent banks of the largest banks in

3 The national reference rate (NRR) is the average interest rate paid on deposits by the banking sector which is used as one of the benchmark interest rates for determining the level of the variable component of the variable interest rate on loans, in accordance with Article 11a of the Credit Consumer Act.

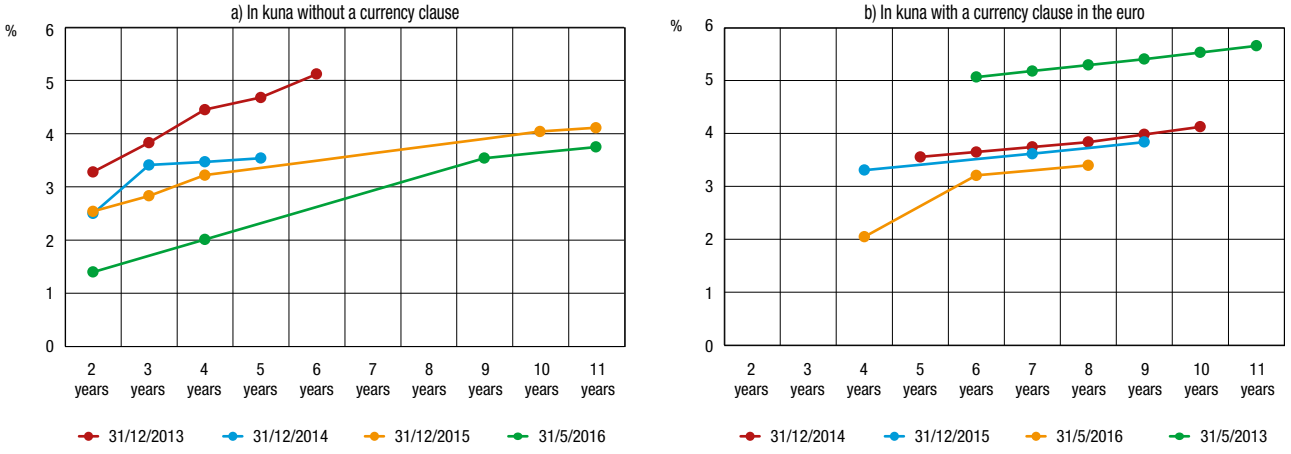
Figure 7.1 Costs of financing of domestic sectors



[a] EMBI (Emerging Market Bond Index) is the spread between yields on government securities of emerging markets, including Croatia, and risk-free securities of developed countries.

Sources: MoF, Bloomberg and CNB.

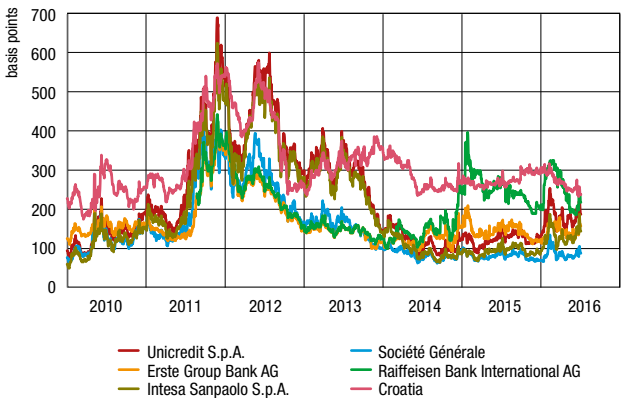
Figure 7.2 Yield-to-maturity on RC bonds



Note: Dots show achieved yields; other values are interpolated.

Source: CNB.

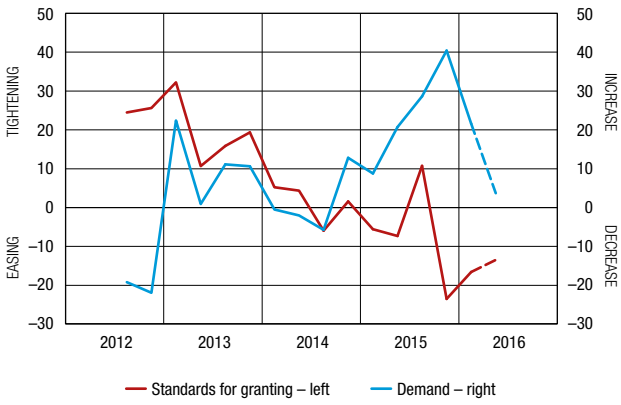
Figure 7.3 CDS spreads for Croatia and selected parent banks of domestic banks



Note: Credit default swaps (CDS) spread is an annual premium that a CDS buyer pays for protection against credit risk associated with an issuer of an instrument.

Source: S&P Capital IQ.

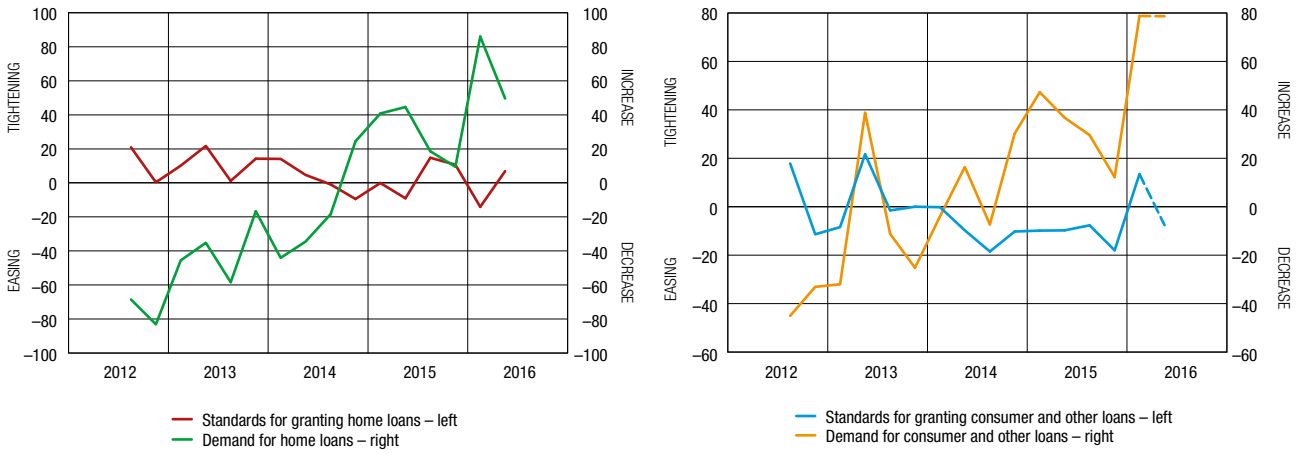
Figure 7.4 Standards for granting loans and corporate demand for loans



Note: Data represent the net percentage of banks weighted by the share in total loans to corporations. Broken lines represent bank expectations for the second quarter of 2016.

Source: CNB.

Figure 7.5 Standards for granting loans and household demand for loans



Note: Data represent the net percentage of banks weighted by the share in total loans to households. Broken lines represent bank expectations for the second quarter of 2016.
Source: CNB.

Croatia reached their peak levels this year in the first quarter of the year, reflecting rising concern of the financial markets regarding future bank profitability, but stabilised briefly afterwards. However, following the referendum decision on the exit of the United Kingdom from the EU, the premiums of parent banks rose again and at end-June were higher than at the end of the previous year (Figure 7.3). By contrast, the CDS for Croatia in the middle of the year was lower than at the end of 2015, but remained considerably higher than peer countries' premiums.

With favourable developments in domestic interest rates, the standards for granting corporate loans and corporate demand for loans continued to improve in the first quarter of 2016 although at a slower pace than in the previous period (Figure 7.4). Based on banks' responses to the Bank Lending Survey, the relaxation in corporate loan granting standards was mostly spurred by positive expectations in relation to general economic developments and competition among banks, while increased demand was mostly driven by the needs for the financing of inventories and working capital and debt restructuring.

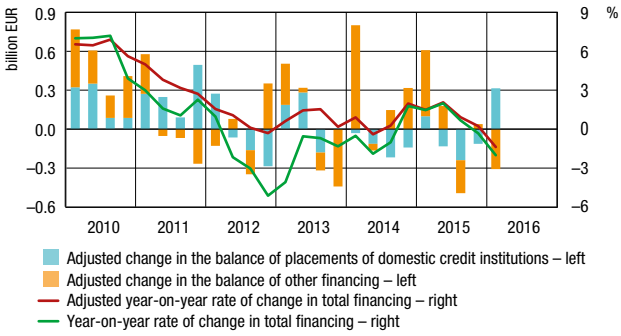
As regards the household sector loan demand and supply, banks' responses to the Bank Lending Survey indicate that the demand for consumer and home loans in the first quarter of 2016 recorded the most favourable developments since the Survey was first conducted (Figure 7.5). Such developments in home loans were mostly influenced by consumer confidence while those in consumer and other loans were influenced by spending on durable consumer goods. As regards the standards for granting loans, the banks relaxed those for granting home loans but tightened those for granting consumer and other household loans, for the first time since 2013.

Despite favourable developments in financing conditions, the total debt of non-financial corporations held steady during the first quarter of 2016, but fell by 1.4% on an annual level (Figure 7.6). In the first quarter of the year, private and public enterprises increased their level of debt with domestic credit institutions (2.5%, based on transactions), but both groups of enterprises reduced their foreign financing by approximately the same amount. The first two months of the second quarter also saw an increase in the corporate credit activity of domestic credit institutions.

The developments in household placements in the first five months of the year were more favourable than in the same period of previous years (Figure 7.7). Thus, household placements rose by 0.6% in the first five months of 2016 (based on transactions), with a particularly strong growth in kuna lending. However, on an annual level, total placements continued to fall, dropping by 0.7% at the end of May. Also, the nominal stock of household loans in the first five months of 2016 was again largely influenced by the conversion and partial write-off of loans in the Swiss franc, a process launched to a more significant extent in December of the previous year. Towards the end of November 2015, household placements in the Swiss franc and indexed to the Swiss franc stood at HRK 21.7bn and at the end of May 2016 at HRK 2.3bn. During that period, HRK 11.2bn worth of loans in the Swiss franc was converted and HRK 5.8bn was written off.

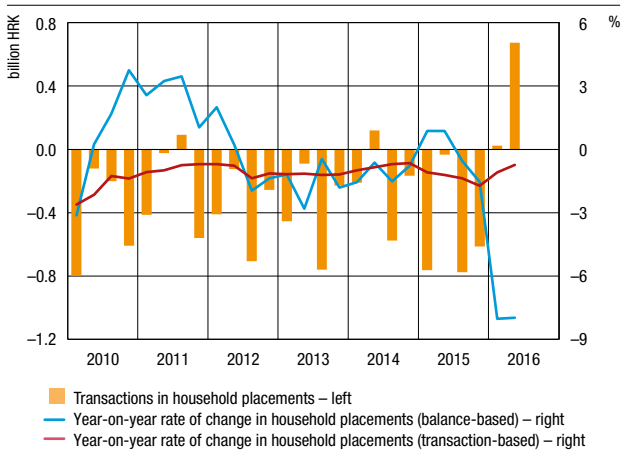
In 2016, total corporate debt might rise slightly as a result of an increase in domestic lending while over a medium term corporate borrowing is expected to accelerate gradually. Accordingly, the total domestic credit activity of banks might also heighten in 2016, after falling for two years in a row, while households are expected to deleverage further, though at a much slower pace than in 2015. By contrast, the stock of placements

Figure 7.6 Corporate financing by sources



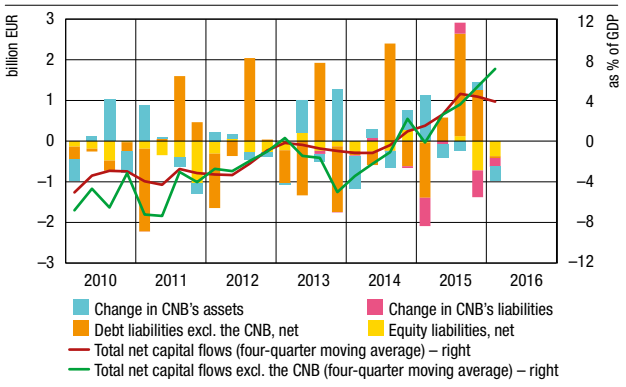
Note: Other financing includes corporate borrowing from domestic leasing companies and direct borrowing from the CBRD, as well as borrowing from foreign banks and affiliated enterprises abroad. The adjusted changes are calculated on the basis of data on transactions in placements of domestic credit institutions and data on the developments in external debt which do not include the effect of the assumption of loans to the shipyards by the Ministry of Finance in 2012 and the effect of the transformation of debt into equity.
Sources: HANFA, CNB and CNB calculations.

Figure 7.7 Household placements



Note: Data for the second quarter of 2016 refer to April and May.
Source: CNB.

Figure 7.8 Financial account flows



Note: A positive value denotes net outflow of equity abroad. The change in CNB's assets includes the change in gross international reserves and funds in the dedicated cash account in TARGET2-HR. Net liabilities represent the difference between the change in assets and the change in liabilities. Total net capital flow series are shown as a four-quarter moving average.
Source: CNB.

will shrink, mostly as a result of the write-off of household placements associated with the conversion of loans indexed to the Swiss franc and the write-offs associated with the sale of non-performing placements of non-financial corporations. Despite expectations of a gradual acceleration in bank activity over a medium term, the risks to lending recovery are slightly negatively skewed, given the high corporate sector debt, increased corporate orientation towards more favourable foreign sources of financing as well as further worsening of the country's credit rating and possible halting of the favourable trends in financing conditions. By contrast, favourable developments in the real sector of the economy, fiscal consolidation and the smaller financial needs of the government may create room for stronger lending to the private sector.

Foreign capital flows

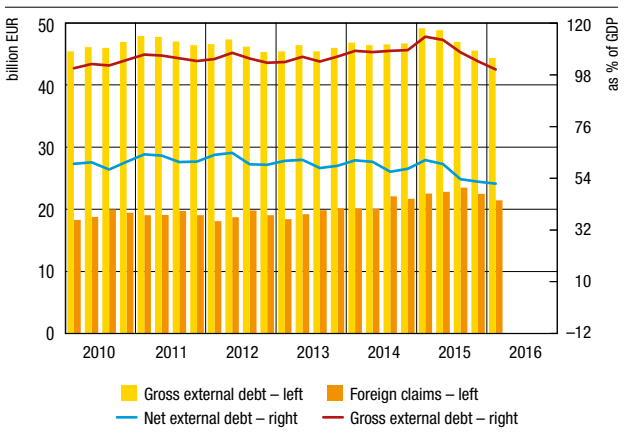
Net foreign capital inflows in the first three months of 2016 were much lower than in the same period of the previous year. The financial account of the balance of payments, excluding central bank transactions, witnessed growth in net foreign liabilities of EUR 0.5bn while that in the year before was EUR 1.3bn.

The net inflow of foreign direct investment in the first quarter of 2016 stood at EUR 0.4bn, having almost doubled from the same period of the previous year. The biggest contributor to this growth was the improvement in retained earnings on the liabilities side, as a result of better business results of banks and, to a lesser extent, domestic enterprises in foreign ownership. The already modest direct equity investments in Croatia dropped additionally and were, debt-to-equity transactions excluded, almost twice as low as at the beginning of the previous year. New equity investments mostly took place in retail trade and in real estate activities. The growth in assets declined as a result of lower equity investments abroad and poorer business results of foreign enterprises in resident ownership.

Unlike the beginning of the previous year when net capital inflow was almost entirely due to debt investments, the first three months of 2016 saw only a small increase in net liabilities on this basis. In addition to an increase in liabilities based on received but undistributed EU funds, it was due to a deterioration in the net external position of credit institutions which continued to deleverage but at the same time decreased their foreign exchange assets even more. The liabilities of other domestic sectors (to affiliated and other creditors) rose only slightly as the increase in liabilities based on short-term trade credits was accompanied by a slightly slower deleveraging in relation to other instruments. This relates in particular to public non-financial corporations, while private non-financial corporations rolled back their liabilities to non-affiliated creditors and at the same time borrowed slightly from affiliated creditors. By contrast, general government liabilities to foreign creditors fell considerably.

The net external position of the central bank (the effects of cross-currency changes excluded), worsened additionally in the first quarter of 2016 as a result of a fall in claims and, to a lesser extent, rise in liabilities. The CNB's decision repealing the requirement for the banks to allocate the foreign exchange component of reserve requirements with the central bank which provided the banks flexibility in their foreign exchange liquidity management, had a strong unfavourable impact on reserves. The fall in reserves was also due, to an extent, to the withdrawal of funds from the government foreign currency deposits with the CNB. The investment of reserves in repo agreements had an opposite effect on reserves, at the same time increasing foreign liabilities of the central bank. The stock of gross international

Figure 7.9 Gross and net external debt



Note: Net external debt is calculated as gross external debt stock net of foreign debt claims.
Source: CNB.

reserves fell by EUR 0.5bn in the first three months of 2016 and stood at EUR 13.2bn at the end of March. However, the coverage of short-term debt by remaining maturity rose slightly, to 97.5%. During that period, the reserves were sufficient for the coverage of 7.5 months of goods and services imports.

The expectations for the remaining part of the year include a fall in the debt liabilities of domestic sectors, particularly as a result of bank deleveraging. By contrast, government foreign liabilities might continue falling until the last quarter of the year when the government might again approach the foreign markets to finance the budget deficit. Accordingly, debt liabilities might continue to fall considerably throughout the year, with bank deleveraging playing the lead role in overall developments in 2016. Other sectors' deleveraging, particularly deleveraging in relation to un-affiliated creditors, might also contribute slightly to this trend. Owing to a fall in gross debt, accompanied by a rise in the nominal GDP, the relative indicator of external debt might improve visibly and fall below the level of 100% of GDP. Debt capital flows in 2017 are expected to continue to be strongly influenced by further deleveraging of credit institutions, although its intensity will slow down gradually. By contrast, foreign liabilities of the government and other domestic sectors might grow gradually. The outlook in such conditions points to a further improvement in the relative indicators of external debt.

As regards foreign direct investments, after falling sharply in 2015, the net inflow of capital on this basis in the current year might return to the level approximate to the average values in the years following the outbreak of the crisis. On the liabilities side, retained earnings are expected to rise as a result of greater profitability of banks and enterprises in foreign ownership, while equity investments might fall, but exclusively as a result of the large amount of debt-to-equity swap transactions and to one large transaction in the tobacco industry last year.

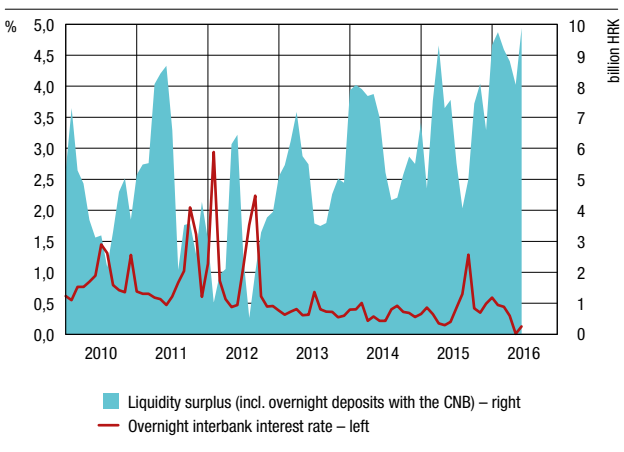
8 Monetary policy

In the first half of 2016, the CNB continued to pursue an expansionary monetary policy, maintaining at the same time the stability of the exchange rate of the kuna against the euro. The expansionary monetary policy orientation was supported additionally by the introduction of long-term structural kuna repo operations. The surplus kuna liquidity rose from the average HRK 6.7bn in 2015 to HRK 9.2bn in the first half of 2016. In such conditions, the overnight interest rate on the interbank money market, in the conditions of a marked fall in the volume of trade, fell to 0.13% in June, after reaching almost 2.0% in mid-September of the previous year. The yield on kuna T-bills of the Ministry of Finance also fell and so did the kuna yield curve for government bonds. In the remaining part of 2016 and in 2017, the CNB will continue to pursue an expansionary monetary policy and to maintain the stability of the exchange rate of the kuna.

Two of the total of four structural repo auctions planned for this year were held in the first half of 2016. At these auctions, the CNB granted to the banks a total of HRK 711.5m for a four-year term, at the fixed rate of 1.8% (HRK 565.0m was auctioned in February and HRK 146.5m in May). These operations provided banks access to longer-term sources of kuna liquidity which is expected to uphold the trend of increased bank lending in the domestic currency particularly present up to now in 2016. The CNB continued to conduct regular weekly reverse repo operations at a fixed repo rate of 0.5%; however, in the conditions of ample surplus kuna liquidity, the average stock of funds placed at these auctions in the first six months of this year stood at only HRK 117.3m.

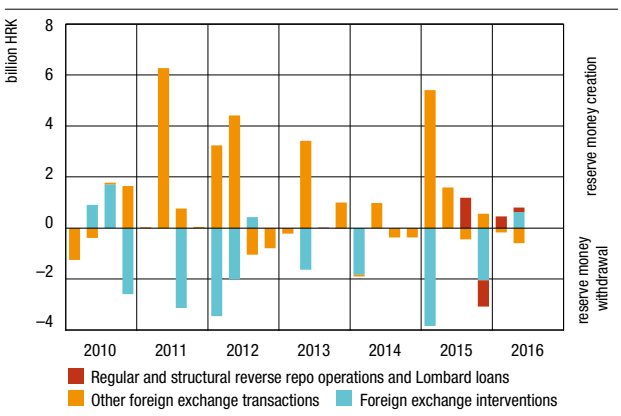
Foreign exchange transactions of the CNB had only a modest net impact on kuna liquidity in the first half of 2016. On the one hand, the central bank held a foreign exchange intervention towards end-May, purchasing EUR 83.5m and creating HRK 625.6m, which helped increase kuna liquidity. Also, in its foreign exchange transactions with the Ministry of Finance in the first half of the year, the CNB purchased EUR 109.7m worth of foreign exchange. But on the other hand, the sale of EUR 210.7m worth of foreign exchange to the European Commission

Figure 8.1 Bank liquidity and overnight interbank interest rate



Source: CNB.

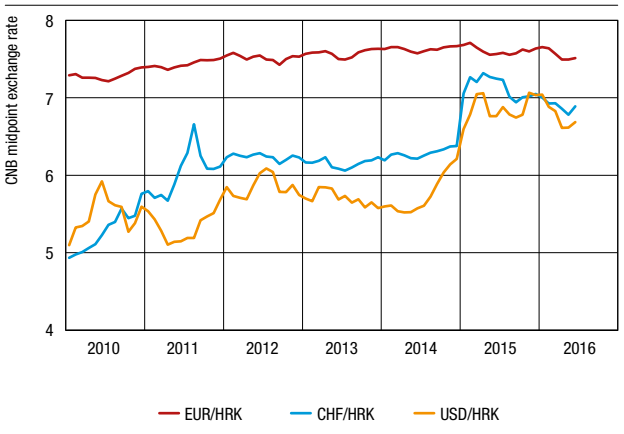
Figure 8.2 Flows of reserve money (M0) creation



Note: Other foreign exchange transactions include the purchase of foreign exchange from and the sale of foreign exchange to the MoF and the EC and foreign currency swaps with banks, where the positive values refer to the purchase of foreign exchange by the CNB.

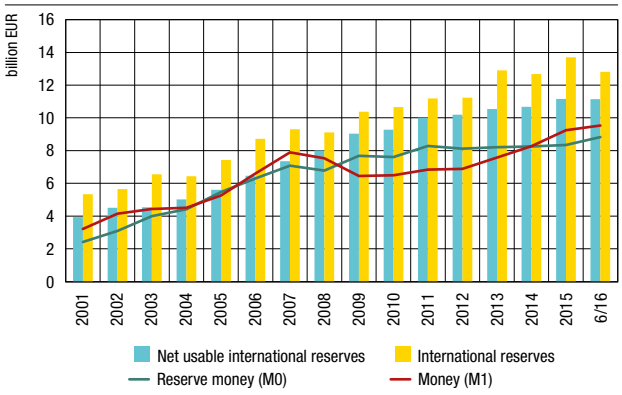
Source: CNB.

Figure 8.3 Nominal exchange rates of the kuna against selected currencies



Source: CNB.

Figure 8.4 International reserves of the CNB and monetary aggregates



Note: Net usable international reserves are defined as international reserves net of foreign liabilities of the CNB, reserve requirements in f/c, government foreign currency deposits and off-balance sheet liabilities (swaps). The most recent data available for M1 refers to end-May 2016.

Source: CNB.

had the opposite effect. Overall, in the first half of the year, the central bank sold net EUR 17.5m of foreign exchange, thus withdrawing HRK 142.5m.

The nominal exchange rate of the kuna against the euro in the first five months of 2016 appreciated visibly, falling from EUR/HRK 7.64 at the end of 2015 to EUR/HRK 7.49 at the end of May. The appreciation pressures on the kuna mounted since March and were partly due to good results in tourism, increased inflows of EU funds, and the expectations of the announced issue of a government bond on the foreign market, which was later postponed. To alleviate these pressures, the CNB intervened in the foreign exchange market on 31 May, purchasing EUR 83.5m and halting the strengthening of the kuna, with the exchange rate reaching EUR/HRK 7.51 by end-June. If the average exchange rate is analysed, in the first half of the year it was 0.9% lower than in the same period of the previous year. The exchange rate of the kuna against the American dollar and the Swiss franc also appreciated in the first five months of this year, mainly due to the strengthening of the euro on the global foreign exchange markets, but June saw a small reversal in the trend, with the kuna weakening against major global currencies.

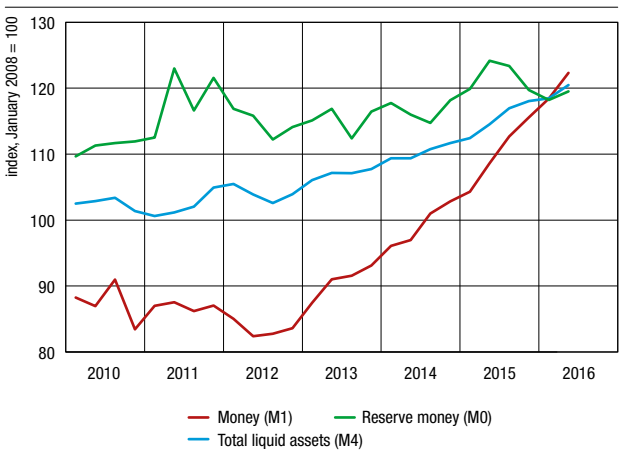
At the end of June, gross international reserves stood at EUR 12.8bn, having fallen by EUR 0.9bn (6.5%) from the end of 2015. The fall in gross reserves can mostly be attributed to the decision to repeal the requirement for the banks to allocate foreign currency reserve requirements to an account with the CNB (EUR 0.5bn). This decision makes it possible for the banks to take a more flexible approach to foreign exchange liquidity management, allowing them to meet the total foreign exchange component of reserve requirements by average daily balances of foreign currency assets. The fall in gross reserves was also due to drawings on government deposits with the CNB, which stood at EUR 411.8m at the end of 2015 and by end-June fell to EUR 241.0m. Since the stated factors have no impact on developments in net usable reserves, these fell only slightly from the end of the previous year (0.1%) and stood at EUR 11.1bn at the end of June. Gross and net international reserves continued greatly to exceed the balance of the narrowest monetary aggregates M0 and M1.

The real seasonally adjusted values of money (M1) and total liquid assets (M4) continued to rise steadily in the first half of 2016. With inflation remaining subdued, the real growth in monetary aggregates was certainly spurred by growth in private sector lending and domestic economic recovery in general. The real value of reserve money (M0) rose again in the third quarter, after falling for several quarters.

In the conditions of subdued inflation and slow recovery in lending, monetary policy in 2016 will keep its pronounced expansionary character and will work towards further maintenance of the stability of the exchange rate of the kuna against the euro. This implies further support to high liquidity in the system by means of structural and regular repo operations as well as foreign exchange transactions. The volume of foreign exchange transactions of the CNB in 2016 will depend primarily on foreign government borrowing and if this is in short supply might lead the government to domestic borrowing but also to a sharper fall in the international reserves of the Republic of Croatia. Banks' corporate and household lending activity is expected to pick up gradually in 2016 and the following year but the risks to such an outcome are slightly negatively skewed and primarily involve possible further deleveraging associated with the high level of debt of the corporate sector and a greater orientation of enterprises towards foreign, more favourable sources of financing than expected.

Figure 8.5 Monetary aggregates

index of developments in seasonally adjusted values, deflated by the consumer price index



Note: Data for the second quarter of 2016 refer to May.

Source: CNB.

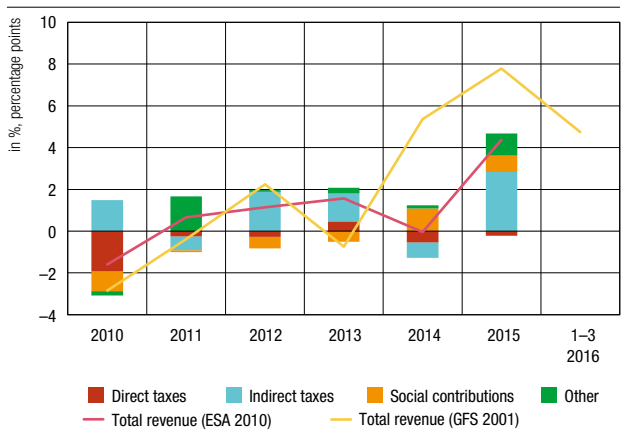
9 Public finance

MoF data indicate that favourable developments continued from 2015 to the first quarter of 2016. In addition to by ongoing economic growth, which made a positive impact on revenue dynamics, these trends were supported by expenditure cuts. As the general government balance is expected to show further improvement under such conditions, the deficit could, for the first time in a number of years, fall below 3% of GDP in 2016. The nominal general government deficit for 2016, planned in the Convergence Programme of the Republic of Croatia for the Period 2016 – 2019, is 2.6% of GDP, which is 0.6 percentage point less than in 2015. The deficit target is in line with the requirements for 2016 under the excessive deficit procedure (2.7% of GDP). However, according to the assessment of the European Commission, the debt criterion is not going to be met.

Revenues and expenditures

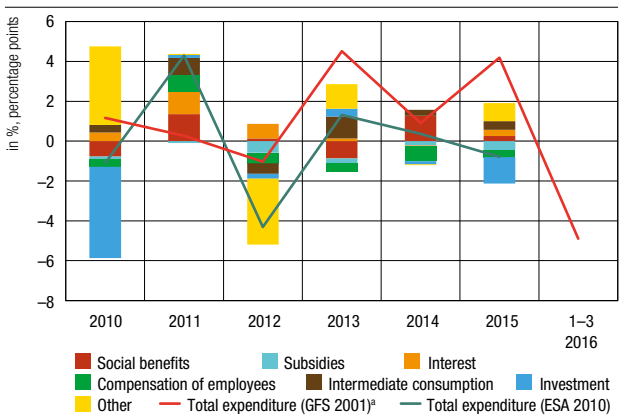
As shown by cash MoF data for the consolidated central government, favourable developments continued in the first three months of this year. Tax revenues continued to increase annually, with the increase mainly driven by excise revenue growth, attributable to favourable personal consumption developments and the whole-year effect of increases in excise duties on tobacco and refined petroleum products from 2015. In contrast, VAT revenues dropped despite favourable household consumption trends in consequence of the rise in tax return refunds, as shown by available data. Furthermore, revenues from social contributions increased sharply, reflecting favourable labour market developments, most importantly, wage growth. MoF data also point to a sharp increase in revenues from international organisations, which may be related to growing transfers from the EU budget. However, under ESA 2010 these transfers have no influence on the deficit as the same amount of funds is recorded in parallel on the expenditure side of the budget. The so-called other revenues were down considerably, partly due to the base effect related to the deferred allocation of the CNB profit to the government budget. However, the decrease also appears to have resulted from the fact that the 2016 data still do not include a part of own and earmarked revenues and corresponding expenditures of some budgetary users.

Figure 9.1 Consolidated general (ESA 2010) and central government revenue (GFS 2001)
year-on-year rate of change and contributions



Note: Structural columns show the contributions of individual revenue categories to the change in total revenue presented according to the ESA 2010 methodology.
Sources: Eurostat and MoF (CNB calculations).

Figure 9.2 Consolidated general (ESA 2010) and central government expenditure (GFS 2001)
year-on-year rate of change and contributions



a Includes net acquisition of non-financial assets.
Note: Structural columns show the contributions of individual expenditure categories to the change in total expenditure presented according to the ESA 2010 methodology.
Sources: Eurostat and MoF (CNB calculations).

The analysis of expenditure trends based on MoF data is made considerably more difficult due to the already mentioned fact that the data for the first quarter of 2016 still exclude part of the expenditures of some budgetary users. In addition, the reporting methodology for wages and some forms of compensation paid to primary and secondary school employees has also been changed as these items are no longer classified as employee compensation, but as grants to the local government because primary and secondary schools are budgetary users of local and regional self-government units.

Given the above, MoF cash data seem to point to a decrease in revenues in the first quarter of this year, probably to some extent due to temporary financing in force at the time. Interest expenditures dipped from the previous year thanks to favourable financial market conditions and a decrease in yields on new issues of public debt instruments.

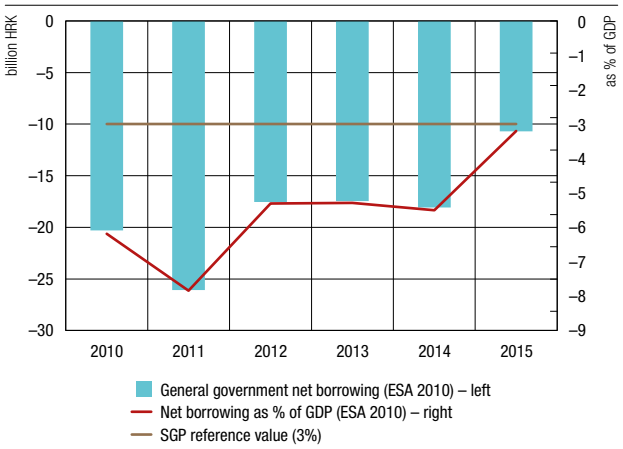
Deficit and debt

Consolidated central government net borrowing (GFS 2001) amounted to HRK 2.6bn in the first quarter of 2016, with the result that the deficit decreased by HRK 3.2bn on an annual basis. Available fiscal data indicate that the general government deficit under ESA 2010 could amount to approximately HRK 2.0bn in the first quarter of 2016.

The funds required for the financing of the deficit and liabilities falling due in the first quarter of 2016 were mainly raised by a HRK 4bn worth ten-year government bond issue in the domestic capital market, with a yield at issue of 3.99%, and by borrowing through T-bills. However, total general government debt declined in absolute terms in the first three months of 2016 from the end of 2015 due to the appreciation of the kuna/euro exchange rate; the decrease in the relative debt indicator was also caused by GDP growth.

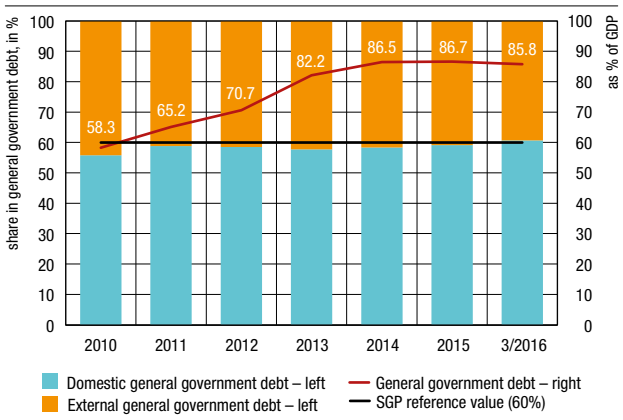
General government will have to refinance about 16% of GDP worth of liabilities at the 2016 level, with about half of this amount falling due in the second half of 2016. The bulk of refinancing needs in the second half of the year includes liabilities on long-term securities, including T-bills in the amount of EUR 1.2bn, maturing in August, and a domestic bond (HRK

Figure 9.3 Consolidated general government balance (ESA 2010)



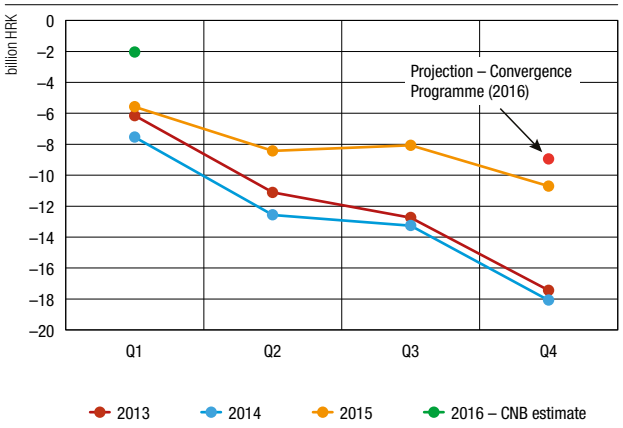
Note: SGP – Stability and Growth Pact.
Source: Eurostat (CNB calculations).

Figure 9.5 General government debt
end-period stock



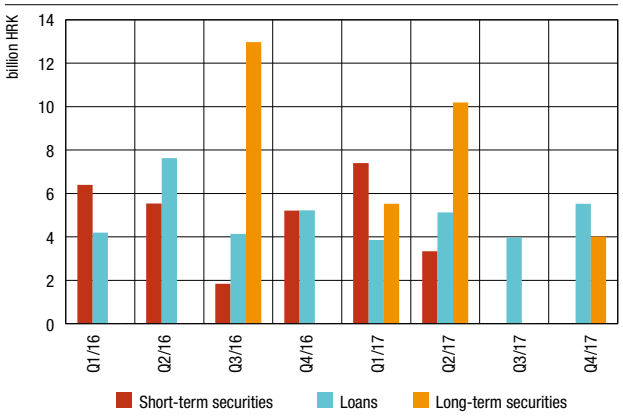
Note: Nominal GDP calculated as the sum of GDP for the first quarter of 2016 and the last three available quarterly data was used for the calculation of the relative indicator in 2016.
Source: CNB.

Figure 9.4 General government cumulative balance by quarters (ESA 2010)



Sources: Eurostat and MoF (CNB calculations).

Figure 9.5 Projection of general government debt maturity



Note: Projection of the repayment of short-term and long-term securities is based on the balances as at 30 June 2016 and projection of the repayment of loans on the balance as at 31 March 2016.
Source: CNB.

3.5bn) maturing in July. A fiscal sustainability analysis shows that short-term and long-term risks to public finances are low, but medium-term risks appear to be high (for more details see Box 5 Assessment of risks to fiscal sustainability in the Republic of Croatia).

10 Deviations from the previous projection

Real GDP could grow by 2.3% in 2016, which is a significant upward revision from the previous official projection of a 1.8% growth. The revision mainly resulted from much better than expected results achieved in the first quarter of 2016. As regards domestic demand components, personal consumption was revised the most due to a sharp annual increase (3.1%) in the first quarter of this year and expectations of further quarterly growth amid trends in the labour market that were better than projected in December. Gross fixed capital formation could also increase slightly faster than expected due to improved results in the first quarter of 2016, both in relation to the previous three months and on an annual basis. Government consumption growth was also revised upwards, although the expected contribution to overall economic developments n 2016 remained almost neutral. Given a higher than expected increase in goods and services exports, foreign demand could this year again make the largest positive contribution to economic growth. Finally, taking into account import dependency, a higher increase in exports and strong growth in domestic demand, imports could grow at a rate higher than expected. Accordingly, in contrast with the previous projection, the contribution of net exports to overall economic growth under this projection could be slightly negative.

Table 10.1 Deviations from the previous projection

	2016		
	Previous projection (12/2015)	Current projection	Deviation
National accounts (real rate of change, in %)			
GDP	1.8	2.3	0.5
Personal consumption	1.5	2.9	1.4
Government consumption	0.2	0.4	0.2
Gross fixed capital formation	2.4	2.9	0.5
Exports of goods and services	4.8	5.7	0.9
Imports of goods and services	4.4	6.6	2.2
Labour market			
Number of employed persons (average rate of change, in %)	0.7	1.5	0.8
Prices			
Consumer price index (average rate of change, in %)	0.9	–0.9	–1.8
External sector			
Current account balance (as % of GDP)	2.7	2.7	–0.1
Goods	–14.6	–15.5	–0.9
Services	17.9	18.0	0.1
Primary income	–3.1	–2.8	0.4
Secondary income	2.6	2.9	0.3
Current and capital account balance (as % of GDP)	3.5	3.6	0.1
Gross external debt (as % of GDP)	102.8	96.9	–5.8
Monetary developments (rate of change, in %)			
Total liquid assets – M4	3.3	3.4	0.1
Total liquid assets – M4[a]	3.4	3.4	0.0
Credit institution placements	–0.2	–2.5	–2.3
Credit institution placements[b]	0.0	0.8	0.7

[a] Exchange rate effects excluded. [b] Rates of change are calculated on the basis of data on transactions.
Source: CNB.

Real GDP growth for 2017 was also revised slightly upwards. The changes made from the previous projection mostly reflected revisions of real GDP growth in 2016. The largest revision was for gross fixed capital formation, which could make a positive contribution to economic growth close to that made by personal consumption. The expected acceleration in investment activity is to a large extent related to government investment growth. Personal consumption was also revised upwards due to the high growth rate in early 2016 and favourable expectations in the labour market related to the growth of employment and real net wages. As a result of these revisions, an upward revision was made to total imports of goods and services. The dynamics of other aggregate demand components remained almost the same as in the December projection.

The average annual inflation rate could hover around –0.9% in 2016, which is 1.8 percentage points lower than in the projection from December 2015. This was mainly due to a decrease in the average annual rate of change in energy prices, caused by a sharper than expected decline in crude oil prices in the world market and an administrative cut in the price of natural gas. In addition, the average annual rate of change in food prices was reduced from the previous projection, primarily due to a stronger spillover effect of the reduction of raw material prices on the consumer prices of food products and surpluses in the EU market. The new inflation projection is also lower due to a slower than expected increase in the CPI excluding food and energy.

The 2016 current and capital account surplus, estimated at 3.6% of GDP, could be only slightly higher than projected in December 2015. On the one hand, the current and capital account balance was higher than expected in 2015. The estimate of the positive balance of net transactions with the EU budget was revised upwards, taking into account the improved results of last year, indicating a higher net inflow to the secondary income and capital transactions accounts. On the other hand, the primary account income deficit could be somewhat lower that projected in December, primarily due to lower interest expenses on the foreign liabilities of domestic sectors. Net exports of services are expected to increase on the back of growing revenues from tourism and other services. The favourable influence of the mentioned factors is to a large extent offset by a poorer outlook for foreign trade; while the assumed slight decrease in global crude oil prices contributes to a drop in net imports of oil and refined petroleum products, a much stronger effect is produced by the growth of the trade deficit in other goods resulting from a faster recovery of imports, under conditions of a higher economic growth, improved labour market conditions and better utilisation of the EU Funds.

The relative indicator of gross external debt is currently projected to improve more than expected and drop below 100% of GDP. The main cause of the decrease is a projected significant drop in total debt liabilities of domestic sectors, which were expected to stagnate in December. Government foreign liabilities could increase much less than previously estimated and other domestic sectors could additionally deleverage. In contrast with

the previous projection, cross-currency changes could also cause a small decrease in debt, due to the assumption of the weakening of the US dollar versus the euro from the previous year. Although in a smaller measure, stronger nominal GDP growth also contributes to the decrease in the relative indicator of gross external debt.

Bank lending to the private sector is expected to recover in 2016. Excluding the effects of write-offs and exchange rate changes, placements could rise by 0.8% in 2016, which is an upward revision from the previously projected stagnation. This is primarily due to the expected recovery of corporate lending and a drop in household deleveraging in line with positive results in the first five months of the current year. On the other hand, placements decreased by 2.5% in nominal terms in 2016, primarily due to the write-off of household placements related to the conversion of Swiss franc indexed loans and write-offs relating to the sale of non-performing placements, which is a considerable upward revision from the previous projection (–0.2%) due to the fact that most of the effect of conversion-induced write-offs was expected to be recorded in 2015.

The growth in net foreign assets and total liquid assets (M4) remained unchanged from the previous projection at 3.4% (excluding the exchange rate effect). It should be taken into account that the slowdown in the broadest monetary aggregate from 2015 resulted from its sharp increase in the previous year, caused by a one-off inflow of funds from the sale of TDR to a foreign investor, nominal net wage growth arising from changes in taxation and a good tourist season.

Table 11.1 Macroeconomic projections of other institutions

change in %

	GDP			Household consumption			Gross fixed capital formation			Exports of goods and services			Imports of goods and services			Industrial production			Consumer prices		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
Croatian National Bank (July 2016)	**1.6**	**2.3**	**2.5**	**1.2**	**2.9**	**2.5**	**1.6**	**2.9**	**6.1**	**9.2**	**5.7**	**5.5**	**8.6**	**6.6**	**6.7**	**–**	**–**	**–**	**–0.5**	**–0.9**	**1.2**
World Bank (June 2016)	1.6	1.9	2.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
European Commission (May 2016)	1.6	1.8	2.1	1.2	1.7	2.0	1.6	2.6	3.4	9.2	5.7	4.2	8.6	5.8	4.7	–	–	–	–0.3	–0.6	0.7
Eastern Europe Consensus Forecasts (May 2016)	1.6	1.6	1.8	1.2	1.4	1.5	1.6	2.1	3.0	–	–	–	–	–	–	2.7	3.5	3.0	–0.5	–0.5	1.1
Raiffeisen Research (May 2016)	1.6	1.5	1.5	–	–	–	–	–	–	10.1	6.5	5.2	8.6	4.5	4.5	2.6	3.0	3.4	–0.5	–0.6	1.5
European Bank for Reconstruction and Development (May 2016)	1.6	1.5	1.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ministry of Finance[a] (April 2016)	1.6	2.0	2.1	1.2	1.8	1.8	1.6	2.5	3.2	9.2	5.2	5.5	8.6	4.7	5.3	–	–	–	–0.5	0.1	1.4
International Monetary Fund (April 2016)	1.6	1.9	2.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–0.5	0.4	1.3
The Institute of Economics, Zagreb (March 2016)	1.6	1.5	1.8	1.2	1.4	1.5	1.6	1.9	3.0	9.2	3.6	3.7	8.6	3.2	3.4	2.7	–	–	–0.5	0.1	1.9
HAAB Economic Research (March 2016)	1.6	1.0	1.5	1.2	0.9	1.0	1.6	2.5	3.8	8.8	3.5	3.5	7.0	4.2	4.0	2.7	2.7	3.0	–0.5	–0.5	1.4

[a] Convergence Programme of the Republic of Croatia for the period 2016–2019.

Sources: Publications of the respective institutions.

12 Boxes

Box 1 Household savings rate

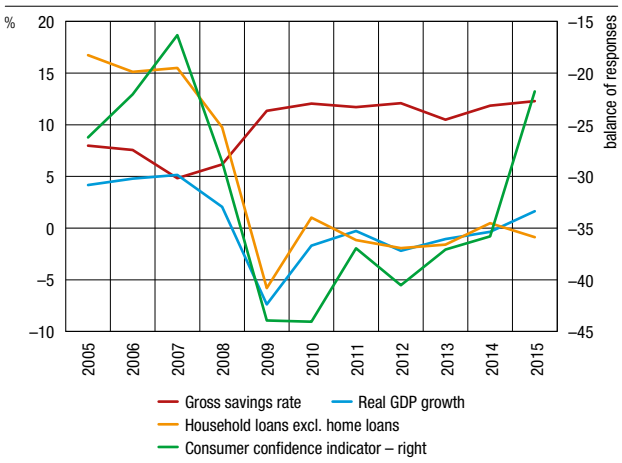
The household savings rate in Croatia had been falling steadily in the period leading up to the crisis, influenced by a relatively fast growth in disposable income, a fall in the unemployment rate and generally favourable household expectations regarding the future, as well as relatively easy access to bank loans. With the onset of the crisis, the savings rate more than doubled and has held steady at the high level of approximately 12% until this day. The growth in the savings rate in Croatia was one of the fastest in the EU.

The household savings rate is the share of disposable household income which has not been used for personal consumption. The Eurostat national accounts data for Croatia which enable the calculation of this rate have become available only recently.

Before the outbreak of the crisis, the household savings rate in Croatia was marked by considerable decline (Figure 1), having fallen from 8% in 2005 to 4.8% in 2007. The same period saw a relatively fast growth in disposable household income (primarily income from labour), optimistic household expectations regarding the future while fast household borrowing paved the way for faster growth in personal consumption than in household disposable income. However, the trend reversed with the onset of the economic crisis and soon, in 2008, as a result of a sharp fall in the prices of shares on the capital market which had an impact on the financial assets of households, the savings rate started to rise. By 2010, the savings rate had more than doubled from 2007 and stood at 12%, holding steady at this high level until 2015 (12.3%). The growth in the savings rate was achieved in the conditions of slow growth in the disposable income of households (with compensations of employees falling slightly while the fall in the disposable income was fended off as a result of an increase in mixed income distributed to a relatively small number of employees), fall in household optimism due to unfavourable developments in the labour market and general insecurity regarding economic outlooks and household deleveraging, which led to a fall in personal consumption. The savings rate might pick up slightly in the current year too, though at a slower pace than in the previous years. Provided favourable cyclic developments continue, the upward trend in the savings rate might possibly reverse, however, over a medium term, the savings rate is not expected to return to its pre-crisis period.

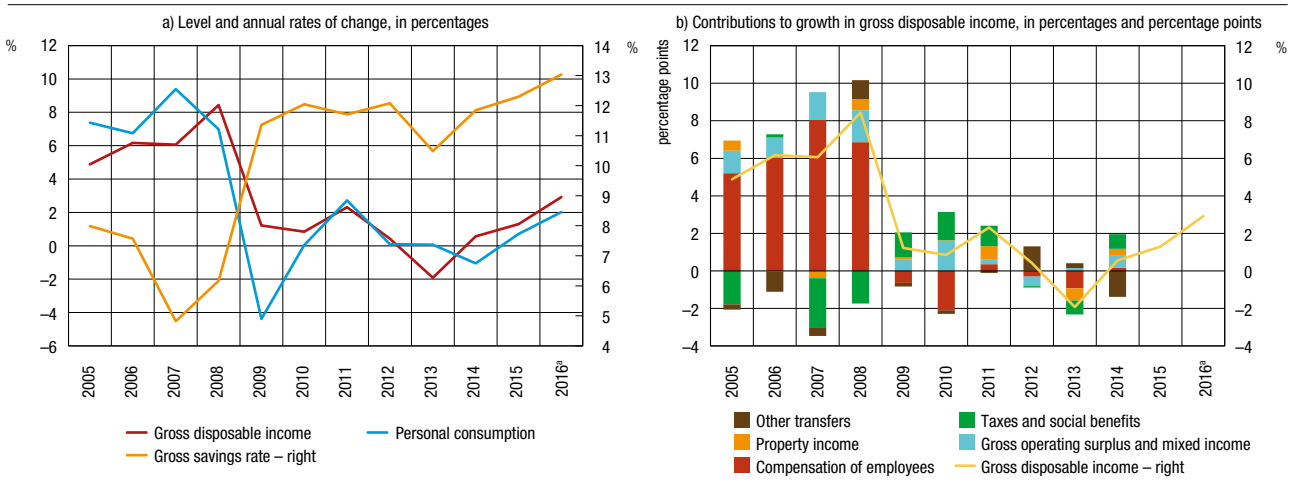
At the level of the whole of the European Union, Croatia stands out as the country with the fastest growing savings rate compared to the pre-crisis period. Despite differences in the levels between countries[1], in the past ten years, similar changes were observed in the savings rates at the EU level as a whole

Figure 2 Determinants of the savings rate in Croatia



Sources: Eurostat, CNB and Ipsos.

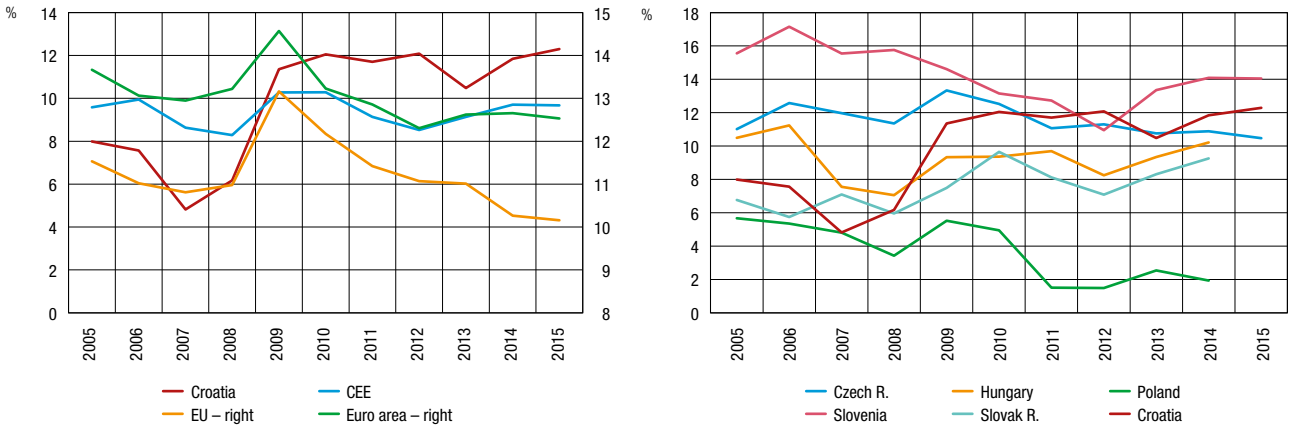
Figure 1 Savings rate, personal consumption and disposable household income



[a] CNB projection.
Sources: Eurostat and CNB.

1 The level of the national savings rates is also influenced by numerous country-specific factors such as level of social security provided by the state, demographic developments, income distribution, length of working years, access to borrowing, etc.

Figure 3 Gross savings rate in Croatia and selected EU countries



Notes: CEE countries include the Czech Republic, the Slovak Republic, Hungary, Poland, Slovenia and Croatia. For CEE countries for which no data on the savings rate in 2015 are available, the 2014 data have been used to calculate the average.
Sources: Eurostat and CNB.

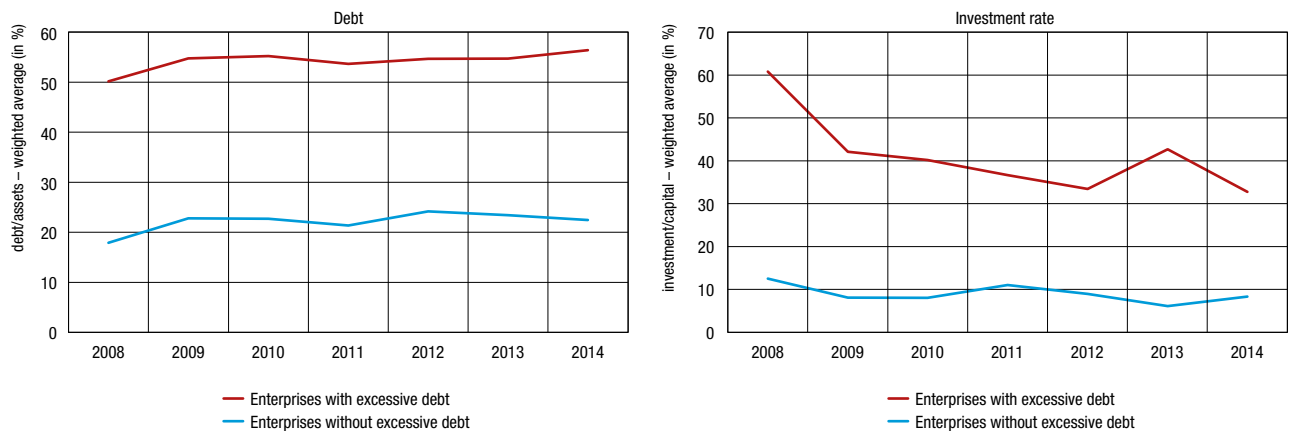
and in Croatia's peer countries (Figure 3). In the peer Central and Eastern European countries, the period leading up to the crisis was marked by a fall or stagnation (the Czech Republic and the Slovak Republic) in the savings rate, with Croatia recording the lowest savings rate, alongside Poland. However, the savings rate increased with the onset of the crisis in 2009 in all the countries except Slovenia where the share of savings in disposable income decreased until mid-2012 when, after problems emerged in the Slovene banking sector, the economy went into recession and consumer confidence plummeted, the savings rate started growing. However, Croatia, together with the Slovak Republic is the only country in which, after a sharp increase in 2009, the savings rate, with slight annual variations, held steady at a much higher level than in the period up to 2007. By contrast, in the Czech Republic and in Poland, which had the lowest savings rate of all peer countries, the savings rate, after a one-off increase in 2009, continued to fall, having fallen by 2015 below the pre-crisis period level. The level of the savings rate in Croatia in 2015 was similar to that in the countries such as Germany and the Netherlands.

Box 2 Effect of excessive corporate debt on investment activity in Croatia[1]

In the period from 2008 to 2014, over-indebted enterprises reduced their investment activities more sharply than enterprises that did not carry a burden of excessive debt. The unfavourable effect of excessive debt on investments was particularly seen by exporters, private enterprises and enterprises in domestic ownership. Further deleveraging efforts of enterprises might limit the investment activity of enterprises in the future as well.

The total unconsolidated debt of non-financial corporations

Figure 1 Debt and investment activity of non-financial corporations in Croatia



Note: The weighted averages for an individual year were calculated as the sum of debt (investment) of all enterprises in the group divided by the sum of assets (capital) of all enterprises in the group.
Source: Amadeus.

1 This Box is based on the results of survey conducted by Martinis, A., and I. Ljubaj (2016): *Corporate Debt Overhang in Croatia: Micro Assessment and Macro Implications,* presented at the 22nd Dubrovnik Economic Conference organised by the CNB.

Table 1 Results of the panel model of the estimated investment equation

Determinants	Basic (linear) model	Extended model for testing asymmetric effects of debt
Investment rate ($INV_{i,t-1}$)	–0.001	–0.001
Change in sales income ($\Delta logS_{i,t-1}$)	0.177**	0.170**
Total assets ($log(A_{i,t-1})$	–1.668***	–1.634***
Debt/assets ($D_{i,t-1}$)	–1.906***	
Debt/assets – enterprises with excessive debt		–2.369***
Debt/assets – enterprises with excessive debt		–1.077***

Notes: The models were estimated using the generalised method of moments or GMM method) in accordance with Arellano and Bond (1991). The instruments are dependent variables with two and three time lags. All regressions pass the Hansen test for overidentifying restrictions, and there is no evidence of second-order autocorrelation in residuals (based on the Arellano-Bond test). The models include fixed effects for enterprises and years.
Source: Author's calculation.

Figure 2 Estimated coefficients of the effect of debt on the investment rate depending on the type of ownership and participation in exports of enterprises

Note: The marks *** and * represent the statistical significance of the estimated coefficients at the level of 1% and 10%.
Source: Author's calculation.

in Croatia at the end of 2014 stood at 100% of GDP. Although almost one third of this debt was estimated as excessive[2], there was no expected deleveraging during the crisis. Looking at the 2008 to 2014 period, the corporate sector debt to GDP ratio rose by almost 19 percentage points, and if measured by the share of debt in corporate assets, the debt increased in both over-indebted enterprises and even those without excessive debt witnessed increased debt (Figure 1, left) At the same time, over-indebted enterprises rolled back their investments more strongly than those without excessive debt (Figure 1, right). The rate of investments in over-indebted enterprises fell by almost one half (–46%) and those in other enterprises by one third (–33%).

An econometric analysis of the effects of enterprises' over-indebtedness on their investment activity was conducted by means of an estimation of the investment equation using panel data by enterprises for the 2009 to 2014 period.[3] Given key theoretical determinants of investments, such as income from sales (which represent an enterprise's growth potential) and total assets of enterprises (which represents the size of an enterprise), the investment equation also includes corporate debt indicators. To test the asymmetry of the impact of over-indebtedness on investments, or whether over-indebted enterprises have indeed rolled back their investments more strongly than enterprises without excessive debt, the investment equation is additionally extended for dummy variables interacting with the debt variable and showing whether a corporation is over-indebted or not[4].

Table 1 shows the results of the estimate of the basic and the extended investment model. The results indicate that corporate debt had a statistically significant negative effect on the investment rate during the crisis. The results of the extended model support the assumption that over-indebted enterprises rolled back their investment activity during the crisis much faster than those that were not over-indebted. The statistically significant negative value of the coefficient associated with debt is twice as high for over-indebted enterprises (–2.4) than for those that are not over-indebted (–1.1). The confirmed negative effect of over-indebtedness on investments is in line with other findings using a similar approach to estimate this effect in other groups of countries[5].

To find out if corporate investment activity was falling at different rates depending on the characteristics of an enterprise, estimates of the investment equation were made, classifying enterprises based on their share in exports (exporters and non-exporters) and type of ownership (domestic and foreign enterprises and private and public enterprises). The results have shown that investments of exporters, private enterprises and enterprises in domestic ownership are more sensitive to over-indebtedness than other enterprises (Figure 2). The much more detrimental effect of debt on investments in these groups can partly explain why exporters and domestic private enterprises carry a smaller excessive debt burden. For instance, over-indebted exporters have a twice as high negative coefficient associated with debt than exporters who are not over-indebted (–2.4 and –1.0, respectively), while in the case of non-exporters, there is no statistically significant difference between the estimated coefficients of over-indebted and other non-exporters. Such results are in line with the assumption that exporters are exposed to tougher competition and faced with growing debt are not able to finance the growing burden of repayment through increased prices but are forced to roll back their investments.

As regards ownership types, the results indicate that foreign-controlled enterprises were the only enterprises in which the level of debt did not have a significant effect on investments and this holds true equally for over-indebted enterprises and those which are not over-indebted. This is due to the fact that foreign-owned enterprises are largely directly financed by their foreign owners and such financing usually does not depend exclusively on the performance of the debtors but also on the business strategy of the owners and investment decisions at group level.

In conclusion, the results of the econometric panel model

2 For more details, see CNB Bulletin, No. 220, Box 5 Debt sustainability of non-financial corporations, December 2015.
3 The annual data from the financial reports of 21 339 enterprises were used.
4 The extended investment equation model is as follows:
$INV_{i,t} = \alpha_i + \beta INV_{i,t-1} + \gamma \Delta \log S_{i,t-1} + \delta \log(A)_{i,t-1} + \underline{\sigma} D_{i,t-1} \times 1\{\text{enterprises with excessive debt}\} + \bar{\sigma} D_{i,t-1} \times 1\{\text{enterprises without excessive debt}\} + \varepsilon_{i,t}$,
where *INV* is an investment to capital ratio, *S* is annual sales income, *A* is the value of the total assets and *D* is the total debt to total assets of an enterprise ratio.
5 Jaeger, A. (2003): *Corporate Balance Sheet Restructuring and Investment in the Euro Area*, IMF Working Paper No. 03/117; Rodriguez-Palenzuela, D., and S. Dees (2016): *Savings and Investment Behaviour in the Euro Area*, ECB Occasional Paper No. 167; Goretti, M., and M. Souto (2013): *Macro-Financial Implications of Corporate (De)Leveraging in the Euro Area Periphery*, IMF Working Paper No. 13/154.

have confirmed that the problem of high debt level of non-financial corporations in Croatia hinders investment growth, and that this negative effect is greater with rising levels of corporate debt, i. e. more unsustainable corporate debt. Given the magnitude of the issue of over-indebtedness in Croatia and the absence of corporate deleveraging in the previous years, these results signal that the problem of over-indebtedness could have negative effects on the recovery dynamics of the Croatian economy over a medium term.

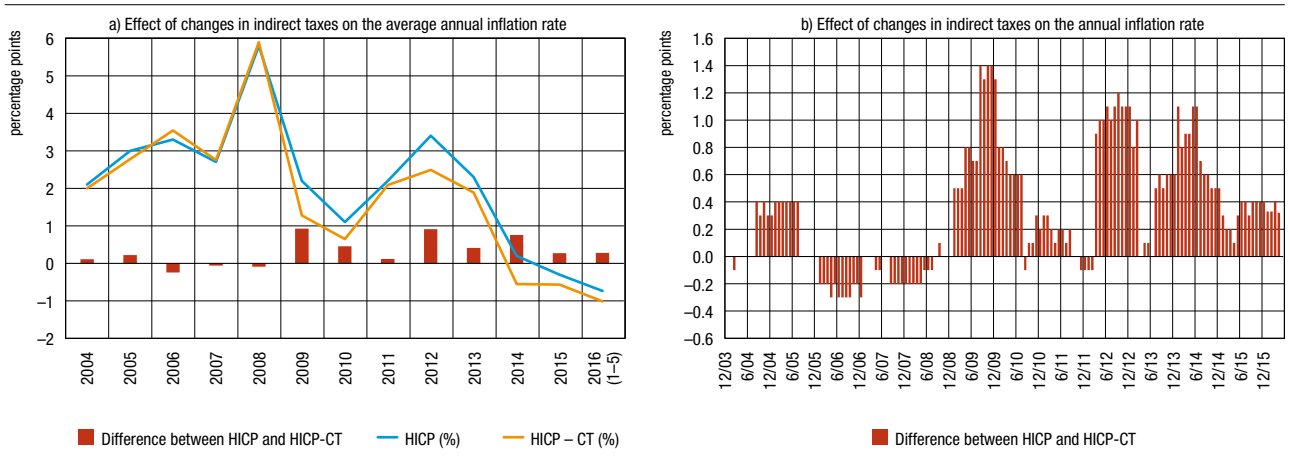
Box 3 Assessment of the effects of changes in indirect taxes on inflation

Changes in indirect taxes are commonly regarded as a significant source of one-off changes in consumer prices which result in a temporary change in the annual rate of inflation. In the period from 2009 to May 2016, the effect of changes in indirect taxes on inflation was on average higher in Croatia than in the European Union (0.5 and 0.2 percentage points, respectively). The mentioned effect was most pronounced in Croatia in 2009 and 2012, fuelled, among other things, by a higher basic VAT rate and in both years stood at 0.9 percentage points.

Changes in indirect taxes are, alongside changes in raw material prices, one of the most significant sources of one-off changes in the consumer price index, leading to a temporary change in the annual rate of inflation. It follows therefore, that changes in indirect taxes lead to "noise" in inflation developments data. It is important that monetary policy makers determine the extent to which developments in inflation over a certain period are greatly influenced by temporary factors that cannot be controlled. To enable an estimate of the effect of this "noise" on inflation in EU member states, Eurostat, in cooperation with the ECB, developed its *HICP at constant tax rates* or short, HICP-CT.[1] The difference between the rate of change of the total HICP and HICP-CT points to a potential effect of changes in indirect taxes on price changes. In the calculation of HICP-CT in a given year, tax rates are kept constant at the previous year's December level and the same methodology is used (range of products, weights, aggregation, etc.) as in the calculation of HICP. Indirect taxes comprise value added tax, excises on alcohol, tobacco and refined petroleum products and special taxes on certain goods and services, such as cars, insurance, games of chance, etc. The calculation of the harmonised index of consumer prices at constant tax rates is based on the assumption that changes in indirect taxes are immediately and fully transferred to the prices, to enable regular monthly publication of the index. In reality, the transfer of changes in indirect taxes on prices is, in general, somewhat slower and depends on the factors associated with the phase of the business cycle, the degree of market competition, demand elasticity, etc. So, for instance, producers or retail traders may partly mitigate price growth fuelled by increased taxes by cutting their profit margins. Therefore, one should bear in mind the fact that the difference between the rate of change in total HICP and HICP-CT points to the upper limit of the effect of changes in indirect taxes on total consumer price inflation.

As shown in Figure 1, the effect of changes in indirect taxes on inflation in Croatia in the 2004 to 2008 period, calculated according to the difference between the average annual rate of change in the total HICP and HICP–CT, was relatively small and fluctuated within a range of ±0.2 percentage points. The average annual rate of growth in the total HICP from 2006 to 2008 was even slightly slower than the growth in the HICP-CT, due to a reduction in indirect taxes on certain products[2], a not so frequent development. By contrast, fiscal consolidation measures taken during the recession period in Croatia, and particularly during 2009 and 2012 when, among others, the basic VAT rate[3] was raised, made a significant positive contribution to the average

Figure 1 Effect of changes in indirect taxes on inflation in Croatia measured by the harmonised index of consumer prices



Sources: Eurostat and CNB calculations.

1 Eurostat started publishing HICP-CT in October 2009, with the series for most EU member states being calculated as from December 2002. The series for Croatia started being published in early 2016. For more details on the calculation of HIPC-CT, see: http://ec. europa. eu/eurostat/documents/272892/272986/HICP-CT_manual_2009. pdf/cc914f3f-ac65–43c8–85ec-f76ed5819122.

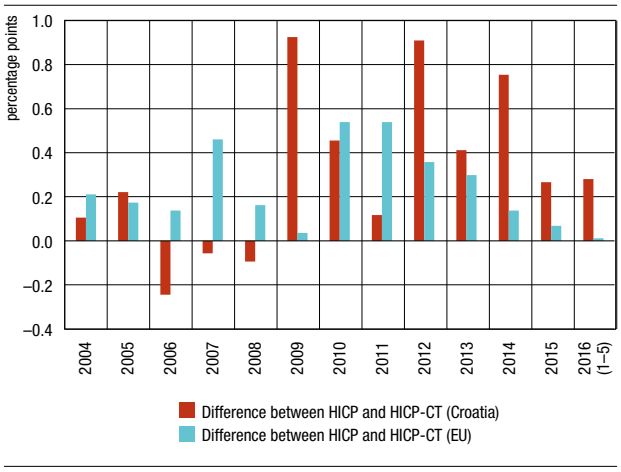
2 So, for instance, in 2006, a lower VAT rate of 10% was introduced on accommodation and food services in tourism and on agency commission on these services. In 2007, the use of the lower 10% VAT rate was extended to apply to newspapers and magazines.

3 The basic VAT rate was raised from 22% to 23% in August 2009. Excises on duties on tobacco products were also raised considerably in 2009. In March 2012, the basic VAT rate was raised by 2 percentage points to 25%.

annual rate of overall consumer price inflation. The effect of changes in indirect taxes on inflation in both years is estimated to stand at 0.9 percentage points. In 2013, administrative decisions effecting compliance with EU regulations (repealing the zero VAT rate and increasing excise taxes on tobacco) fuelled overall inflation. In addition, the increase in indirect taxes in 2014, when the lower VAT rate was raised from 10% to 13% and an increase in excise duties on refined petroleum products and tobacco, made a very strong contribution to the average annual consumer price inflation (0.8 percentage points). The effect of changes in indirect taxes on inflation in Croatia started to lessen from mid-2014 and disappeared in May 2016, when the annual rate of change in the total HICP and HICP-CT became equal (Figure 1.b).

During the last recession, many European Union countries were, faced with the problem of rising fiscal deficits, forced to raise VAT and other indirect taxes to increase budget revenues. To improve competitiveness, some countries also attempted to cut direct and raise indirect taxes, with a neutral effect on tax revenues[4]. This fuelled inflation, particularly between 2010 and 2013, when the maximum effect of changes in indirect taxes on the average annual rate of inflation in European Union ranged between 0.3 and 0.5 percentage points (Figure 2). In the past two and a half years, the contribution of indirect taxes to total consumer price inflation in the European Union fell considerably. If the entire period following the outbreak of the crisis is observed, it is evident that the effect of indirect taxes on total inflation was on average greater in Croatia than in the European Union (0.5 and 0.2 percentage points, respectively).

Figure 2 Comparison of the effects of changes in indirect taxes on the average annual rate of inflation in Croatia and the European Union



Sources: Eurostat and CNB calculations.

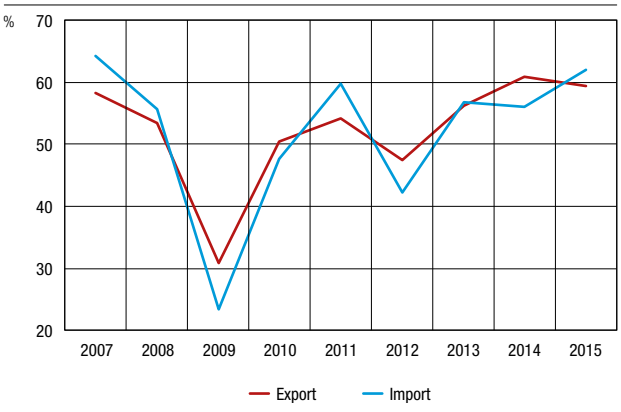
Box 4 Changes in the dynamics and structure of Croatian goods exports since entry into the EU

Croatia's goods exports since accession to the EU have been very dynamic, widely diffused across a large number of products and mostly focussed on the European Union market. The importance of medium-sized and small enterprises in total export results is growing. There are also changes in the production structure of goods exports, with a growing, though still small, share in higher value-added products which also witness a pronounced growth in intra-industry trade.

The Croatian economy has undergone positive changes in the past three years, as seen in an ever increasing orientation of domestic producers to foreign markets. This is also confirmed by data on the sale of industrial products on the domestic and foreign markets showing that the growth in industrial production, present since end-2013, was determined primarily by foreign sales as well as by data on the average increase in goods exports of approximately 10% in the past two years. The diffusion index of exports growth also shows an increase in the number of products or sectors with rising exports. Namely, the share of products in the total number of approximately 3 000 production categories at 5-digit level of the Standard International Trade Classification (SITC 5) which has been rising steadily since the accession to the EU stood at almost 60% in 2015, a slight increase from the year prior to the crisis. Imports also saw a widely diffused growth (Figure 1).

The recovery in exports was driven by a considerable acceleration in demand growth for imports in some of the major Croatian trading partners, such as Italy, Slovenia or Austria, but even more by changes in trading terms with EU countries following Croatia's accession to the European Union, which facilitated trading procedures with other member states for Croatia, and in turn helped and accelerated exports. For example, the average number of days to expedite exports[1] fell to 16 days in 2014, from 20 days needed in 2012 and as many as 26 days in 2005. However, this is still below the EU average of 12 days, with poorer performance than that in Croatia being observed only in Hungary, the Czech Republic, Bulgaria and Italy. EU membership also

Figure 1 Developments in the diffusion index of the Croatian goods exports/imports growth

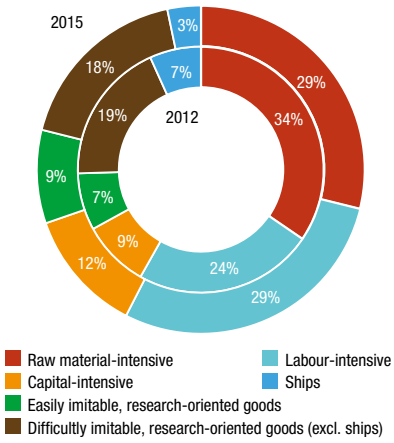


Note: Diffusion in exports (imports) growth is defined as the ratio between the number of products with a positive annual rate of change in exports (imports) and the total number of export (import) products (on 5-digit SITC level of aggregation).
Sources: CBS and CNB calculations.

4 In the wake of the outbreak of the financial crisis, the standard VAT rate rose the most (4 percentage points and more) in Greece, Spain. Cyprus, Hungary and Great Britain. Fiscal devaluation was made in France and Spain.

1 Source: World Bank, http://data. worldbank. org/indicator/IC. EXP. DURS.

Figure 2 Goods exports by production categories
as % of total exports



Raw material-intensive goods: food products, raw materials, mineral fuels, animal and vegetable oils, etc.

Labour-intensive goods: textile, clothing and footwear, furniture, cork and wood, fabricated metal and non-metal products, etc.

Capital-intensive goods: electricity, road vehicles, iron and steel, beverages and tobacco, etc.

Easily imitable, research-oriented goods: medical and pharmaceutical products, organic and chemical products, plastics in non-primary forms, office machinery, telecommunication apparatus, etc.

Dificultly imitable, research-oriented goods: ships, electrical appliances, office machinery, scientific instruments, plastics in primary forms, etc.

Sources: CBS and CNB calculations.

meant the application of the common EU customs tariff policy, which led to the termination of all the existing free trade agreements that Croatia was a party to, the most significant being the Central European Free Trade Agreement (CEFTA). As a result, in contrast with the fast growth in trade with EU member states, the loss of a preferential status in trade with CEFTA countries had an unfavourable impact on exports to these countries, and a shift in trade directions was also witnessed in trade with third countries (see Figure 6.3 of chapter Foreign trade and competitiveness).

The analysis of changes in the market share of Croatian goods exports made by the European Commission[2] shows that exports growth was widely diffused in the past two years across smaller and more dynamic sectors, spurred by exports of a larger number of newer products, particularly to EU member states. This also led to changes in the structure of goods exports (Figure 2), with a rising share of easily imitable research-oriented goods (particularly medical and pharmaceutical products, plastics in non-primary forms and telecommunication apparatus) and capital-intensive goods (most notably electricity and road vehicles). By contrast, the share of difficultly imitable, research-oriented goods fell considerably, driven particularly by a fall in the exports of ships. In its analysis, the European Commission concluded that it was "positive that a rising share of goods exports involves less price-sensitive production and probably higher added value, although the share of raw material-intensive and labour-intensive goods remains considerable". The share of labour-intensive goods in the structure of exports increased partly due to growing repairs and processing activities.

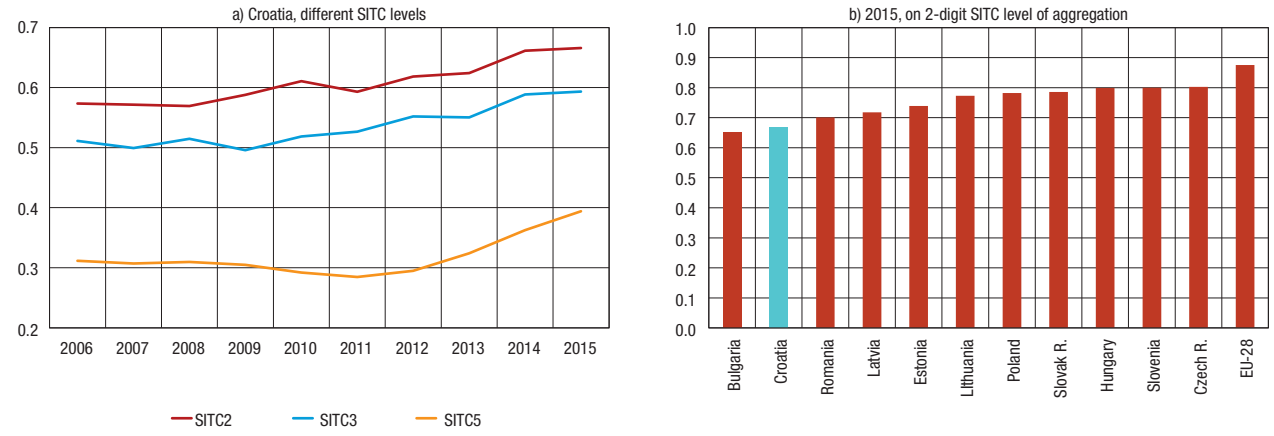
There are also visible changes in the structure of export enterprises, with medium-sized and small enterprises growing in importance. Namely, in most countries, and particularly in small and open economies, exports are concentrated in a small number of enterprises. This is confirmed by the results of the *CompNet* research network of the ECB, according to which the average share of the 10 largest exporters in total Croatian goods and services exports between 2002 and 2014 stood at 30% on average and did not differ greatly from that of Central and Eastern

Figure 3 Exports and labour productivity by size of enterprise

Note: Labour productivity is based on value added per employee. On average, small enterprises have up to 50 employees, medium-sized between 50 and 250 and large enterprises over 250 employees.
Sources: CompNet, ECB and CNB.

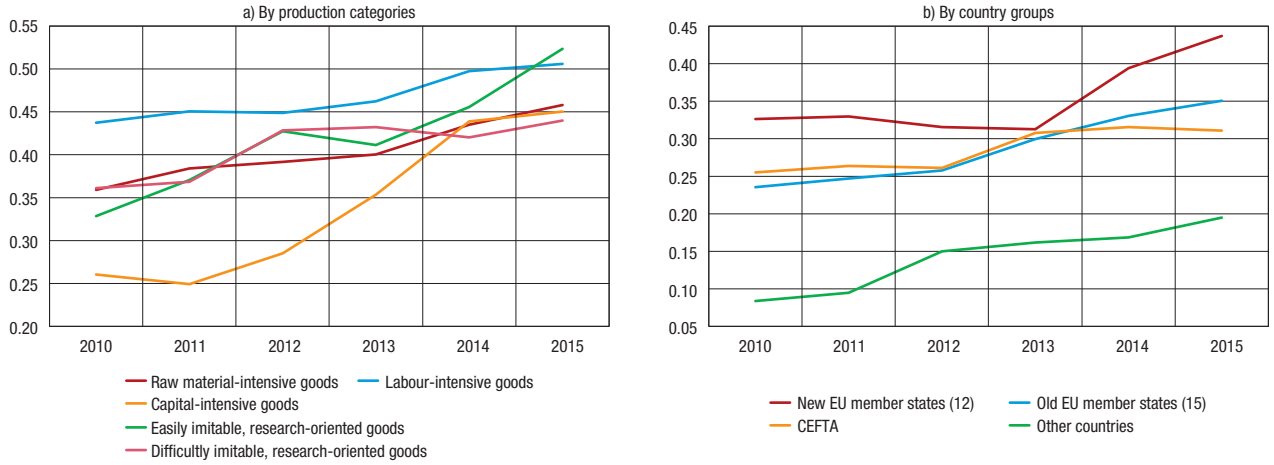
2 Source: European Commission, Country Report Croatia 2016.

Figure 4 Intra-industry trade Gruber-Lloyd index



Sources: CBS and CNB calculations.

Figure 5 Disaggregated intra-industry trade Gruber-Lloyd index



Note: Gruber-Lloyd indices have been calculated for individual production categories/country groups, disaggregated on 5-digit SITC level of aggregation.
Sources: CBS and CNB calculations.

European countries[3]. However, the last years of the observed period saw a fall in the share of the largest exporters and a small growth in the importance of medium-sized and small enterprises in total export results. It was exactly these enterprises that witnessed a faster and stronger recovery in exports than large enterprises (Figure 3.a). In addition, these enterprises, particularly medium-sized enterprises, had a more powerful impact on the developments in total labour productivity in Croatia, in the wake of its entry into the EU (Figure 3.b).

Following Croatia's entry into the EU, the links between changes in exports and imports grew stronger. Among goods that contributed the most to growth in exports those that also contributed the most to growth in imports are often found, such as trade in electricity, clothing, road vehicles and miscellaneous manufactured articles. The usual positive correlation between developments in imports and exports may be explained by various factors such as dependence of exports on imports, transit trade (transit of goods through Croatia or import of goods for future re-export, generating profit on price differences) and processing activities; the increase in this correlation in the past few years was fuelled by liberalisation in the electricity trade, in addition to faster dynamics of the existing factors.

Stronger links between developments in exports and imports may point to a rising intra-industry trade[4], i. e. the trade in goods from the same industry, which is as a rule more significant in the trade in more sophisticated goods and more to be found in the foreign trade of more open and developed countries. The Grubel-Lloyd index[5], the most frequently used measure of intra-industry

3 The results of the CompNet research network (ECB) are available at: https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1788.en.pdf.

4 Intra-industry trade may be vertical, i. e. exports and imports of goods at different stages of production (for instance, export of quality clothing and import of poorer quality clothing) and horizontal which comprises trade in the same goods of different characteristics (e. g. different car types).

5 The value of the Grubel-Lloyd index ranges between 0 (inter-industry trade exclusively) and 1 (intra-industry trade exclusively) and is calculated as: $GL_i = \sum_i \left(1 - \frac{|Ex_i - \mathrm{Im}_i|}{Ex_i + \mathrm{Im}_i}\right) \times \frac{f_i}{F}$, where Ex_i is exports, Im_i imports, and f_i volume of trade in goods (exports + imports) in an individual sector i, and F volume (exports + imports) of the total goods trade, or its subaggregate for which the index is being calculated. The level of data disaggregation has a big impact

trade, shows that the degree of intra-industry trade in Croatia started growing strongly following the country's accession to the EU (Figure 4.a). However, it is still not as significant as in peer countries and is among the lowest of all EU member states (Figure 4.b), similar to that in Bulgaria and Romania.

Although intra-industry trade is usually the strongest in the trade in more sophisticated goods, in Croatia it is relatively high in the trade of labour-intensive goods (clothing, fabricated metal products, furniture and miscellaneous manufactured articles). However, in addition to these products, the share of intra-industry trade in easily imitable, research-oriented goods (medical and pharmaceutical products, plastics in non-primary forms and telecommunication apparatus) and capital-intensive goods (electricity, road vehicles and essential oils and perfumes and toilet preparations) has been rising sharply since 2013 (Figure 5. a). Observed by partner countries, the strongest intra-industry trade during the observed period was seen in the trade with EU member states, particularly new member states and it has strengthened additionally since Croatia's entry into the EU, while that with non-EU member states and the countries of the region was the slowest (Figure 5.b). However, a detailed analysis shows that a relatively high significance and a sharp increase in the trade with new member states relates mostly to trade with Slovenia, which has seen a considerable increase in the past few years, particularly in the trade of electricity, electrical machinery, apparatus and appliances.

Box 5 Assessment of risks to fiscal sustainability in the Republic of Croatia

The results of the Fiscal Sustainability Report 2015, published by the European Commission earlier this year, show that the risks for fiscal sustainability in Croatia over a short and a long term are low but high over a medium term. The risks to fiscal sustainability remain high over a medium term even if much more favourable recent fiscal developments are taken into account, while the low risk assessed over a longer term is probably underestimated, since it is based on an optimistic assumption of a significant cut in expenditures for pensions.

The Fiscal Sustainability Report[1] is a document produced by the European Commission which provides assessments of short-term, medium-term and long-term risks to public finance sustainability in EU member states. These assessments take into account the fiscal impacts of population ageing, the results of which are shown in the Ageing Report – 2015. Both reports are made every three years.

The assessment of risks to fiscal sustainability is based on the calculation of three synthetic indicators (S0, S1 and S2) and the projected level and dynamics of general government debt under the baseline and different alternative and shock scenarios. The indicator S0 is a composite indicator pointing to short-term risks (within one year) to public finances. The indicators S1 and S2 point to risks to fiscal sustainability over a medium and long term. The S1 indicator shows additional fiscal adjustment compared to the baseline projection scenario[2] which would ensure a level of public debt of 60% of GDP by 2030, as envisaged by the Stability and Growth Pact, while S2 shows the adjustment necessary to stabilise public debt over an indefinite time period.

The results of the Fiscal Sustainability Report show that all EU countries are characterised by low risk to public finances over a short term. The risks to public finances over a medium term are high in Croatia and another ten EU member states. Only five countries face high risks over a long term, while this risk is estimated to be low in Croatia (Table 1).

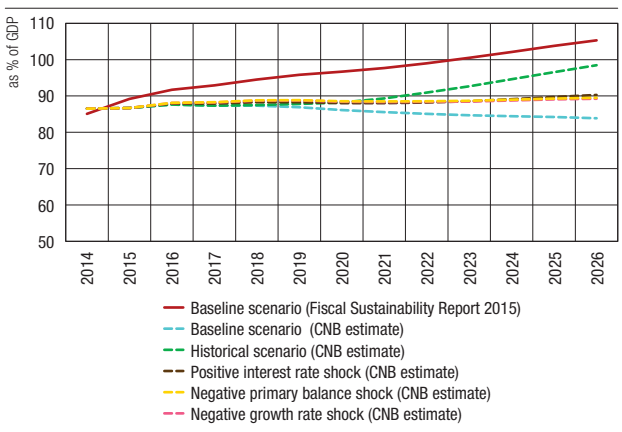
As regards medium-term developments, the high risks to public finances in Croatia are suggested by the projected dynamics and level of general government debt and high S1 indicator, which is the result of unfavourable initial fiscal position and a much higher level of debt compared to the benchmark value of 60% of GDP. The projected dynamics and level of debt over a medium term would be much more favourable if the latest available fiscal projections of the EC for Croatia were taken into account (Spring 2016) but the assessment of risk would not change (Figure 1). The value of the S1 indicator under the baseline scenario would fall below the benchmark level for high risk, but historical and shock scenarios would show that general

Table 1 Level of risk to fiscal sustainability over a short, a medium and a long term in EU member states

	Short term	Medium term	Long term
High risk		BE, IE, ES, FR, HR, IT, PT, RO, SK, FI, UK	SI, SK, FI, SE, UK
Medium risk		LT, HU, NL, AT, PL	BE, BG, CZ, LT, LU, MT, NL, AT, PL, RO
Low risk	BE, BG, CZ, DK, DE, EE, IE, ES, FR, HR, IT, LV, LT, LU, HU, MT, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK	BG, CZ, DK, DE, EE, LV, LU, MT, SK, SE	DK, DE, EE, IE, ES, FR, HR, IT, LV, HU, PT

Source: EC.

Figure 1 Projection of general government debt



Note: To calculate the historical scenario and different shocks to macro variables, the assessment made by the CNB takes into account the new Spring 2016 projections of the EC and the EC methodology used in the Fiscal Sustainability Report 2015.
Sources: EC and CNB estimate.

on the final value of the index, given that a smaller share of trade is classified as intra-trade with industry narrowing on higher levels of disaggregation (e.g. SITC 5).

1 http://ec. europa. eu/economy_finance/publications/eeip/pdf/ip018_en. pdf
2 The adjustment is distributed over a period of five years following the last year covered by detailed projections (in this case 2017).

government debt might remain high.[3]

Over a long term, low risk to fiscal sustainability is based on the low level of the S2 indicator, which is the result of favourable developments in expenditures associated with population ageing, particularly expenditures for pensions. Public expenditures for pensions are expected to shrink visibly in the future, primarily due to the currently applicable mixed pension system. However, Croatia might face serious difficulties associated with pension sufficiency and the ensuing possible underestimation of risks to fiscal sustainability over a long term (for more details see Box 7 of Bulletin 220).

3 It should be noted that, under EC methodology, it is sufficient that one of the indicators points to high risk to assess total risks to fiscal sustainability as high.

Abbreviations and symbols

Abbreviations

BIS – Bank for International Settlements
bn – billion
b.p. – basis points
BOP – balance of payments
c.i.f. – cost, insurance and freight
CBRD – Croatian Bank for Reconstruction and Development
CBS – Central Bureau of Statistics
CCI – consumer confidence index
CDCC – Central Depository and Clearing Company Inc.
CDS – credit default swap
CEE – Central and Eastern European
CEFTA – Central European Free Trade Agreement
CEI – consumer expectations index
CES – Croatian Employment Service
CM – Croatian Motorways
CIHI – Croatian Institute for Health Insurance
CLVPS – Croatian Large Value Payment System
CNB – Croatian National Bank
CPF – Croatian Privatisation Fund
CPI – consumer price index
CPIA – Croatian Pension Insurance Administration
CR – Croatian Roads
CSI – consumer sentiment index
DAB – State Agency for Deposit Insurance and Bank Resolution
dep. – deposit
DVP – delivery versus payment
EC – European Commission
ECB – European Central Bank
EFTA – European Free Trade Association
EMU – Economic and Monetary Union
ESI – economic sentiment index
EU – European Union
excl. – excluding
f/c – foreign currency
FDI – foreign direct investment
Fed – Federal Reserve System
FINA – Financial Agency
FISIM – financial intermediation services indirectly measured
f.o.b. – free on board
GDP – gross domestic product
GVA – gross value added
HANFA – Croatian Financial Services Supervisory Agency
HICP – harmonised index of consumer prices
ILO – International Labour Organization
IMF – International Monetary Fund
incl. – including
IPO – initial public offering
m – million
MIGs – main industrial groupings
MM – monthly maturity
MoF – Ministry of Finance
NCA – National Classification of Activities
NCB – national central bank
NCS – National Clearing System
n.e.c. – not elsewhere classified
OECD – Organisation for Economic Co-Operation and Development
OG – Official Gazette
R – Republic
o/w – of which
PPI – producer price index
RTGS – Real-Time Gross Settlement
Q – quarterly
RR – reserve requirement
SDR – special drawing rights
SITC – Standard International Trade Classification
SGP – Stability and Growth Pact
VAT – value added tax
WTO – World Trade Organization
ZMM – Zagreb Money Market
ZSE – Zagreb Stock Exchange

Three-letter currency codes

ATS – Austrian schilling
CHF – Swiss franc
CNY – Yuan Renminbi
DEM – German mark
EUR – euro
FRF – French franc
GBP – pound sterling
HRK – Croatian kuna
ITL – Italian lira
JPY – Japanese yen
USD – US dollar

Two-letter country codes

BG – Bulgaria
CZ – Czech R.
EE – Estonia
HR – Croatia
HU – Hungary
LV – Latvia
LT – Lithuania
PL – Poland
RO – Romania
SK – Slovak R.
SI – Slovenia

Symbols

– – no entry
.... – data not available
0 – value is less than 0.5 of the unit of measure being used
∅ – average
a, b, c,... – indicates a note beneath the table and figure
* – corrected data
( ) – incomplete or insufficiently verified data