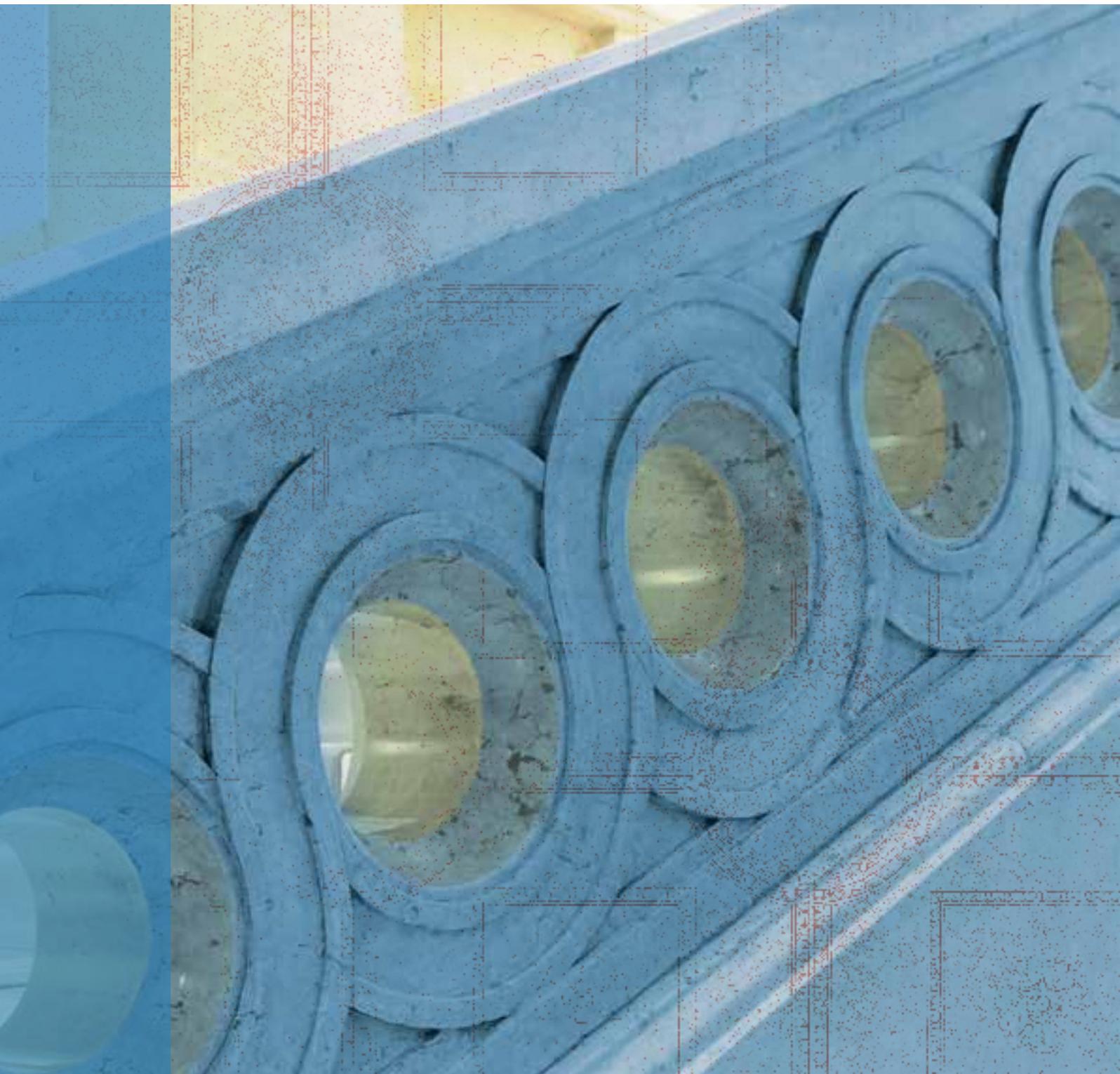




Macroeconomic Developments and Outlook

Year II · Number 3 · December 2017



PUBLISHER

Croatian National Bank
Publishing Department
Trg hrvatskih velikana 3, 10000 Zagreb
Phone: +385 1 45 64 555
Contact phone: +385 1 45 65 006
Fax: +385 1 45 64 687

www.hnb.hr

Those using data from this publication are requested to cite the source.

Any additional corrections that might be required will be made in the website version.

ISSN 2459-8607

Contents

General information on Croatia	iv	Box 2 Income yield on foreign investment in Croatia and comparable countries	22
1 Introduction	3		
2 Global developments	4	7 Private sector financing	24
Croatia's main trading partners	5	Box 3 Survey on the access to finance of SMEs – Survey findings	28
Prices, exchange rates and financing conditions	5		
Projected developments	5	8 Foreign capital flows	31
3 Aggregate supply and demand	7	Projected developments	32
Aggregate demand	8	9 Monetary policy	33
Aggregate supply	9		
Projected developments	10	10 Public finance	34
Box 1 Croatia in global value chains	11	Box 4 Strategy for the Adoption of the Euro in Croatia	36
4 Labour market	13	11 Deviations from the previous projection	38
Employment and unemployment	13		
Wages and unit labour costs	14	12 Annex A: Macroeconomic projections of other institutions	41
Projected developments	15		
5 Inflation	16	13 Annex B: Comparison of Croatia and selected countries	41
Projected developments	17		
6 Current and capital account	18	Abbreviations and symbols	46
Foreign trade and competitiveness	18		
Income and transactions with the EU	20		
Projected developments	21		

General information on Croatia

Economic indicators

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area (square km)	56,594	56,594	56,594	56,594	56,594	56,594	56,594	56,594	56,594	56,594	56,594
Population (million) ^a	4.314	4.312	4.310	4.303	4.290	4.280	4.268	4.256	4.238	4.204	4.174
GDP (million HRK, current prices) ^b	294,437	322,310	347,685	330,966	328,943	333,326	330,925	331,374	331,266	338,975	349,410
GDP (million EUR, current prices)	40,208	43,935	48,135	45,093	45,146	44,837	44,022	43,754	43,416	44,546	46,406
GDP per capita (in EUR)	9,321	10,189	11,169	10,480	10,524	10,476	10,314	10,281	10,245	10,596	11,118
GDP – real year-on-year rate of growth (in %)	4.8	5.2	2.1	-7.4	-1.4	-0.3	-2.2	-0.6	-0.1	2.3	3.2
Average year-on-year CPI inflation rate	3.2	2.9	6.1	2.4	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1
Current account balance (million EUR) ^c	-2,613	-3,138	-4,227	-2,299	-482	-313	-51	415	858	2,019	1,172
Current account balance (as % of GDP)	-6.5	-7.1	-8.8	-5.1	-1.1	-0.7	-0.1	0.9	2.0	4.5	2.5
Exports of goods and services (as % of GDP)	39.7	39.0	38.5	34.5	37.7	40.4	41.6	42.9	45.3	48.2	49.1
Imports of goods and services (as % of GDP)	46.5	46.3	46.5	38.2	38.0	40.8	41.2	42.5	43.4	45.9	46.2
External debt (million EUR, end of year) ^c	29,725	33,721	40,590	45,600	46,908	46,397	45,297	45,803	46,416	45,384	41,668
External debt (as % of GDP)	73.9	76.8	84.3	101.1	103.9	103.5	102.9	104.7	106.9	101.9	89.8
External debt (as % of exports of goods and services)	186.1	196.6	219.1	292.7	275.8	255.9	247.3	244.1	235.9	211.4	182.9
External debt service (as % of exports of goods and services) ^d	42.0	40.1	33.8	52.9	49.5	40.9	43.3	41.0	44.1	42.5	34.4
Gross international reserves (million EUR, end of year)	8,725	9,307	9,121	10,376	10,660	11,195	11,236	12,908	12,688	13,707	13,514
Gross international reserves (in terms of months of imports of goods and services, end of year)	5.6	5.5	4.9	7.2	7.5	7.3	7.4	8.3	8.1	8.0	7.6
National currency: kuna (HRK)											
Exchange rate on 31 December (HRK : 1 EUR)	7.3451	7.3251	7.3244	7.3062	7.3852	7.5304	7.5456	7.6376	7.6615	7.6350	7.5578
Exchange rate on 31 December (HRK : 1 USD)	5.5784	4.9855	5.1555	5.0893	5.5683	5.8199	5.7268	5.5490	6.3021	6.9918	7.1685
Average exchange rate (HRK : 1 EUR)	7.3228	7.3360	7.2232	7.3396	7.2862	7.4342	7.5173	7.5735	7.6300	7.6096	7.5294
Average exchange rate (HRK : 1 USD)	5.8392	5.3660	4.9344	5.2804	5.5000	5.3435	5.8509	5.7059	5.7493	6.8623	6.8037
Consolidated general government net lending (+)/borrowing (-) (million HRK) ^e	-9,971.9	-7,880.6	-9,604.6	-19,844	-21,257	-25,930	-17,267	-17,517	-17,033	-11,210	-3,155
Consolidated general government net lending (+)/borrowing (-) (as % of GDP) ^e	-3.4	-2.4	-2.8	-6.0	-6.5	-7.8	-5.2	-5.3	-5.1	-3.3	-0.9
General government debt (as % of GDP) ^e	38.9	37.7	39.6	49.0	58.2	65.0	70.6	81.7	85.8	85.4	82.7
Unemployment rate (ILO, persons above 15 years of age) ^f	11.2	9.9	8.5	9.2	11.6	13.7	15.9	17.3	17.3	16.2	13.1
Employment rate (ILO, persons above 15 years of age) ^f	43.6	47.6	48.6	48.2	46.5	44.8	43.2	42.1	43.3	44.2	44.6

^a The population estimate of the Republic of Croatia for 2000 is based on the 2001 Census and that for the 2001-2016 period on the 2011 Census. Data for 2016 are preliminary.

^b The GDP data are presented according to the ESA 2010 methodology. Data for 2016 are preliminary.

^c Balance of payments and external debt data are compiled in accordance with the methodology prescribed by the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) and the new sector classification of institutional units in line with ESA 2010. Balance of payments and external debt data are based on the most recent available balance of payments data up to the third quarter of 2017 and data on the gross external debt position as at the end of September 2017.

^d Includes principal payments on bonds, long-term trade credits and long-term loans (excluding liabilities to affiliated enterprises), as well as total interest payments (including FISIM), without interest payments on direct investment.

^e Fiscal data is shown according to the ESA 2010 methodology.

^f Data for the 2007-2013 period are revised and therefore no longer comparable to data for the 2000-2006 period.

Sources: CBS, MoF and CNB.



Macroeconomic Developments and Outlook

1 Introduction

In the third quarter of 2017, economic activity continued to grow at a stable pace, propelled by the growth in the exports of goods and services and in personal consumption. Real GDP might increase by 3.1% in 2017, while its growth rate in 2018 might be slightly lower, at 2.9%. The unemployment rate might fall to some 10% in 2018. Inflation is expected to accelerate in 2017, predominantly as a result of the bigger contribution of the prices of food and energy. In addition to growth of import prices and a mild resurgence of domestic inflationary pressures, given that the cyclical position of the domestic economy is about to change, inflation is expected to accelerate further in 2018. However, the rate of inflation could remain low, below the long-term average. The expected temporary increase in the current and capital account surplus in 2017 reflects a decrease in the profits of banks resulting from their exposures to Agrokor. In 2018, the surplus could go down to 3.5% of GDP, caused not only by the weakening of the mentioned Agrokor effect but also by the strengthening of domestic demand. General government deficit and debt might continue to decline in 2017, according to MoF projections. Monetary policy will continue to aid economic growth by remaining expansionary, supporting the high liquidity in the monetary system and maintaining the stability of the kuna against the euro.

In the third quarter of 2017, economic activity continued to grow at the same pace as in the first half of the year, primarily as a consequence of the increase in total exports and personal consumption. Available monthly indicators for October suggest that economic growth continued in the fourth quarter as well, although at a slightly slower pace than in the period to date. Accordingly, it is estimated that economic growth on an annual level will total 3.1%, only slightly lower than the year before, reflecting weaker investment activity of the general government and an upturn in imports. So far, it seems that the crisis in the Agrokor Group has had a limited effect on economic activity in the current year. In 2018, GDP growth could slow down slightly as personal consumption growth is expected to lose some of its pace, mostly owing to the waning of positive tax reform effects, and slower growth in exports of goods and services. Relatively

favourable developments in the labour market are expected to continue, although the growth of the number of the employed might slow down in relation to 2017.

The annual consumer price inflation rate accelerated in the second half of 2017 as a consequence of the strengthening of imported inflationary pressures, administrative decisions (increase in electricity prices) and adverse weather conditions (increase in the price of vegetables). It is estimated that the average annual consumer price inflation rate might accelerate to 1.2% in 2017. The contribution of food prices to the overall average annual inflation rate in 2017 is expected to be most significant and stand at approximately 0.8 percentage points. The average annual inflation rate is projected to accelerate to 1.6% in 2018. The contribution of the prices of energy and the price index excluding food and energy is expected to increase, while

Table 1.1 Summary table of projected macroeconomic measures

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
National accounts (real rate of change, in %)										
GDP	-7.4	-1.4	-0.3	-2.2	-0.6	-0.1	2.3	3.2	3.1	2.9
Personal consumption	-7.5	-1.5	0.3	-3.0	-1.9	-1.6	1.0	3.5	3.8	3.2
Government consumption	2.1	-0.6	-0.4	-0.8	0.6	0.8	-0.9	1.9	1.7	1.5
Gross fixed capital formation	-14.4	-15.2	-2.7	-3.3	1.4	-2.8	3.8	5.3	4.2	7.1
Exports of goods and services	-14.1	6.2	2.2	-0.1	3.1	6.0	9.4	5.6	6.6	5.8
Imports of goods and services	-20.4	-2.5	2.5	-3.0	3.1	3.1	9.2	6.2	8.5	7.4
Labour market										
Number of employed persons (average rate of change, in %)	-2.1	-4.2	-1.1	-1.2	-1.5	-2.0	0.7	1.9	1.8	1.5
Registered unemployment rate	14.9	17.4	17.8	18.9	20.2	19.6	17.0	14.8	12.4	11.3
ILO unemployment rate	9.2	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.3	10.2
Prices										
Consumer price index (average rate of change, in %)	2.4	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.2	1.6
Consumer price index (rate of change, end of period, in %)	1.9	1.8	2.1	4.7	0.3	-0.5	-0.6	0.2	1.7	1.0
External sector										
Current account balance (as % of GDP)	-5.1	-1.1	-0.7	-0.1	0.9	2.0	4.5	2.5	3.7	2.6
Current and capital account balance (as % of GDP)	-5.0	-0.9	-0.6	0.0	1.1	2.4	5.3	3.8	4.5	3.7
Gross external debt (as % of GDP)	101.1	103.9	103.5	102.9	104.7	106.9	101.9	89.8	79.9	74.9
Monetary developments (rate of change, in %)										
Total liquid assets – M4	-1.0	1.9	5.6	3.6	4.0	3.2	5.1	4.7	4.5	4.5
Total liquid assets – M4 ^a	-0.8	0.7	4.6	3.9	3.6	2.4	5.0	5.3	4.0	4.5
Credit institution placements to the private sector	-0.6	4.7	4.8	-5.9	-0.5	-1.6	-2.9	-3.7	0.6	4.1
Credit institution placements to the private sector ^b	-0.3	2.3	3.5	-1.2	1.0	-1.5	-2.2	1.0	3.0	4.1

^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 the CNB Bulletin No. 221). Note: The projections for 2017 and 2018 are derived from data available until 13 December 2017.

Sources: CBS, MoF and CNB.

the contribution of food prices to the overall inflation might decrease. An important factor contributing to inflation growth is the acceleration of the annual growth of import prices. In addition, domestic inflationary pressures on the demand side are expected to grow slightly in 2018, in view of the gradual increase in the positive domestic output gap. Unit labour costs are also expected to continue growing.

Amid the recovery in domestic economic activity and the strengthening of non-price competitiveness in foreign markets the trend of reduction in external imbalances continued. The current account surplus in the current year reflects good export results and inflows from the EU budget. Similar developments are expected in 2018. The temporary increase in the current account surplus in 2017 was also affected by the crisis in the Agrokor Group (through the reduction in the negative balance of foreign income), while the expected decrease in total surplus in 2018 could be affected by the deterioration in the trade balance under the influence of the strengthening of domestic demand. With regard to foreign capital flows, net outflow of capital, as a consequence of deleveraging in domestic sectors, is expected to decrease gradually. This will be reflected in the improvement of the relative indicators of external debt, which are still high. At the same time, equity investments in Croatia are expected to recover gradually and only slightly.

The CNB continued its expansionary monetary policy, supporting the high liquidity in the monetary system. The increase in liquidity was spurred predominantly by the purchase of foreign exchange from banks, which alleviated appreciation pressures on the domestic currency and added to gross international reserves. In addition to the purchase of foreign exchange, the CNB continued supporting high kuna liquidity through kuna

operations, including the structural repo operation conducted in November, a year after the last such operation. In addition, the CNB introduced a system of collateral management by means of the pool of eligible assets in September, providing banks the opportunity for long-term kuna borrowing with the CNB based on a wide spectrum of collateral types, also including short-term securities. Interest rates on loans of domestic credit institutions mostly continued to be reduced amid high liquidity in the domestic and international markets. Favourable financing conditions, consumer confidence and developments in the labour market paired with the government programme of subsidised housing loans contributed to the acceleration of the annual growth of household placements, while the growth of corporate placements slowed down in the second half of the year. Monetary policy will keep its expansionary character in the upcoming period. This will support the favourable financing conditions of domestic sectors and spur lending to the private sector.

As for public finances, available data indicate that favourable developments continued in the first eight months of the year. Accordingly, the general government deficit could continue to decrease in 2017, despite the tax reform aimed at reducing the overall tax burden. Favourable deficit dynamics, as well as continued economic growth, will result in a further gradual decrease of the general government debt-to-GDP ratio.

It is estimated that the risks to GDP projections in the projection period are balanced. While the negative effect of financial problems in the Agrokor Group on investment activity and personal consumption might be greater than currently projected, the positive risks arise from the possibility of the growth of the export of tourist services, which has been projected conservatively, exceeding the current expectations.

2 Global developments

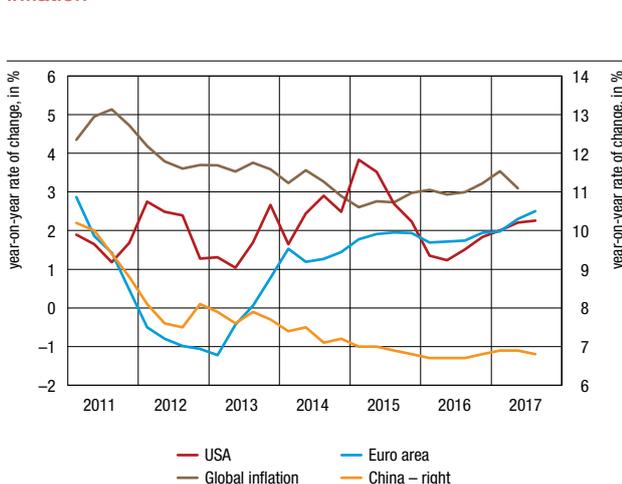
After a relatively weak first quarter, global economic activity accelerated in the second and the third quarter of 2017. The growth recovery was widespread, in particular among developed countries, accompanied by an additional acceleration in the global trade. Global inflation increased moderately, mostly due to the recent rise in the prices of energy, while core inflation

remained relatively subdued. Accommodative monetary policies, still prevailing in the majority of large economies, continued to provide for favourable financing conditions.

Among developed markets, the positive trend in the previous part of the year was particularly pronounced in the euro area where economic activity in the third quarter of 2017 accelerated to 2.5%, which had not been recorded since the outbreak of the global financial crisis. An acceleration in growth was recorded in the majority of the member countries, in particular in the Baltic countries, while the largest relative contribution to the strengthening of the recovery of the euro area was made by the old and largest members – Italy, France and Germany. The acceleration of growth of the euro area reflected the diminished political uncertainty in recent months, as well as economic policy incentives primarily focused on the recovery of investments and the strengthening of potential growth. In addition, favourable financing conditions and improved conditions in the labour market continued to boost private consumption.

The growth of the US economy, the world's largest, also recovered in the rest of the year, after a slow-down recorded in the first quarter of 2017. In the third quarter of 2017, growth reached 2.3%, the highest rate in the past two years. It was particularly spurred by the recovery of private sector investments and strong personal consumption. Severe natural disasters that hit the US at the beginning of the third quarter did not have a significant impact on growth because they boosted construction activity and the consumption of durable goods. With regard to the UK, after the initial resistance of the economy, the

Figure 2.1 Economic growth in selected markets and global inflation



Sources: Eurostat, BEA, NBS and IMF.

uncertainty about the course of the UK's exit from the EU started to reflect negatively on investments, so that real growth weakened in the middle of the year, and has lately been among the lowest in Europe.

As for developing and emerging market countries, in the first three quarters of 2017 favourable developments were seen in large Asian markets, notably China, in which economic activity accelerated moderately again. Economic trends were also very favourable among European emerging market economies, in particular in Turkey and Romania, while the Russian market was rebounding successfully. Latin American countries, which were earlier hit by the crisis, also recorded more favourable movements, while exporters of oil were still in the process of adjustment to relatively low prices of raw materials.

Croatia's main trading partners

Most of Croatia's major trading partners were marked by quite favourable economic developments in the previous part of 2017. This was particularly true for trading partners from the euro area, primarily Slovenia, Austria and Italy, where the highest growth rates were recorded over the past several years. Growth was mostly triggered by personal consumption, due to the growth of disposable income. The growth of investments and exports was also noticeable. The real growth of the German economy also accelerated, triggered by strong exports and increasing personal consumption in the conditions of a robust labour market and the recovery of the construction sector. By contrast, trading partners in the region of SE Europe recorded a decrease in growth, in particular Serbia and Bosnia and Herzegovina, as a result of adverse weather conditions, which in the previous period of the year hit the agriculture sector severely.

Prices, exchange rates and financing conditions

Crude oil prices rose sharply in the second half of 2017, following a decrease in the first half of the year. The average price of a barrel of Brent crude oil stood at USD 63 in November, or up by about 33% and 16% from June and December 2016 respectively. The growth in the prices of oil was attributed to the increase in demand due to more favourable global economic developments and expectations concerning a further decrease in crude oil reserves following the agreement between OPEC countries and Russia on limiting supply. The political turmoil in Saudi Arabia in November also contributed to the rise in the prices of oil. In the second half of 2017, the prices of raw materials excluding energy increased, which almost entirely offset their decrease in the first half of the year. Coal prices recorded the largest increase, which was mainly attributed to the increase in demand for energy in China during the summer months and a decrease in the production of coal in Indonesia. In addition, driven by favourable expectations concerning industrial activity in EU countries and the US, the prices of metal also increased considerably. As for food raw material prices, the rise in the prices of oil seeds offset the fall in the prices of cereals. Moreover, the prices of butter grew strongly in the EU, which was attributed to the decline in production and a strong demand for dairy products in the world market.

The divergent trends in the monetary policies of the US and the euro area continued. The Fed raised its benchmark interest rate by a total of 75 basis points on three occasions in the course of the year, and in October it began the process of gradually reducing its balance sheet. The ECB kept its benchmark rate unchanged; however, from April, it reduced the volume of its bond purchase programme from EUR 80bn to EUR 60bn a month. In October, the ECB decided on a further reduction to EUR 30bn a

month, starting from January 2018.

The euro continued to strengthen against the major currencies on the global foreign exchange market. The exchange rate of the US dollar against the euro reached EUR/USD 1.20 in mid-September, which is an increase of about 5% from the end of June and about 14% from the end of 2016. The major contributors to the strengthening of the euro against the US dollar included a more favourable outlook for the euro area economy and the uncertainty about the implementation of the tax reform in the US and its impact on economic growth. However, after September, due to good economic results in the US, the trend of the weakening of the US dollar against the euro was stopped. At the same time, an increase in risk appetite and a more favourable outlook for the euro area economy had an effect on a significant depreciation of the Swiss franc against the euro over the past months. The exchange rate of the Swiss franc against the euro was about 6% higher than at the end of June and stood at EUR/CHF 1.16.

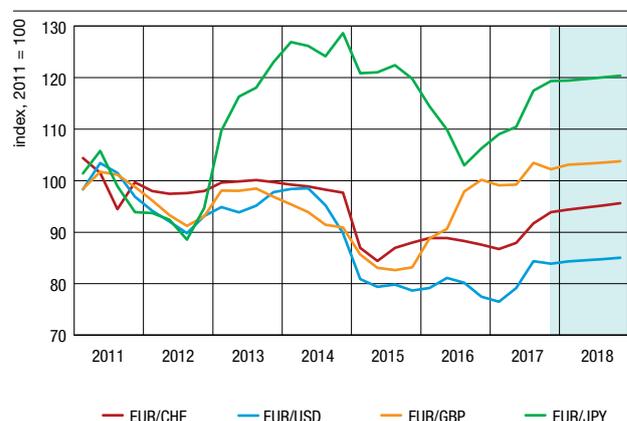
Financing conditions for European emerging market countries, including Croatia, mostly improved throughout the major part of 2017. This was also observed in the movement of the EMBI index, which fell by about 50 basis points in the first three quarters of 2017, much more than in 2016. However, short-term volatility of the EMBI index indicates that uncertainty is still present in financial markets.

Projected developments

The projection is based on the assumptions of favourable outlooks for global economic growth, a moderate and gradual strengthening of the euro against major global currencies, the continuation of a rise in the US benchmark interest rate and the maintenance of the key euro area interest rates at current levels. In addition, it is expected that the prices of crude oil might decrease only slightly in 2018, while no significant changes are expected in the prices of other raw materials.

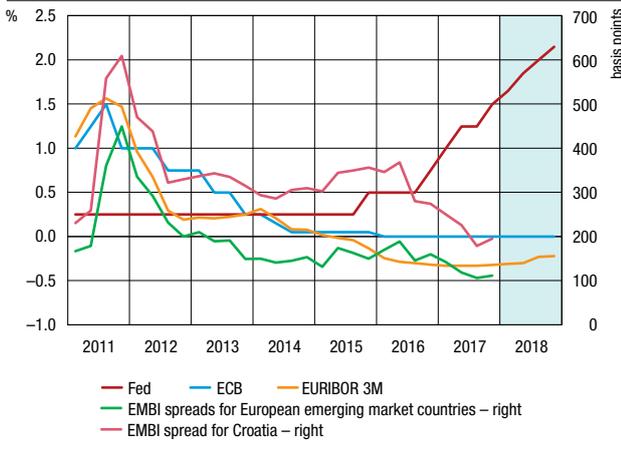
With regard to the global foreign exchange market, in line with expectations published in the Foreign Exchange Consensus Forecast in November 2017, the US dollar might be considerably weaker against the euro in 2018 than in 2017. The average dollar/euro exchange rate might stand at EUR/USD 1.18 in 2018. The exchange rate of the Swiss franc against the euro might also be considerably weaker in 2018 than in 2017, and might stand at EUR/CHF 1.17.

Figure 2.2 Exchange rates of individual currencies against the euro



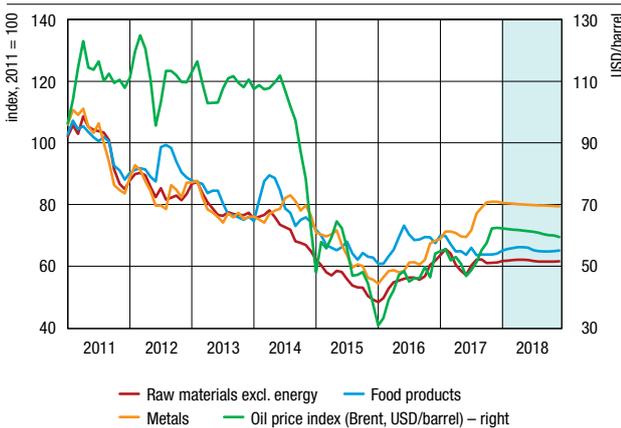
Note: A growth in the index indicates a depreciation of a currency against the euro.
Sources: Eurostat and Foreign Exchange Consensus Forecasts (November 2017).

Figure 2.3 Benchmark interest rates and the average yield spread on bonds of European emerging market countries end of period



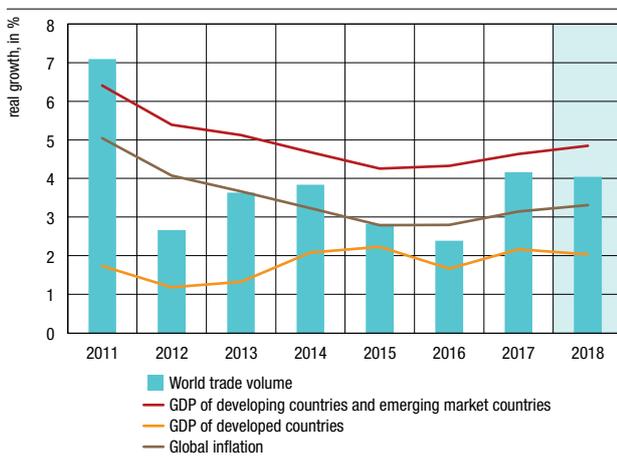
Source: Bloomberg (forecast), 14 November 2017.

Figure 2.4 Prices of raw materials on the international market



Sources: HWWI, IMF (November 2017) and prices of oil: Bloomberg (Brent crude oil futures, 21 November 2017).

Figure 2.5 Global economic developments



Source: IMF (WEO, October 2017).

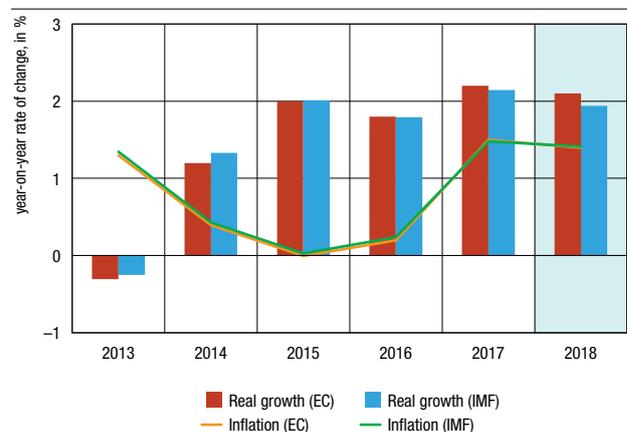
As for key interest rates, a further tightening of the Fed's monetary policy is expected in the course of 2018, i.e. at a pace similar to that in the previous year. In addition to keeping its benchmark rates at a historically low level, at least until September 2018, the ECB will continue the bond purchase programme, but at half the current rate (from January 2018, the programme will be cut from EUR 60bn to EUR 30bn a month). The ECB is expected to raise its benchmark interest rates for the first time in the first quarter of 2019, a long time after the unconventional measures programme is expected to end.

As regards developments of the prices of raw materials, most recent market expectations point to the stagnation of crude oil prices until the end of 2017 and their slight decline by the end of 2018. Pressures on the decline in the prices of crude oil might be exerted by the increase in production from new technologies in the US. By contrast, expectations concerning additional adjustments of the agreement between the OPEC countries and other producers on limiting supply and the increase in demand for oil due to favourable outlooks for global economic growth might lead to an increase in crude oil prices. Market expectations do not suggest that prices of raw materials excluding energy are likely to change significantly in 2018. On the one hand, the high global reserves of food raw materials should restrict a significant growth in their prices while, on the other hand, the strengthening of global demand might exert pressure on their growth.

With regard to global economic activity, according to the IMF's projections (WEO, October 2017), the global economy might accelerate from 3.2% in 2016, the lowest rate in the post-crisis period, to 3.6% in 2017 and 3.7% in 2018. World trade is also expected to further intensify as the recovery of global demand strengthens. Developing and emerging market countries might be the main generators of growth, even more so since the Chinese economy is not slowing down in 2017, despite restructuring. By contrast, due to its weak potential, the growth of developed countries might slow down again moderately; however, support for growth can be seen in the recent diminution of political uncertainty and the implementation of structural reforms in a number of countries.

As regards the euro area, it is estimated that due to good recent results growth might accelerate to 2.1% in 2017 and slow down only slightly, to 1.9%, in 2018. The momentum of private investments and exports, initiated in 2017, is expected to

Figure 2.6 Economic growth and inflation in the euro area



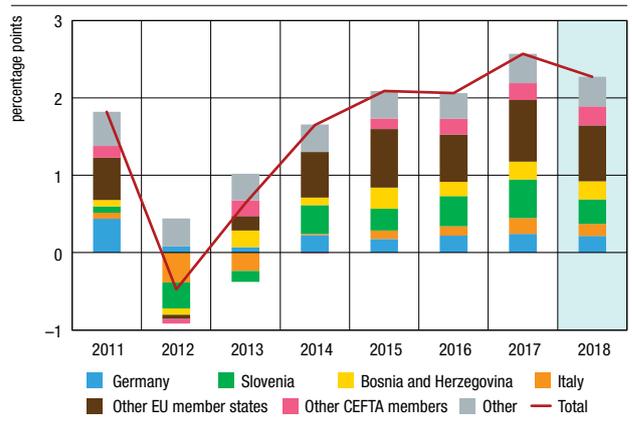
Sources: IMF (WEO, October 2017) and EC (November 2017).

continue and the growth of personal consumption is expected to weaken mildly due to weaker growth in wages and disposable income.¹ Because of low inflationary expectations, but also the fact that the earlier effects of rising oil prices will wear off gradually, inflation might remain below the targeted ECB level for a long time. After reaching 2% in February 2017, inflation trended down in the following months, so that at the entire 2017 level it might stand at 1.5% and drop to only 1.2% in 2018.

Economic growth in the US might reach 2.2% until the end of the current year and accelerate slightly in 2018. The strengthening of personal consumption in the conditions of almost full employment and growth in disposable income, with some positive short-term incentives coming from expansionary fiscal policy measures and tax cuts resulting from a package of tax reform measures, will contribute to a further recovery of the US economy. However, the effect of such measures in a mid-term period might result in the worsening of the public finance situation and burden future growth.

In line with the expected pick up in global trade, the growth of demand for Croatian export products might also remain relatively strong (Figure 2.7). Among Croatia's major trading partners, in the coming months, demand is expected to increase significantly from euro area members where Croatia places more than a half of its exports. Forecasts are particularly favourable for Slovenia, whose economic growth might reach 4% in 2017, while the growth dynamics of the Italian, Austrian and German economies should remain favourable. However, since it is expected that the growth of the euro area might weaken gradually already in 2018, neighbouring countries in the region might play an increasingly important role in export demand, whose growth might accelerate again after a temporary weakening in 2017.

Figure 2.7 Foreign demand
contributions of Croatia's trading partners



Note: Foreign demand is calculated as the weighted average of real GDP growth of Croatia's trading partners, with their shares in Croatia's exports of goods used as weights.

Source: IMF (WEO, October 2017).

Positive expectations concerning global growth notwithstanding, risks remain emphasised. On the one hand, uncertainty concerning global policies and political uncertainty as well as a possible stronger deterioration of global financing conditions might jeopardise growth. On the other hand, a stronger cyclical recovery, in particular in the euro area countries, might give an additional impetus to the global economy, at least in a short period.

3 Aggregate supply and demand

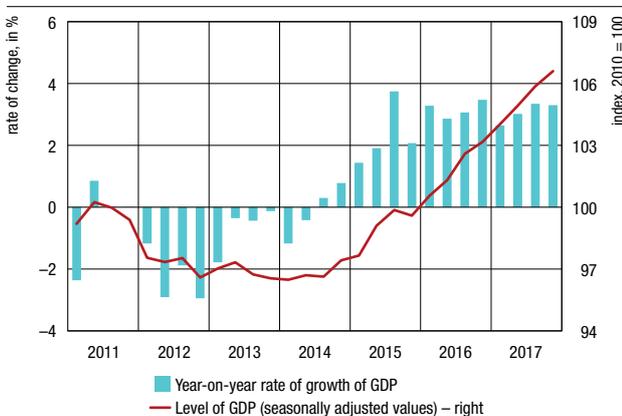
In the third quarter of 2017, economic activity continued to grow at the same pace as in the first half of the year, increasing by 0.9% on the second quarter. Continued positive developments were primarily a consequence of the increase in total exports and of the growth in personal consumption. Available

monthly indicators for October suggest that economic growth continued in the fourth quarter as well, albeit at a slightly slower pace than in the period from July to September this year.

Economic activity intensified additionally in the third quarter of 2017, so real GDP increased by 3.3%.

These developments were mostly a result of the growth in the exports of goods and services, although a positive contribution

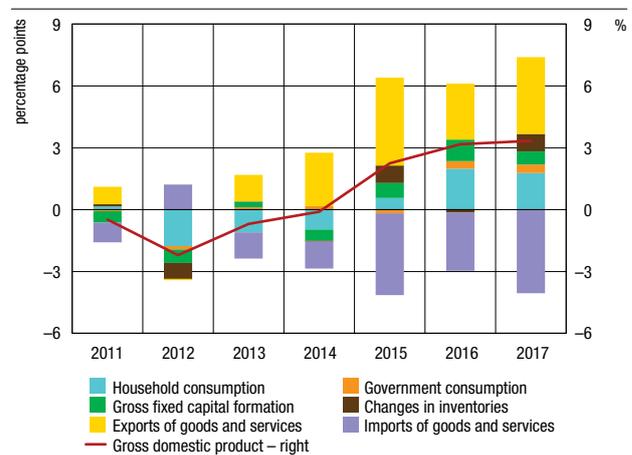
Figure 3.1 Gross domestic product
real values



Note: Data for the fourth quarter of 2017 are estimated with the use of the CNB's monthly indicator of real economic activity, on the basis of data published until 30 November 2017.

Source: CBS (seasonally adjusted by the CNB).

Figure 3.2 GDP rate of change
contributions by components



Note: Data for 2017 refer to the third quarter.

Source: CBS.

1 Recent projections of the European Commission are even more favourable.

to economic growth was also made by all components of domestic demand. Consequently, total imports increased as well. The production side of the GDP calculation shows that gross value added grew by 2.6% in the third quarter of 2017 from the same period a year ago, which can be attributed to an increase in all activities except for agriculture, forestry and fishing.

Aggregate demand

Real exports of goods and services increased by 0.7% in the third quarter from the previous three months, after having fallen in the second quarter. The increase is a reflection of positive trade developments, with nominal data showing that all MIG components but capital goods rose. In the meantime, services exports stagnated. Observed at an annual level, the growth in total exports slowed down from 6.5% in the second to 5.7% in the third quarter. The annual growth in the exports of goods in the third quarter was slightly higher than in the previous three months, while the growth in the exports of services slowed down.

The upward trend in personal consumption that started early in 2015 continued throughout the third quarter of 2017.

Household consumption was 0.9% higher than in the second quarter of this year. Favourable trends reflect the increase in employment and real net wages, the increase in wages being registered both in the private and the public sector. In addition, consumer confidence recovered in the third quarter, after having fallen substantially in April, which is associated with problems of the Agrokor Group. Personal consumption went up 3.7% on an annual level, contributing the most to real GDP growth after total exports.

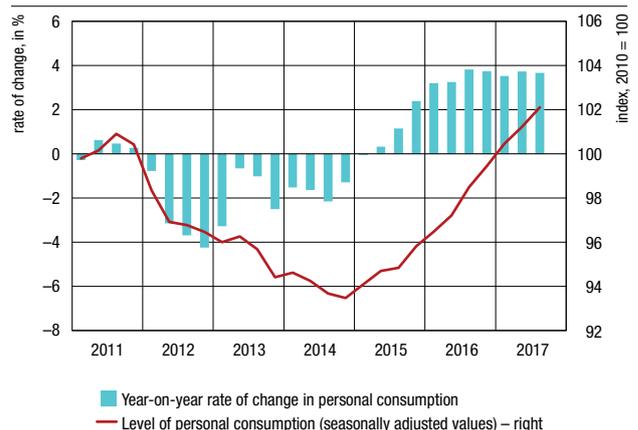
Gross fixed capital formation increased by a modest 0.4% in the third quarter from the previous three months. The slower growth of investment activity in the second and the third quarter as compared to the very beginning of the year may also be associated with the financial problems of the Agrokor Group. In the third quarter of this year, capital investments increased by 3.4% annually, primarily due to the growth of investments in the private sector, as indicated by monthly indicators on construction works on buildings and imports of capital goods. At the same time, investment activity of the government decreased, as confirmed by the data on civil engineering works, as well as the available nominal fiscal data for the central government.

Figure 3.3 Exports of goods and services
real values



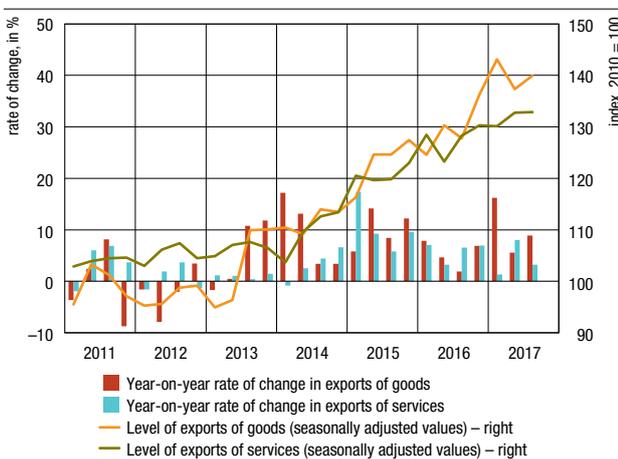
Source: CBS (seasonally adjusted by the CNB).

Figure 3.5 Personal consumption
real values



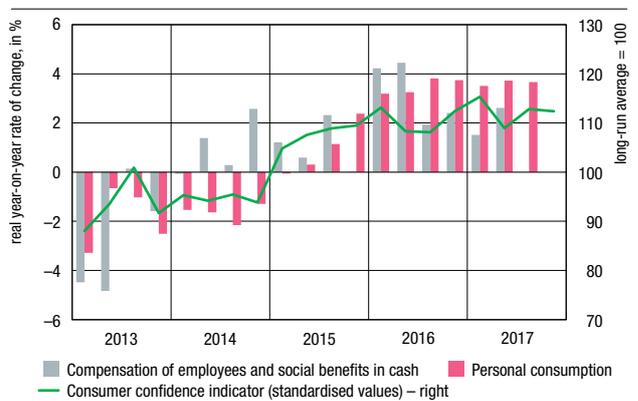
Source: CBS (seasonally adjusted by the CNB).

Figure 3.4 Real exports of goods and services



Source: CBS (seasonally adjusted by the CNB).

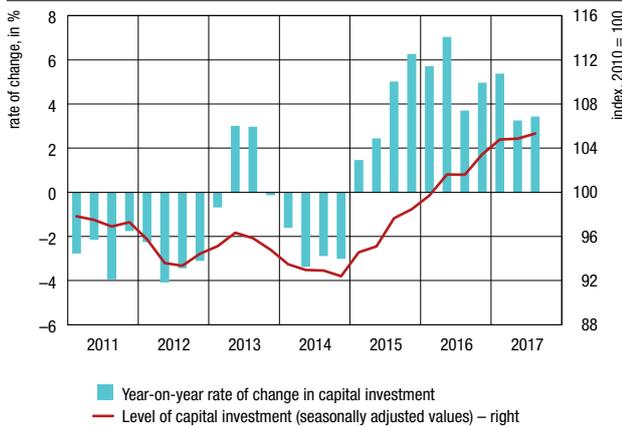
Figure 3.6 Determinants of personal consumption
real values and index



Notes: Real values of compensation of employees and social benefits in cash were calculated by deflating nominal values using the personal consumption deflator. Consumer confidence indicator values were calculated as three-member averages of monthly data, where the most recent data refers to November 2017.

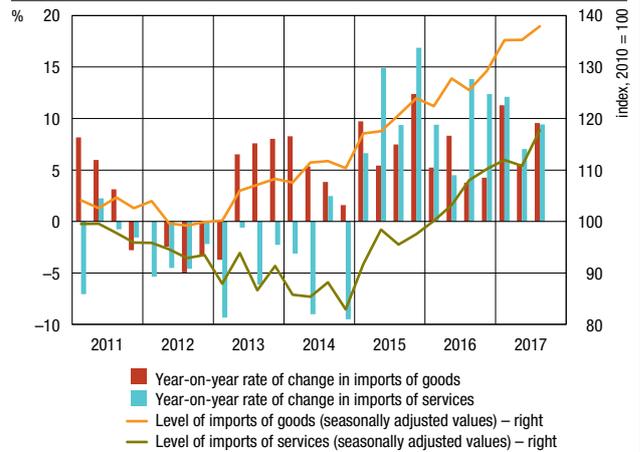
Sources: CBS, Ipsos and CNB.

Figure 3.7 Gross fixed capital formation
real values



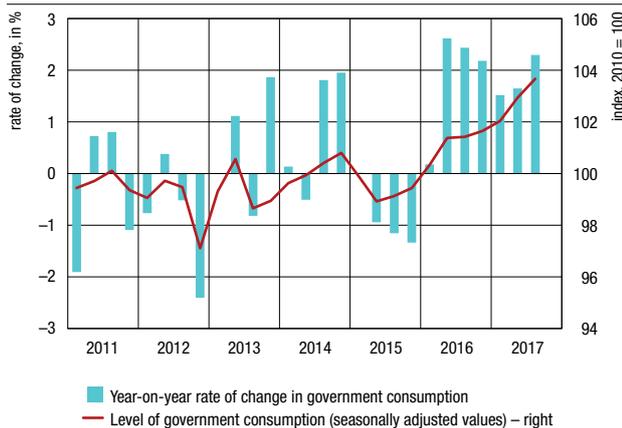
Source: CBS (seasonally adjusted by the CNB).

Figure 3.10 Real imports of goods and services



Source: CBS (seasonally adjusted by the CNB).

Figure 3.8 Government consumption
real values



Source: CBS (seasonally adjusted by the CNB).

The upward trend in government consumption that began in mid-2015 continued during the third quarter. The government consumption thus increased by 0.7% from the previous quarter, while growth generated on an annual level was 2.3%. Nominal data on government expenditures suggest that all subcomponents of government consumption contributed to this growth.

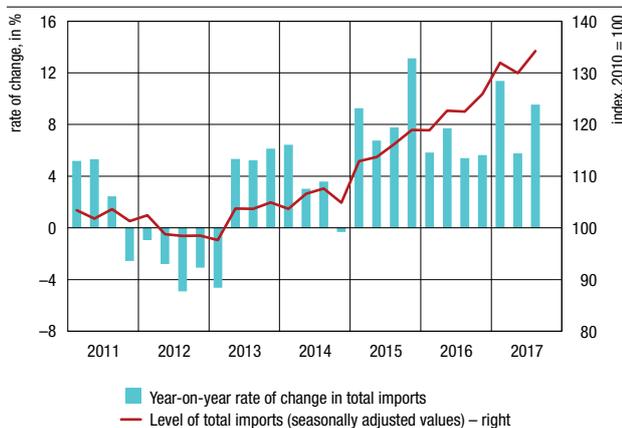
The rise in the exports of goods and services and further strengthening of domestic demand resulted in the 3.3% increase of total imports from the second quarter, when they registered a fall. The imports of both goods and services increased on a quarterly basis. Nominal data on trade in goods show that compared to the previous three months imports grew in all main industrial groupings except capital goods.

On an annual level, real imports of goods and services intensified, growing by 9.5%, while the negative contribution of net foreign demand to GDP growth totalled -0.3 percentage points.

Aggregate supply

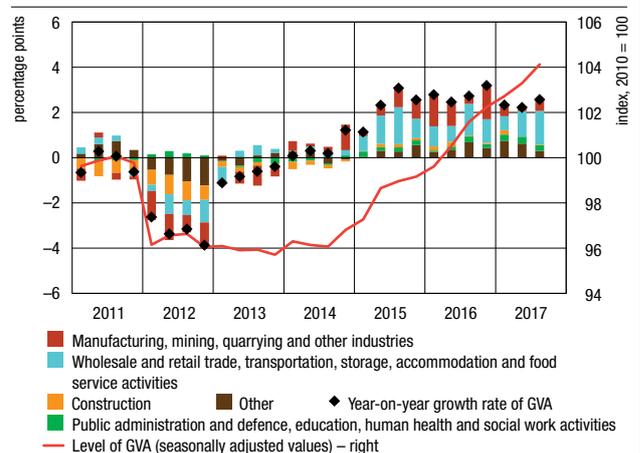
The rise in gross value added intensified further in the third quarter of 2017, increasing by 0.8% from the previous quarter.

Figure 3.9 Imports of goods and services
real values



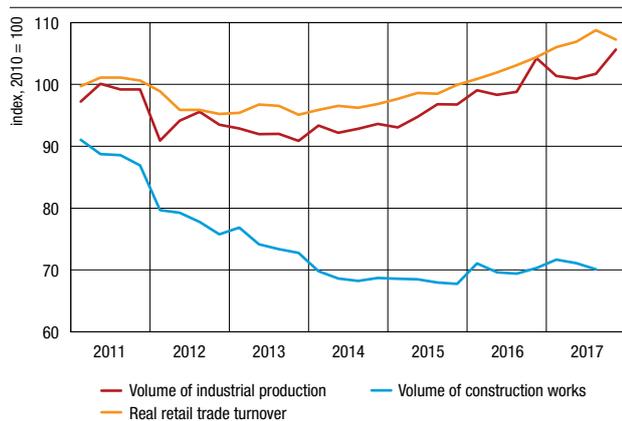
Source: CBS (seasonally adjusted by the CNB).

Figure 3.11 GVA rate of change
contributions to the annual change by components



Source: CBS (seasonally adjusted by the CNB).

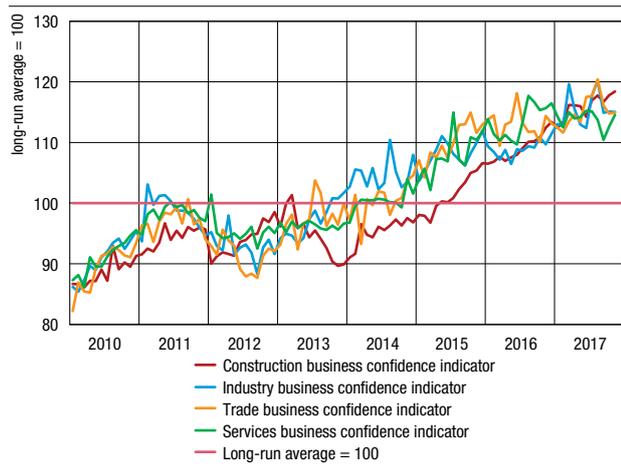
Figure 3.12 Short-term economic indicators
seasonally adjusted values



Notes: Quarterly data are calculated as an average of monthly data. Data on industry and trade in the fourth quarter of 2017 refer to October.

Source: CBS (seasonally adjusted by the CNB).

Figure 3.13 Business confidence indicators
standardised seasonally adjusted values



Sources: Ipsos and CNB (seasonally adjusted by the CNB).

All components of GVA increased at the quarterly level, with trade, transportation and tourism activities boasting the greatest growth, which can be associated with exceptionally favourable developments in tourism, as well as an increase in household purchasing power. On the other hand, agriculture, forestry and fishing, as well as finance and insurance activities, registered a fall, while construction and real estate activities stagnated. Observed at the annual level, GVA growth intensified in the third quarter, reaching 2.6%, due to exceptionally favourable developments in retail trade, transportation and storage.

The GDP nowcasting model based on currently available data shows that economic growth might continue in the fourth quarter of 2017 from the previous quarter, although at a slightly slower rate. Industrial production intensified in October. It was 3.9% higher than the average in the previous three months, with growth on a quarterly basis being recorded by all MIG components but energy. On the other hand, in October this year real retail trade turnover was 1.4% lower than the average of the third quarter.

The business confidence survey reflects a continuation of

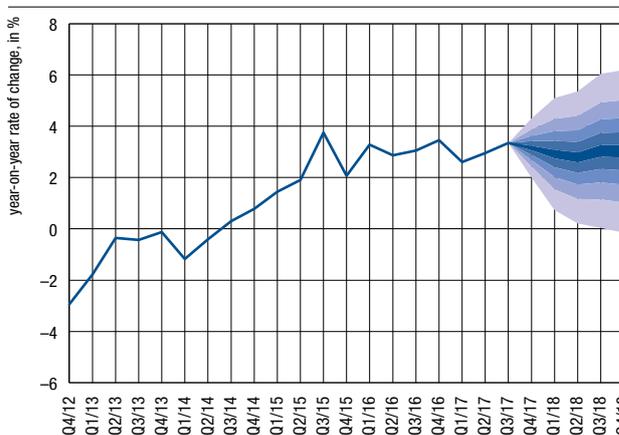
positive trends as regards expectations in construction. In comparison with the third quarter, better expectations are also evident in the services industry. On the other side, confidence fell in industry and trade. Namely, while the deterioration in industry is a reflection of poorer expectations regarding production in the following three months, a greater number of trade subjects assessed the business situation in the last three months as unfavourable.

Projected developments

The real GDP growth rate for the whole of 2017 might come in at 3.1%. It is expected that the greatest contribution to this year's economic growth will come from the exports of goods and services. However, other components of domestic demand could also make a positive contribution. The expected slight deceleration of economic activity (GDP increased by 3.2% in 2016) is related to poorer expectations as regards the growth of capital investments due to lower growth rates in the first three quarters of this year than previously expected. The 2018 economic growth might be only slightly lower due to the expected slowdown in the growth of total exports and personal consumption.

The rise in total exports may pick up in 2017 and reach 6.6%. Real growth in exports of goods is expected to be a little faster in line with the sustained recovery of Croatia's main trading partners, while, in view of the record high seen in 2016, this projection also shows a slower increase in exports of services, which are largely determined by tourism services. Among the components of domestic demand, household consumption is expected to intensify even further due to the growth of the number of the employed, faster growth of wages in the private sector aided by the regulatory changes on income taxation and the rise in wages of civil servants and government employees and the growth of loans to households. Based on these assumptions, household consumption may grow by 3.8% in 2017 and provide the strongest boost to total economic growth of all domestic demand components. Government spending might also increase and thus positively contribute to GDP growth. As for investment activity, its growth is expected to slow down in 2017 (to 4.2% from 5.3% in 2016), for in the second and third quarters results were worse than previously expected, probably due to financial problems in the Agrokor Group. Finally, the acceleration of the growth in total exports and personal consumption might result

Figure 3.14 Projection of real GDP dynamics



Sources: CBS and CNB.

in high growth of imports of goods and services so the negative contribution of net foreign demand might come in substantially higher than in 2016 (−0.7 percentage points, relative to only −0.1 in 2016).

Real GDP might continue increasing in 2018, although its growth rate might be slightly lower than the year before (2.9%). The slowdown in economic activity is mainly attributable to the expected slowdown in the growth of the exports of goods and services, partly due to the assumption that exports of tourist services may slow down in 2018, after growing exceptionally strongly for several years. In addition, it is expected that personal consumption growth will also lose some of its pace, mostly owing to the disappearance of the favourable effects of the tax reform and consequent slowdown in the growth of real net wages, but also as a result of the slightly lower rate of employment growth. Of all domestic demand components, household consumption will continue to provide the strongest boost to GDP growth, supported by the continuation of relatively favourable

trends in the labour market. At the same time, it is expected that the growth of gross fixed capital formation will intensify as a consequence of a substantial increase in the use of EU funds, so that the positive contribution of capital formation to economic growth may come close to that of personal consumption. Continued growth in the exports of goods and services and the strengthening of domestic demand might be reflected in the high rate of growth of total imports, so the negative contribution of net foreign demand to the overall 2018 economic growth might remain at the level estimated for the previous year (−0.7 percentage points).

It is estimated that the risks to GDP projections in the projection period are balanced. While the negative effect of financial problems in the Agrokor Group on investment activity and personal consumption might be far greater than currently projected, positive risks arise from the possibility of the growth of export of tourist services, which is conservatively projected, exceeding the current expectations.

Box 1 Croatia in global value chains²

Croatia is less integrated in global value chains than other CEE countries and its relative position did not change significantly in the 2000 to 2014 period. The structure of value added in exports did not change much either, in contrast with that of CEE countries, where the share of foreign value added increased significantly. According to the impact of exports on GDP, Germany, Italy, Slovenia, Austria, the US and China are Croatia's main trading partners.

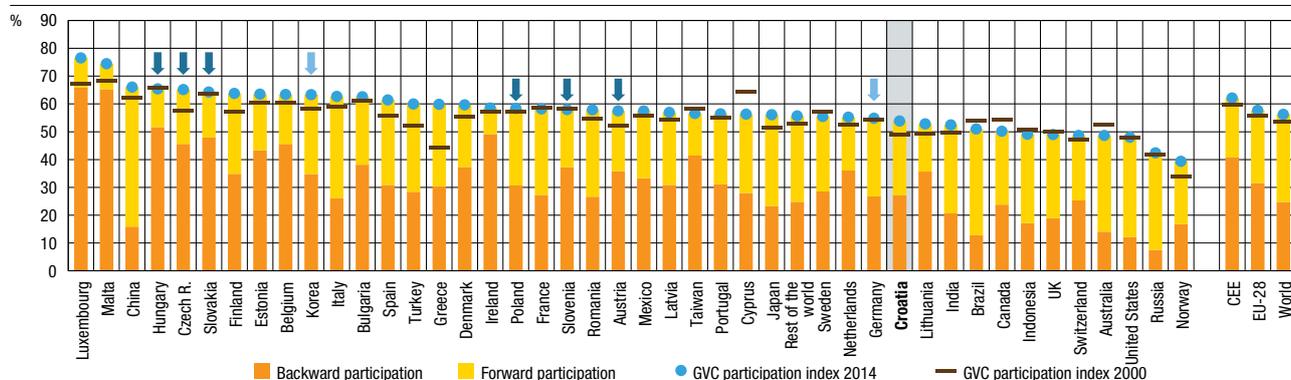
Global value chains (GVCs) involve different stages of the production process located across the world, with each of these stages giving value added to the final goods or service. Due to globalisation, enterprises are now able to optimise production costs by setting up and implementing production stages across different countries. This has led to production, as well as trade and investments, being increasingly organised within global value chains, which provide for increased efficiency and competitiveness in enterprises and, in turn, for accelerated economic

growth. A significant amount of empirical research shows that a greater degree of integration in global value chains leads to productivity growth and total economic growth.

A country may be included in a global value chain by backward participation, that is, by using imported intermediate goods in the production of its final exported goods (goods or services), or by forward participation, that is, by exporting goods to other countries, which are then used for exports to third countries. An indicator of backward participation, which creates value in the country from where intermediate goods are imported, is foreign value added, while a measure of forward participation is indirect domestic value added. Countries with a high rate of specialisation (e.g. Hungary, the Czech Republic and the Slovak Republic) in general have a greater share of backward participation, while economies rich with natural resources (e.g. China, Australia and Russia) have a greater share of forward participation.

GVC participation index³ is one of the most common

Figure 1 GVC participation index for 2014

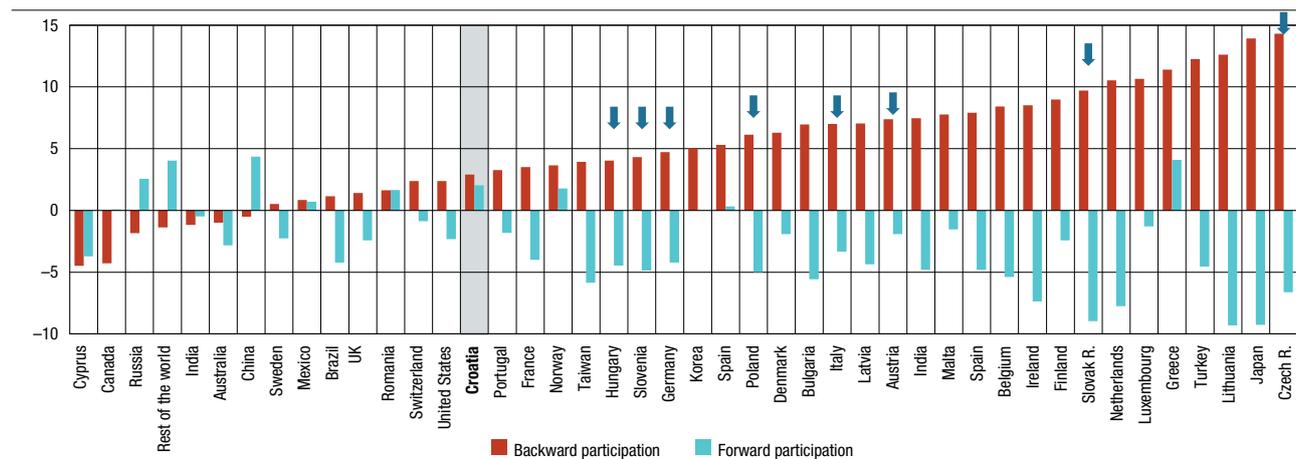


Notes: Comparable countries are marked with arrows and include CEE countries (the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia) and Croatia's major trading partners (Austria, Italy and Germany). Although Bosnia and Herzegovina, Serbia and Montenegro also belong to the group of countries with which Croatia does a significant amount of trade, they are not included in the WIOD separately, but are classified under Rest of the world, which prevents their individual comparison. Dark blue arrows indicate the countries where backward participation accounts for a larger share than forward participation, while light blue arrows indicate the countries where forward participation accounts for a larger share.

Source: CNB's calculation based on the WIOD for 2014.

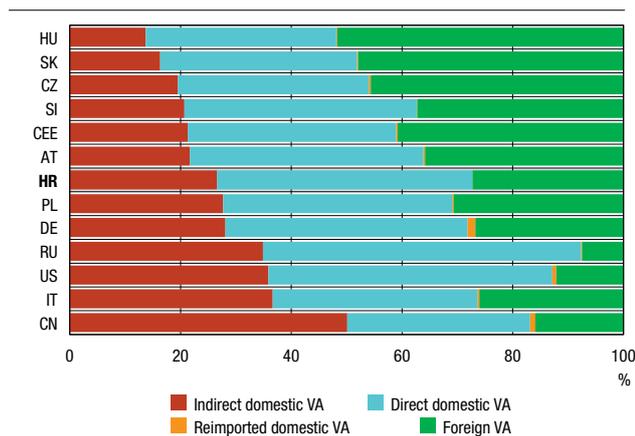
2 Based on the paper *Croatia in global value chains* (authors: Ivana Vidaković Peruško, Katarina Kovač and Miroslav Jošić) presented at the conference organised by the Institute for Public Finance on 3 November 2017. The paper provides a detailed overview of Croatia's inclusion in global value chains, using an analysis based on the World Input-Output Database (WIOD), which includes input-output tables for 43 countries in the period from 2000 to 2014.

Figure 2 Change in backward participation and forward participation between 2000 and 2014 in percentage points



Source: CNB's calculation based on the WIOD for 2014.

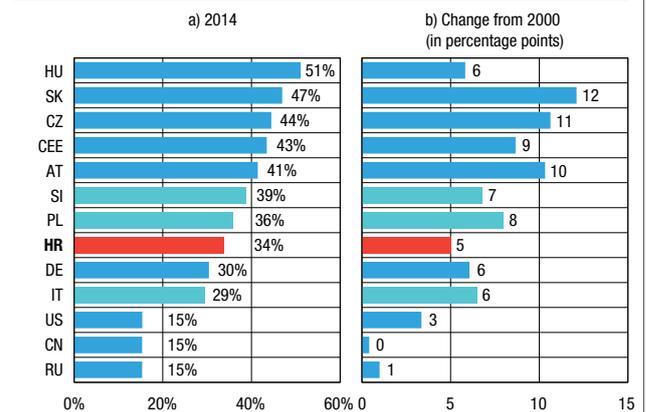
Figure 3 Structure of value added (VA) in exports in 2014



Note: CEE countries include the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia.

Source: CNB's calculation based on the WIOD for 2014.

Figure 4 Foreign value added in production by country



Note: CEE countries include the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia.

Source: CNB's calculation based on the WIOD for 2014.

indicators of a country's inclusion in global value chains. It is calculated as follows:

$$GVC\ participation_i = \frac{IVA_i}{EX_i} + \frac{FVA_i}{EX_i}$$

where IVA_i is indirect domestic value added⁴ in the country i , FVA_i is foreign value added in the country i , and EX_i stands for the country's gross exports. Figure 1 shows the GVC participation index for selected countries in 2014, the shares of backward participation and forward participation in the same year and the GVC participation index for 2000, in order to enable a discussion on the dynamics of inclusion in global value chains.

As concerns its inclusion in global value chains, Croatia was among the last of the selected countries in 2014, and in the period between 2000 and 2014 it recorded a slight improvement. In the observed period, Croatia's progress in backward

participation was only slightly greater than that in forward participation (Figure 2). At the same time, CEE countries and Croatia's major trading partners considerably increased their participation in global value chains due to increases in backward participation, while their forward participation declined.

A decomposition analysis of global value added in exports for 2014 shows that in Croatia foreign value added accounts for a smaller share than domestic value added. Moreover, this share is the lowest among the shares of all CEE countries and major trading partners (Figure 3). A breakdown by sectors shows that in most of the countries, including Croatia, the share of foreign value added in exports is high in production and mining, while domestic value added has a considerably larger share in agriculture and services.

It should be noted that domestic value added directly contributes to GDP creation as the value is created in the exporting

³ For the calculation methodology see Koopman, R., W. Powers, Z. Wang and S.-J. Wei (2011): *Give credit where credit is due: tracing value added in global production chains*, NBER Working Paper 16426.

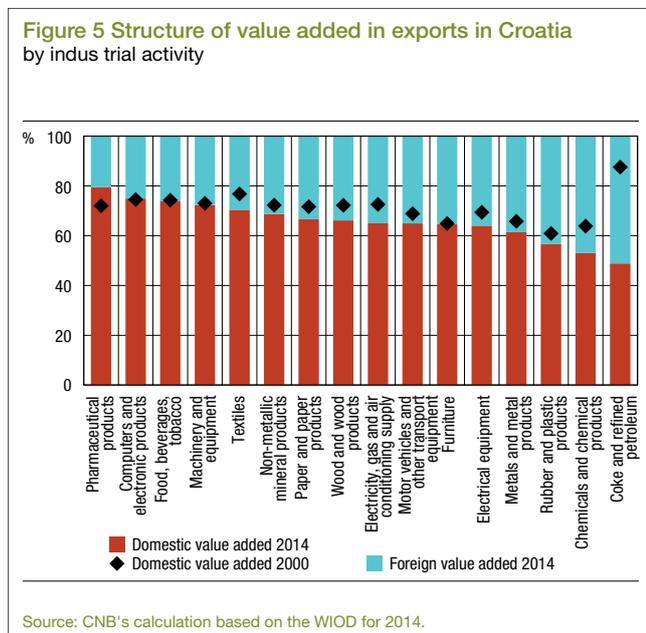
⁴ Domestic value added may be divided into direct value added, which refers to exports of intermediate goods to other countries for final consumption, and indirect value added, which is created when another country uses an imported product for further exports to third countries.

Table 1 Dependence of Croatia's GDP on final demand of selected countries

in %

	AT	CN	CZ	DE	HR	HU	IT	PL	RU	SK	SI	US	Rest of the world
AU	78.8	1.0	0.5	4.9	0.2	0.5	1.4	0.5	0.4	0.2	0.2	1.3	10.2
CN	0.0	90.8	0.0	0.3	0.0	0.0	0.1	0.1	0.1	0.0	0.0	1.2	7.2
CZ	1.1	1.1	72.5	6.6	0.1	0.7	1.1	1.4	0.9	1.3	0.1	1.3	11.8
DE	0.6	1.5	0.4	81.7	0.0	0.3	1.0	0.6	0.5	0.2	0.0	1.7	11.6
HR	0.9	0.7	0.2	1.7	79.5	0.4	1.7	0.2	0.2	0.1	0.8	0.8	12.8
HU	1.3	1.0	0.7	5.5	0.2	73.1	1.7	0.8	0.4	0.7	0.2	1.5	13.0
IT	0.2	0.5	0.1	1.3	0.0	0.1	88.4	0.2	0.2	0.1	0.0	1.0	7.7
PL	0.4	0.7	0.8	4.3	0.0	0.3	0.9	79.7	0.6	0.4	0.0	0.9	10.9
RU	0.2	2.5	0.2	1.4	0.0	0.1	0.7	0.8	75.9	0.1	0.0	1.4	16.6
SK	1.4	0.7	2.0	4.6	0.1	1.0	1.3	1.3	1.0	73.7	0.1	0.8	12.0
SI	1.9	0.8	0.4	4.1	1.1	0.6	2.6	0.5	0.5	0.3	73.6	0.9	12.7
US	0.0	0.5	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	94.1	5.0
Rest of the world	0.1	2.4	0.1	0.8	0.0	0.1	0.4	0.1	0.2	0.0	0.0	2.3	93.5

Source: CNB's calculation based on the WIOD for 2014.



country. In contrast, the greater the share of foreign value added in an industry, the less important it seems for the economic growth because it reduces the positive effect of exports on GDP growth. However, the use of foreign intermediate goods in production improves the competitiveness of an enterprise and

4 Labour market

Employment and unemployment

The increase in employment figures was slower in the third quarter than in the first half of the year (0.3%) due to weaker employment growth in all NCA activities. Employment growth picked up pace early in the fourth quarter. Employment rose by 0.8% in October and November relative to the previous quarter's average, mostly due to the increase in the number of persons employed in private sector service activities (excluding

enhances the growth of domestic value added, thus generating economic growth.

An analysis of the dynamics of foreign value added in domestic production indicates that Croatia has the lowest growth relative to 2000 (in percentage points) among CEE countries (Figure 4).

The structure of value added in exports by industrial activity in 2014 shows a large share of domestic value added in exports (and a small share of foreign value added) in water supply, in the production of food, beverages and tobacco, in the production of pharmaceutical products and in the production of computers and electronic products. In the period from 2000 to 2014, the share of domestic value added decreased in exports of most domestic industrial activities, with the most significant change recorded in the production of coke and refined petroleum products. In contrast, the share of domestic value added increased significantly in exports of pharmaceutical products (Figure 5).

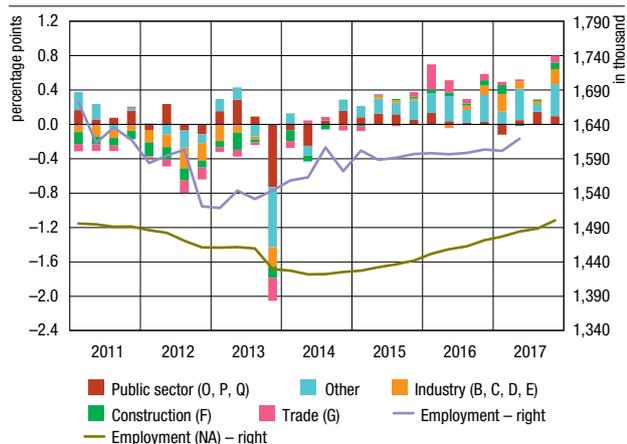
The analysis of Croatia's inclusion in global value chains includes an estimate of the dependence of Croatia's economy on the final demand of other countries made by the VAX ratio (the ratio of value added to gross exports).⁵ Table 1 shows that 20% of Croatia's GDP is directly or indirectly related to meeting other countries' final demand. Croatia's main trading partners in this respect are Germany and Italy, and in addition to these countries, Croatia's exports to a large extent depend on final demand for Croatian products in Slovenia, Austria, the US and China.

trade) and industry, while the contribution of the public sector was less pronounced (Figure 4.1).

An analysis of employment figures in the national accounts shows significant deviations from the number of persons insured with the CPII. For example, employment according to the national accounts grew sharply in 2014 (2.7%), while CPII data on the number of insured persons show a steady decrease (-2%). A noticeable divergence between the two data sources was also

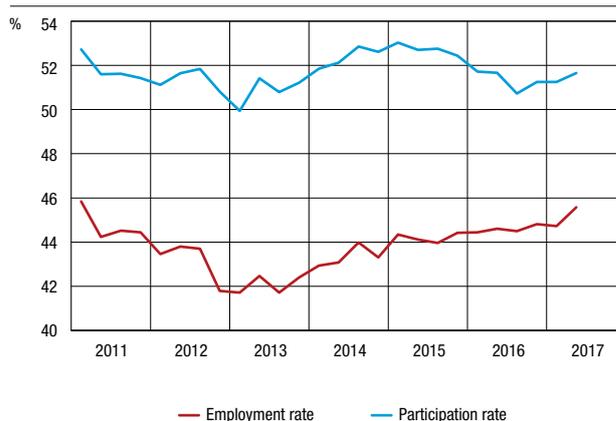
5 For more details on the VAX matrix see Johnson, R. C., and G. Noguera (2012): *Accounting for intermediates: production sharing and trade in value added*, Journal of International Economics, 82 (2), pp. 224-236.

Figure 4.1 Employment by NCA activities
seasonally adjusted data, contributions to the quarterly rate of change



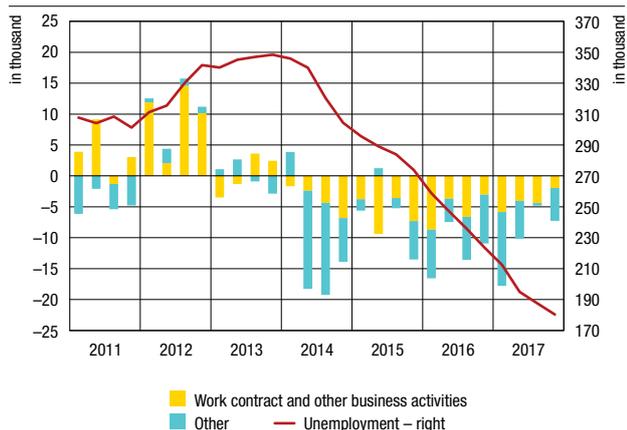
Note: Data for the fourth quarter of 2017 refer to October and November.
Sources: Eurostat and CPII (seasonally adjusted by the CNB).

Figure 4.4 Labour Force Survey
seasonally adjusted series



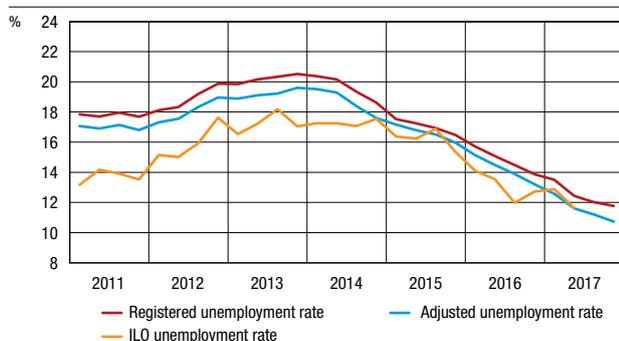
Source: CBS (seasonally adjusted by the CNB).

Figure 4.2 Total unemployment and net unemployment inflows
seasonally adjusted data



Note: Data for the fourth quarter of 2017 refer to October and November.
Source: CES (seasonally adjusted by the CNB).

Figure 4.3 Unemployment rates
seasonally adjusted data



Notes: The adjusted unemployment rate is the CNB estimate and is calculated as the share of the number of registered unemployed persons in the working age population estimated as the sum of unemployed persons and persons insured with the CPII. Since January 2015, the calculation of the registered unemployment rate published by the CBS has been made using the data on employed persons from the JOPPD form. The registered unemployment rate data for the fourth quarter of 2017 refer to October, while data for the adjusted rate refer to October and November.

Sources: CBS, CES and CNB calculations (seasonally adjusted by the CNB).

recorded in 2016, when the data on the number of persons insured with the CPII pointed to a relatively strong recovery in the number of employed persons (1.9%), while the national accounts data pointed to a stagnation (0.3%). In calculating the number of persons employed according to the definition in the national accounts, the CBS combines several data sources (administrative and survey data), with the Labour Force Survey being the main source, including also in employment figures an estimate for the number of persons employed in the grey economy.

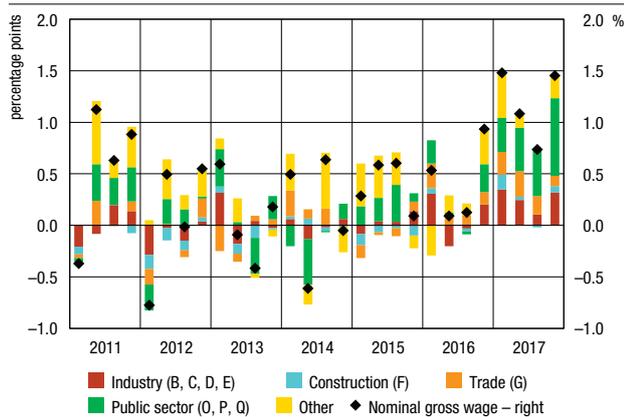
Unemployment continued to decrease in the third quarter of 2017, but at a slower pace than in the first half of the year, due to the noticeably slower removals from the CES register on account of other reasons (non-compliance with legal provisions, registration cancellation and failure to report regularly). At the same time, the outflows from the CES register for employment and other business activities continued at a similar pace (Figure 4.2). A decrease in unemployment early in the fourth quarter was of a similar dynamics, with the number of the unemployed falling to around 180,000 in November (according to seasonally adjusted data). In line with the described movements in unemployment and employment, the registered unemployment rate steadily decreased, standing at 12.0% in the third quarter. It continued to fall early in the fourth quarter, being 11.8% in October according to the seasonally adjusted data.

Favourable developments in the labour market are also confirmed by other Labour Force Survey data. The employment rate went up from 44.7% to 45.6%, while the participation rate grew from 51.2% to 51.7% from the first to the second quarter of 2017 (Figure 4.4).

Wages and unit labour costs

Available data show that the growth in nominal gross wages lost momentum from the first half of the year to the third quarter of 2017 (0.7%), while data for October show that wage growth again picked up steam at the beginning of the fourth quarter (1.5%) (Figure 4.5). The public sector was the main generator of wage growth in the fourth quarter, while the private sector made the largest contribution to overall wage movements in the previous part of the year (Figure 4.4). The sharp increase in public sector wages at the end of the year is the result of the Croatian government's decision to increase the basis for the calculation of the wages of civil servants and government employees in several stages. Following the increase in January, wages

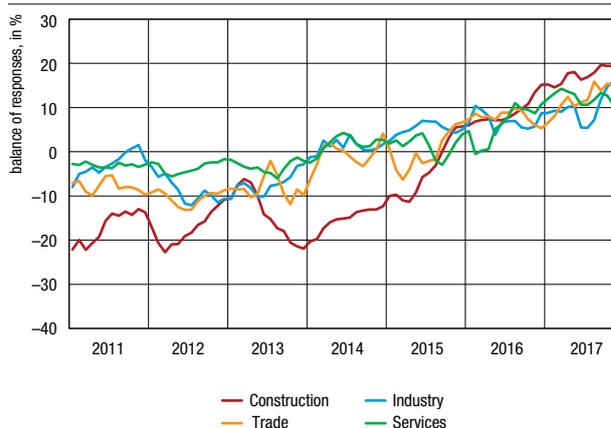
Figure 4.5 Average nominal gross wage by NCA activities seasonally adjusted data, contributions to the quarterly rate of change



Notes: Data on the average nominal gross wage by activity refer to data from the RAD-1 form, and from January 2016 to data from the JOPPD form. Data for the fourth quarter of 2017 refer to October.

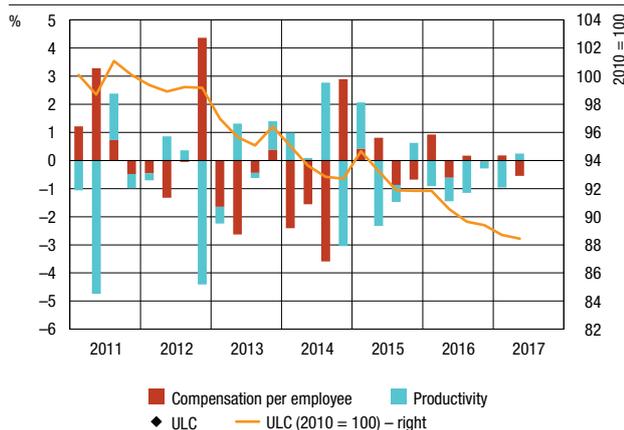
Sources: CBS and CNB calculations (seasonally adjusted by the CNB).

Figure 4.7 Employment expectations by sectors (in the following three months) seasonally adjusted data, three-member moving average of monthly data



Source: Ipsos (seasonally adjusted by the CNB).

Figure 4.6 Compensation per employee, productivity and unit labour costs seasonally adjusted data, quarterly rate of change and levels (2010 = 100)



Note: Productivity growth carries a negative sign.

Sources: CBS, CPII and Eurostat (seasonally adjusted by the CNB).

Table 4.1 Projection of labour market indicators for 2017 and 2018

	2012	2013	2014	2015	2016	2017	2018
Number of employed persons – CPII	-1.2	-1.5	-2.0	0.7	1.9	1.8	1.5
Number of employed persons – national accounts	-3.6	-2.6	2.7	1.2	0.3	1.8	1.5
Unemployment rate (ILO)	15.9	17.3	17.3	16.2	13.1	11.3	10.2
Average nominal gross wage	1.0	0.8	0.2	1.3	1.9	4.0	3.5
ULC	-1.0	-2.9	-2.6	-0.7	-3.0	2.7	2.0
Productivity	1.4	2.0	-2.7	1.1	2.9	2.0	2.2

Note: The year-on-year rate of change of the average gross wage until 2015 refers to data from the RAD-1 monthly survey, and from 2016 to data from the JOPPD form.

Sources: CBS, Eurostat, CPII and the CNB projection.

to civil servants and government employees were again raised in August.⁶

The increase in real wages in October was less pronounced due to the simultaneous growth in consumer prices.

According to the national accounts data, nominal unit labour costs continued to fall in the second quarter of 2017, but at a slower pace because compensation per employee decreased more than labour productivity.

Projected developments

In view of employment developments in the first eleven months, employment is expected to be 1.8% higher in 2017 as a whole than in the year before. The latest available data from the business confidence survey suggest the continuation of favourable expectations regarding employment trends in industry and

construction late in 2017 (Figure 4.7). The ILO unemployment rate might drop to 11.3% in 2017, which is a sharp fall from the 13.1% registered in 2016. As regards labour costs, the average nominal gross wage is expected to grow noticeably in 2017 (4%), due mostly to the sharp increase in private sector wages triggered by continued productivity growth and the labour shortage problem⁷, while public sector wages will grow thanks to the government's decision to increase the basis for the calculation of the wages of civil servants and government employees in three stages. The growth in net wages will be relatively stronger in 2017 owing to the legislative changes of January 2017, which, adopted under the new Income Tax Act (OG 115/2016), reduced the tax burden on labour.

Favourable labour market developments are expected to continue into 2018, although at a slightly lower intensity. Employment growth might lose some steam (1.5%) due to the possible unfavourable effect of the Agrokor Group restructuring on

6 The wage calculation basis for civil servants and government employees was to be raised by 6% in 2017. The increase was to be made in three stages and wages were to grow by 2% in January, August and in November.

7 The official CBS data show that a net figure of 20,000 Croatian citizens (about 0.5% of total the population) emigrated in 2016, while around 50,000 citizens emigrated in the period following the EU accession. However, it is possible that the number of emigrants is underestimated by the official statistics data as they include only those persons who changed the place of residence in the period longer than one year and informed the Ministry of the Interior thereof. Mirror statistics for Germany, Austria and Ireland show that a net figure of 130,000 Croatian citizens moved into these three countries from 2013 to 2016.

developments in the labour market. In line with this, the decrease in the ILO unemployment rate might be less intensive and the rate might fall to 10.2% in 2018. The wage growth on an annual basis is expected to slow down only marginally in 2018 (to

3.5%), mostly due to the lower increase in private sector wages, while the increase in public sector wages will continue at a similar pace due to the overall annual effect of the 2017 decision to raise the wages of civil servants and government employees.

5 Inflation

The indicators of current developments in overall and core inflation rose markedly in the second half of 2017, indicating the strengthening of inflationary pressures (Figure 5.1). This was due primarily to mounting imported inflationary pressures brought about by the rise in the prices of crude oil and other raw materials in the world market. The rise of administered prices, mostly electricity prices, also contributed to the growth of inflation. In addition, trends in the inflation diffusion index suggest that from mid-2017 there were more products in the HICP basket the prices of which went up.

The annual consumer price inflation rate increased from 0.7% in June to 1.4% in October. Core inflation decelerated, from 1.8% in June to 1.4% in October, largely as a result of a decrease in the annual rates of change in the prices of meat, footwear, communication and pharmaceutical products. The annual rate of change in industrial producer prices (energy excluded) increased only slightly from 0.5% in June to 0.6% in October, which shows that inflationary pressures from the production process are mild. Intermediate and capital goods were the main source of upward pressures on these prices. Broken down by components, the prices of energy and food made the largest contribution to the rise in the annual inflation rate in the second half of 2017 (Figure 5.1). The contribution of energy prices to the overall annual rate of inflation rose from -0.5 percentage points in June to 0.1 percentage point in October. This was mainly the result of the rise in electricity prices fuelled by the growth in renewable energy sources tariffs and the rise in refined petroleum product prices due to the growth in crude oil prices in the world market. The rise in electricity prices was only partly offset by their decrease in January brought about by a lower VAT rate on these products. The prices of liquefied natural gas also rose markedly. As regards food prices, their contribution to overall annual inflation rose from 0.6 percentage points in June

to 0.8 percentage points in October. The major contributors were the prices of vegetables which grew by about 10% in October relative to the same month in 2016, largely as a consequence of weather conditions. Moreover, a sizable increase was seen in the prices of oil and fats, notably butter. The slowdown in the annual growth rate of meat prices, most probably due to the fall in pork prices in the EU market, alleviated the upward pressures on food prices.

The acceleration in the annual inflation, although negligible, was the result of the service prices, with the rise in refuse collection prices mostly offsetting the decrease in the prices of telecommunication services. Non-food industrial goods without energy were the only component whose contribution to the overall annual inflation decreased in the second half of the year, but only mildly. The largest contribution was made by the slowdown in the annual growth in the prices of footwear, the seasonal fall in these prices being more pronounced during the summer months of 2017 than in the same period in 2016.

Euro area inflation also trended up, but at much smaller rate than in Croatia (Figure 5.3). The annual inflation rate in the euro area grew from 1.3% in June to 1.4% in October, due mainly to the rise in the prices of food and energy. As regards foods prices, a sizeable increase was seen in the prices of fruit, vegetables, oil and fats and in the prices of milk and dairy products. The growth in energy prices was for the most part the result of the rise in the prices of refined petroleum products stimulated by the growth in crude oil prices in the world market. Core inflation (which excludes the prices of energy, food, alcoholic beverages and tobacco) decelerated from 1.1% in June to 0.9% in October. The decrease in the annual rate of change in services prices (notably prices of package holidays, education and transport) contributed the most to this trend.

The annual inflation rate in Croatia, measured by the

Figure 5.1 Indicators of current inflation trends

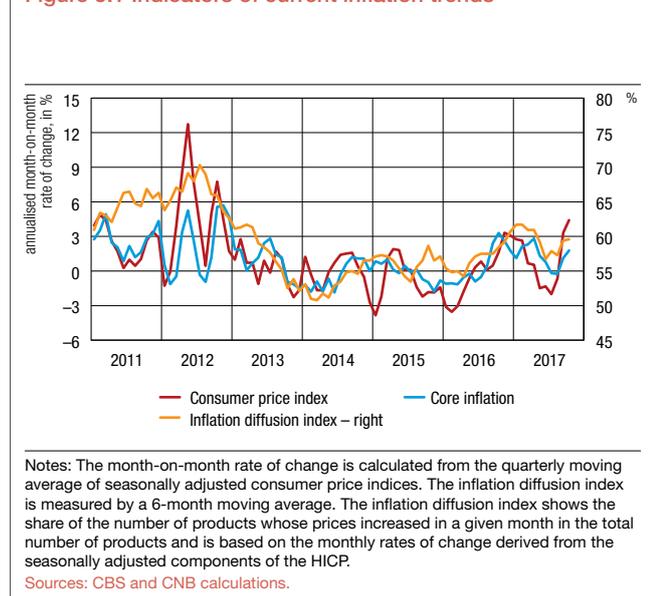


Figure 5.2 Year-on-year inflation rate and contributions of components to consumer price inflation

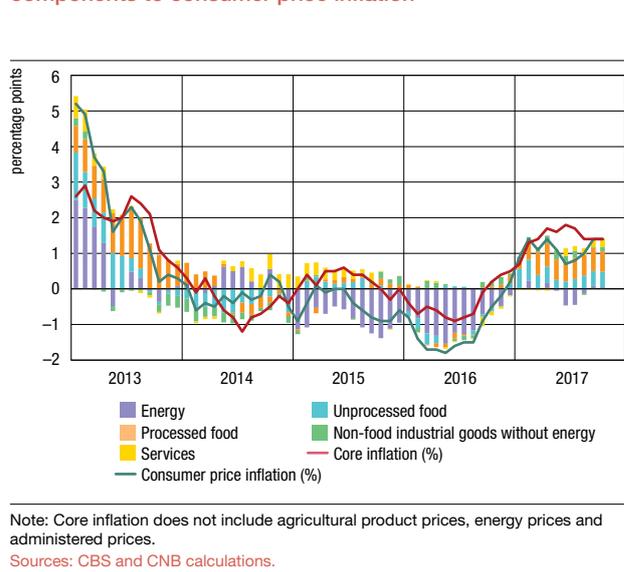


Table 5.1 Price indicators

year-on-year rate of change

	12/2016	3/2017	6/2017	9/2017	10/2017
Consumer price index and its components					
Total index	0.2	1.1	0.7	1.4	1.4
Energy	-1.1	-0.1	-2.8	0.5	0.3
Unprocessed food	1.7	4.2	2.2	4.5	4.6
Processed food	1.0	2.8	2.3	2.8	2.5
Non-food industrial goods without energy	0.2	0.3	0.8	0.1	0.5
Services	-0.1	-0.1	0.8	0.9	0.9
Other price indicators					
Core inflation	0.5	1.4	1.8	1.4	1.4
Index of industrial producer prices on the domestic market	-0.1	1.1	0.4	2.2	1.3
Index of industrial producer prices on the domestic market (excl. energy)	-0.9	0.1	0.5	0.9	0.6
Harmonised index of consumer prices	0.7	1.1	1.1	1.6	1.6
Harmonised index of consumer prices at constant tax rates	0.6	1.0	1.0	1.6	1.6

Note: Processed food includes alcoholic beverages and tobacco.

Source: CBS.

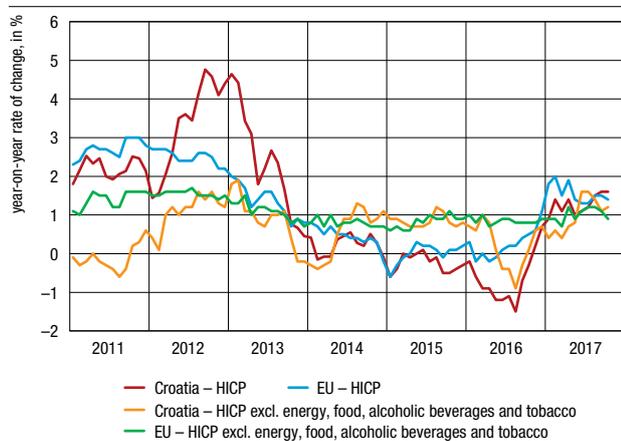
harmonised index of consumer prices (HICP), rose from 1.1% in June to 1.6% in October. The largest contribution to this increase, standing at 0.5 percentage points, came from the rise in energy prices (notably the prices of electricity and refined petroleum products). The contribution of food prices also increased, especially vegetable prices. As a result, the overall inflation was 0.2 percentage points higher in October in Croatia than in the euro area, while in June it was 0.2 percentage points lower. Core inflation (measured by the HICP excluding energy, food, alcoholic beverages and tobacco prices) slowed down in Croatia from 1.6% in June to 1.2% in October, but was higher than in the euro area, this difference standing at 0.3 percentage points in October.

Projected developments

The average annual consumer price inflation rate might accelerate in 2017 to 1.2%, from -1.1% in 2016, the result of the increase of the contributions of all three basic components of the consumer price index, particularly food and energy. In contrast,

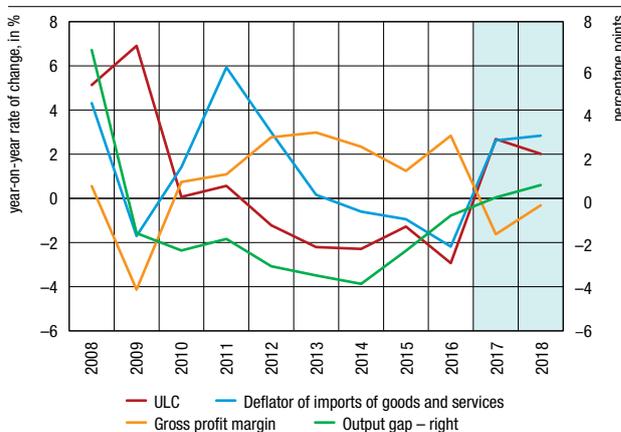
it is estimated that tax changes contributed to a decrease in the overall inflation in 2017, by about 0.2 percentage points.⁸ The growth in food prices reflects strong increase in vegetable prices brought about by weather conditions and the rise in prices of meat, milk and butter. It is estimated that the contribution of food prices to the overall average annual inflation rate in 2017 might be more pronounced and stand at about 0.8 percentage points. Moreover, it is estimated that the average annual rate of change of energy prices will increase from -5.6% in 2016 to about 0% in 2017 as a result of the acceleration in the annual growth in the prices of refined petroleum products and gas. The estimated rise in energy prices in 2017 was largely offset by the decrease in electricity prices. As regards the prices of non-food products excluding energy, the forecast shows a mild increase in the average annual growth of these prices, to 0.7% (from 0.3% in 2016), which mainly reflects the effects of tax reform (the increase in the VAT rate on catering services and the increase in excise duties on cigarettes and cars) and the strengthening of imported inflationary pressures.

Figure 5.3 Indicators of price developments in Croatia and European Union



Sources: CBS and Eurostat.

Figure 5.4 Domestic and foreign inflation indicators



Note: Gross profit margin is calculated as the difference between the annual rate of change of the GDP deflator and the annual rate of change of unit labour costs.

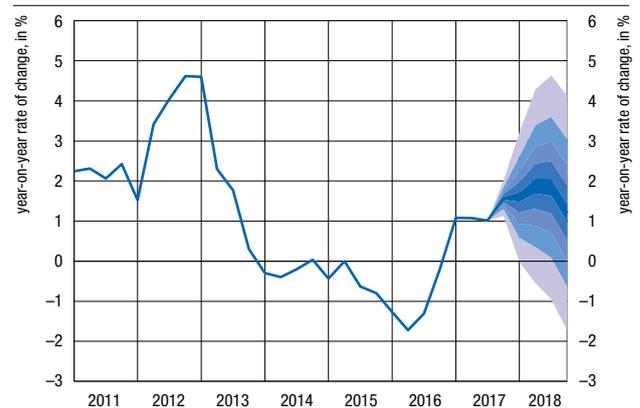
Sources: Eurostat, CBS and CNB calculations.

8 A significant negative effect (of -0.5 percentage points) on the overall inflation in 2017 came from the decrease in the VAT rate on electricity.

The forecast shows a 1.6% acceleration of the average annual consumer price inflation rate in 2018. The contribution of energy prices and the index of prices excluding food and energy are expected to increase, while the contribution of food prices to overall inflation might decrease. The year 2018 is expected to see a slight acceleration in domestic inflationary pressures from the demand side, having in mind a gradual increase of the positive domestic output gap. The continued growth of unit labour costs (although somewhat weaker than in 2017), which might result from faster expected growth in wages than in labour productivity, might contribute to a mild increase in inflation. In addition, import prices are expected to slightly accelerate on an annual level in 2018 (Figure 5.4). The forecast for 2018 also includes an annual increase in the average prices of Brent crude oil (in kuna) of about 9%. However, a downward trend in crude oil prices in the world market is expected to materialise during the year so that they are expected to be about 2% lower in the last quarter of 2018 than in the same period in 2017. The volatility of the annual rate of change in energy prices could to a large extent set the dynamics of the overall annual inflation rate in 2018, i.e. its acceleration to about 2% in the middle of the year and a subsequent slowdown to 1.0% towards the year-end.

Broken down by components, the annual rate of change in energy prices is expected to accelerate in 2018, mainly as a result of the pass-through of the rise in the prices of electricity, refined petroleum products and gas in the second half of 2017. Moreover, the anticipated slight increase of the annual growth of the index of prices excluding food and energy reflects the strengthening of domestic inflationary pressures (from the demand side) as well as the pass-through of the increase in the prices of imported raw materials and final goods on consumer prices. In contrast, the expected slowdown in the average annual growth of food prices in 2018 is in part the result of base period effect, i.e. disappearance of the effect of strong increase in food price in 2017. In addition, October 2017 saw the stabilisation of food raw material prices in the EU, with a sizeable decrease in the prices of pork, butter and powdered milk. This suggests that with a time lag, food consumer prices might decelerate in the

Figure 5.5 Projection of consumer price inflation



Sources: CBS and CNB calculations.

domestic market.

It is estimated that the risks of lower than projected or higher than projected inflation are balanced. Risks that might lead to lower than projected inflation include lower prices of crude oil (in the case of a strong increase in supply due for example to a rise in the unconventional production in the USA) and other raw materials in the world market. In addition, it is estimated that a contributor to lower inflation might be a potentially stronger impact of the strengthening of the kuna against the US dollar on the prices of imported products. On the other hand, there are several risks that could lead to higher than forecasted inflation. They include, inter alia, a stronger increase in crude oil prices due to geopolitical tensions, administered prices and agricultural products prices due to potentially unfavourable weather conditions.

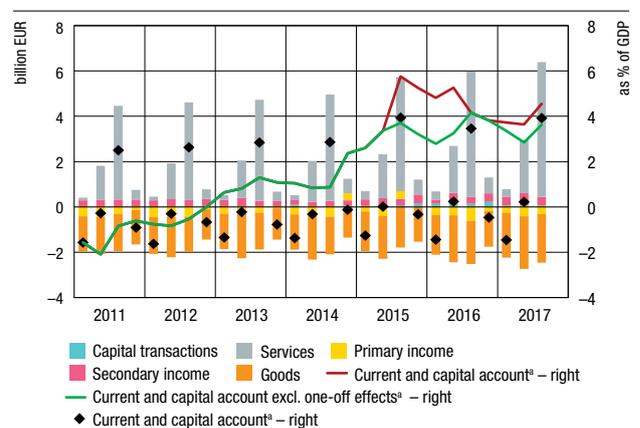
6 Current and capital account

In 2017, the current and capital account continued to be marked by a substantial surplus, trending up significantly in the third quarter of 2017 from the same period in 2016. In addition to an exceptionally good tourist season and its developments, temporarily outweighing the deterioration of the deficit in the foreign trade in goods, another contributor was a lower primary income account deficit associated with the situation in the Agrokor Group. The latter also explains the improvement of the overall surplus in the current and capital account in the previous part of the year when the increase of the trade surplus in services was accompanied by stronger increase of the trade deficit in goods. Observing cumulative values over the past year, the surplus in the current and capital account stood at 4.7% of GDP (or 3.7% of GDP if the effect of the Agrokor Group on bank profits is excluded) in the third quarter of 2017.

Foreign trade and competitiveness

The growth of the foreign trade deficit in goods accelerated significantly in 2017 from 2016, supported by the strengthening of personal consumption and exports that have an import

Figure 6.1 Current and capital account balance and its structure

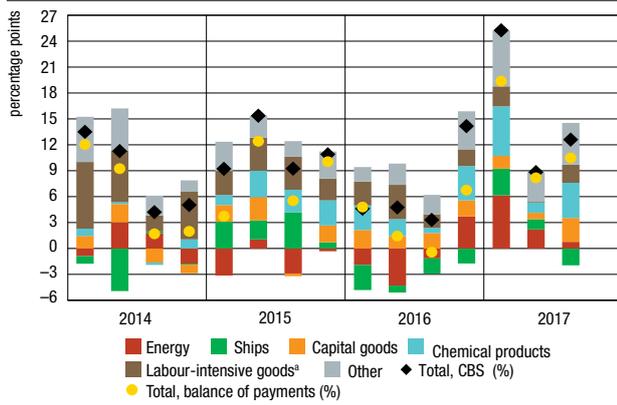


^a Sum of the last four quarters

Note: One-off effects include conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017.

Source: CNB.

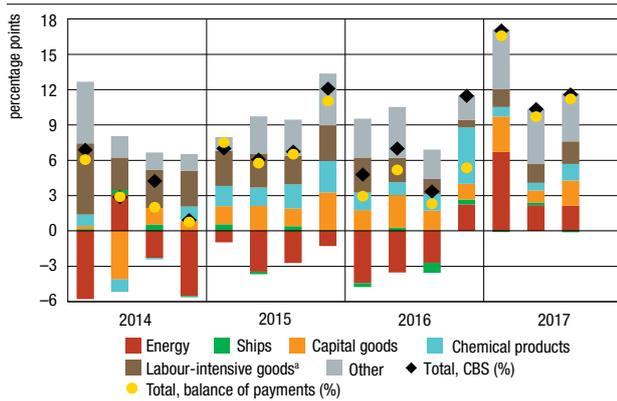
Figure 6.2 Goods exports
year-on-year rate of change and contributions



^a Labour-intensive goods (according to the SITC) include: textile, wearing apparel, footwear, leather, paper, cork and wood, furniture, manufactures of metals and non-metallic mineral manufactures, prefabricated buildings and manufactured articles n.e.c.

Source: CBS.

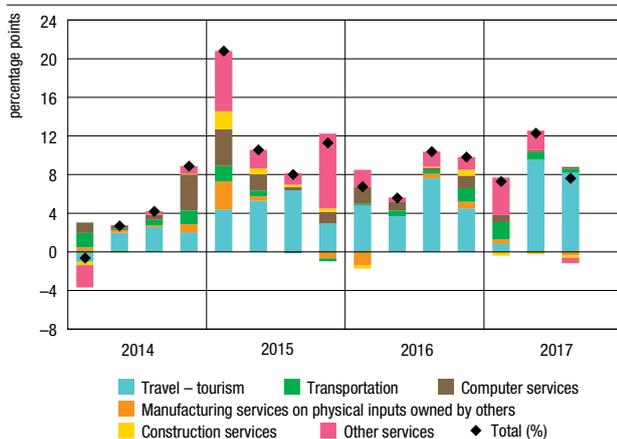
Figure 6.3 Goods imports
year-on-year rate of change and contributions



^a Labour-intensive goods (according to the SITC) include: textile, wearing apparel, footwear, leather, paper, cork and wood, furniture, manufactures of metals and non-metallic mineral manufactures, prefabricated buildings and manufactured articles n.e.c.

Sources: CBS and CNB.

Figure 6.4 Services exports
year-on-year rate of change and contributions



Source: CNB.

component. The growth of goods trade was particularly pronounced at the beginning of the year. Notwithstanding lower growth rates in the remaining part of the year, the third quarter again saw a two-digit annual growth rate (according to the balance of payments data). As a result, the total annual growth rate of goods exports and imports and the deficit stood at about 12% in the first three quarters of 2017.

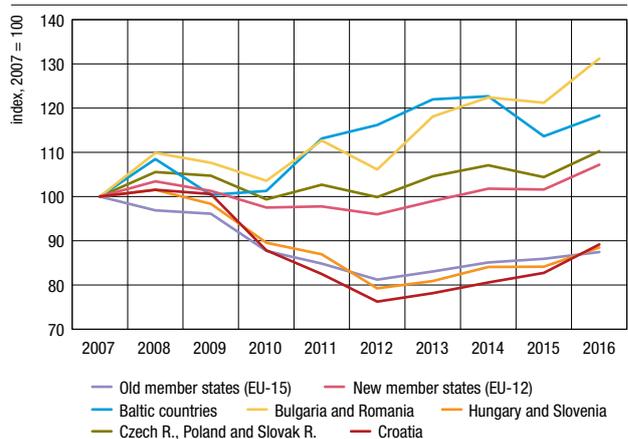
According to the CBS data, available by individual products, the widening of the foreign trade deficit in goods in the third quarter was strongest in the trade in energy products, miscellaneous manufactured articles, other transportation equipment (mostly ships) and food products. As for energy products, net imports of oil and refined petroleum products (stimulated by both the growth in prices and the higher growth in imported than exported volumes) grew at the strongest rate. In contrast, the balance of trade in medical and pharmaceutical products improved significantly.

The annual growth rate of total goods exports stood at a high 12.6% in the third quarter according to the CBS data. At the same time, owing to a substantial drop in ship exports, in part subdued by higher exports of refined petroleum products, the growth of exports (these two categories excluded) was even stronger (15.2%). As for other products, exports of medical and pharmaceutical products to Belgium and the USA were prominent. An increase was seen in exports of capital goods (notably electrical machinery, apparatus and appliances to Egypt and Turkey and power generating machinery and equipment to Bosnia and Herzegovina and the UK) as well as in exports of metal industry products.

Moreover, imports of goods also trended up, with a relatively high annual growth rate of 11.6% being observed in the third quarter. Contributors included, in addition to energy products, further strengthening of imports of capital goods, notably electrical machinery, apparatus and appliances from Slovenia and power generating machinery and equipment from Denmark. An increase was also seen in imports of metal industry products and chemical products (excluding medical and pharmaceutical products) from Italy and India, with a significant contribution being made by the growth of imports of scientific and control instruments from China and Belgium.

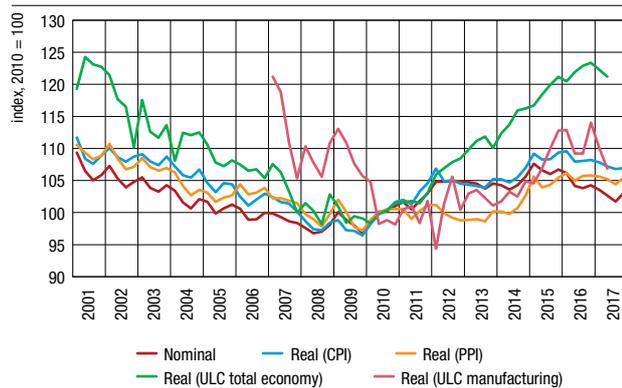
In contrast to the foreign trade in goods, the foreign trade balance in services continued to improve due for the most part to travel services marked by increased revenues and an even

Figure 6.5 World market share of exports of goods and services



Source: Eurostat.

Figure 6.6 Nominal and real effective exchange rates of the kuna



Notes: A fall in the index indicates an effective appreciation of the kuna. In the fourth quarter of 2017, data on the real exchange rate deflated by consumer and producer prices refer to October and data on the nominal exchange rate to October and November.

Source: CNB.

stronger relative growth in tourism consumption of residents abroad (although much smaller in absolute amount). Exports of tourist services, measured by revenues from non-resident consumption, grew by 9.8% in the third quarter from the same period in 2016 or at somewhat higher rate than the number of arrivals and nights stayed by tourists in commercial accommodation facilities (8.5% and 7.4% respectively). Tourists from Germany, Poland and the UK contributed the most to the growth of the volume indicators.

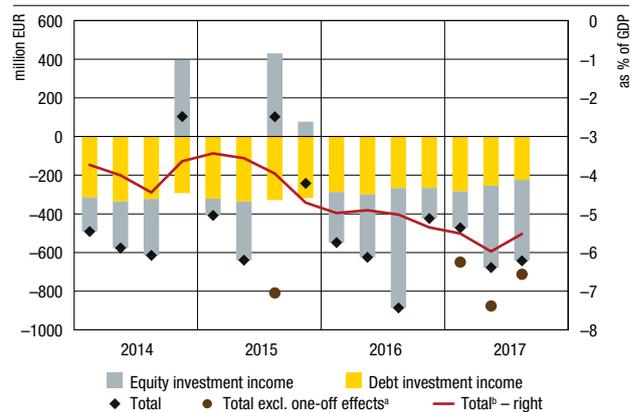
Favourable trends in exports of goods and services are corroborated by trends in the world market share. It grew for the fourth consecutive year in 2016, showing the positive impact of joining the EU stemming from easier, faster and simpler trade in goods and services within the common market and the effect of Croatia being observed as a safe and desirable tourist destination. Notwithstanding recent favourable positive trends, the overall market share of Croatian exports of goods and services is smaller than before 2009, due to the failure to counterbalance significant losses recorded in several years after the outbreak of the crisis in which Croatia's exports recovered at a much slower pace than global demand.

Overall, an improvement in price and cost competitiveness of exports did not go hand in hand with favourable developments in goods exports in 2017. The trend of mild appreciation of the real effective exchange rate of the kuna deflated by consumer and producer prices continued from 2016 into the first three quarters of 2017 due to the appreciation of the nominal effective exchange rate of the kuna. However, indicators for October suggest a slight improvement in price competitiveness. Cost competitiveness of exports, measured by the real effective exchange rate deflated by unit labour costs, was more favourable than in previous years; its improvement, which lasted almost uninterruptedly from 2010, came to a halt at the end of 2016.

Income and transactions with the EU

The deficit in the primary income account fell considerably in the third quarter of 2017 from the same period in 2016. This was mainly due to income from direct equity investment, with a considerable increase being observed in resident revenues from their foreign investments, notably in mining and quarrying and financial activity. Moreover, the value of expenditures based on the operations of domestic business entities in non-resident ownership decreased due to lower profits in the

Figure 6.7 Investment income

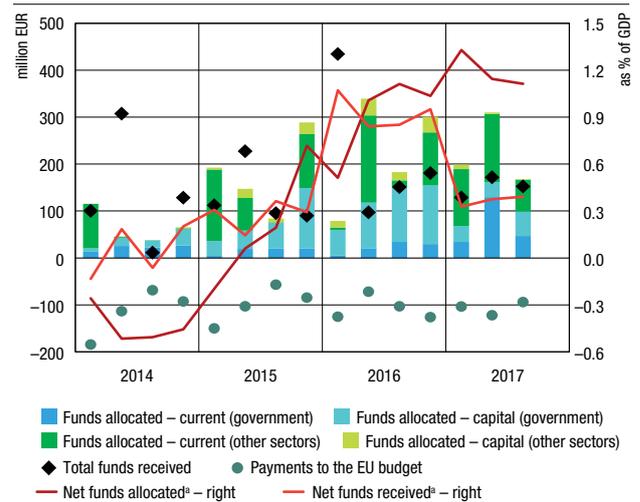


^a One-off effects include conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017.

^b Sum of the last four quarters, excluding one-off effects.

Source: CNB.

Figure 6.8 Transactions with the EU budget



^a Sum of the last four available quarters.

Notes: 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.

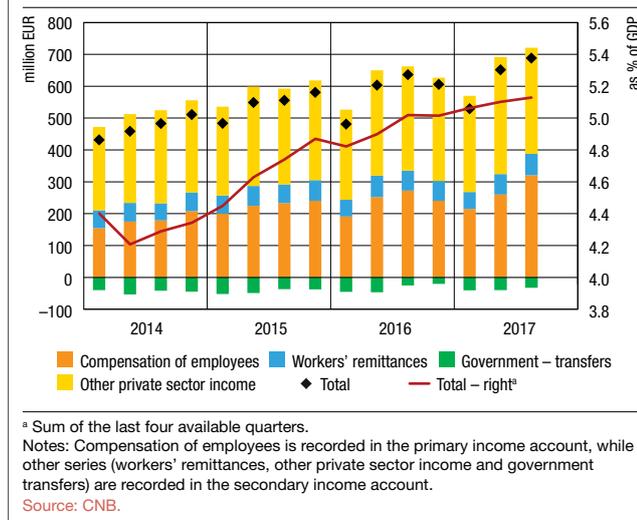
Sources: CNB and MoF.

financial activity accounted for by bank provisions for loans to the Agrokor Group. Concurrently, profits in other activities, after stronger growth in the first half of the year (particularly in the pharmaceutical and oil industry and trade), held steady in the third quarter at the level reached in the same period in 2016.

Also favourable was the effect of the decrease in interest expenses on external debt, to a small extent due to deleveraging of domestic sectors to foreign creditors and to a large extent due to discontinued interest accrual on the old external debt of the Agrokor Group.

Total net revenues arising from transactions with the EU budget remained almost unaltered in the third quarter of 2017 from the same period in 2016. However, their structure changed, with current revenues exceeding capital revenues. The positive balance in transactions with the EU budget, i.e. the

Figure 6.9 Other income, excluding investment income and transactions with the EU



surplus of funds utilised from EU funds over the payments to the EU budget, reported as the sum of the last four quarters, grew modestly, from 1.0% of GDP at the end of 2016 to 1.1% of GDP in September 2017. Other current income, with the exception of income from investments and transactions with the EU, also continued to trend upwards, the most significant being the growth in revenues of residents working abroad.

Projected developments

The deficit in the current and capital account is expected to broaden slightly in the last quarter of 2017 from the same period in 2016, while improvements of the balance in other accounts might alleviate the widening of the foreign trade deficit. In line with this and developments in the previous part of the year, the surplus in the current and capital account in 2017 might exceed that for 2016 by 0.6 percentage points and stand at 4.5% of GDP. However, as mentioned above, this improvement entirely reflects the effect of the crisis in the Agrokor Group on bank profits (the estimated surplus in the current and capital account in 2017, the Agrokor Group excluded, decreases to 3.5% of GDP).

With a similar relative dynamics of exports and imports, the foreign trade deficit is expected to increase by more than one tenth in 2017. The expected continuation of the growth of Croatia's market share of exports of goods and services reflects further improvement in non-price competitiveness factors.

In 2017, tourism should again make a significant positive contribution to the growth of net trade surplus in services, which grew by about 8% annually for the fourth consecutive year. The growth of revenues from travel services might be somewhat stronger than in 2016, the good results being attributable to substantial investment in accommodation capacities and ancillary activities, the perception of the country as a relatively safe tourist destination and economic growth in the main outbound markets, with the recovery of domestic economic activity stimulating tourist consumption of residents abroad.

The balance of investment income might improve in 2017 on the account of the earlier mentioned effect of the Agrokor Group. This effect excluded, the deficit could be somewhat

higher than in 2016 due to better operating results of banks based on other activities as well as further growth in profits of other enterprises in foreign ownership. By contrast, these developments are mitigated by improved profitability of foreign enterprises in resident ownership, which has rebounded after losses recorded in the previous five years (due in part to the effect of value adjustments). In addition, at the entire 2017 level, interest expenditures for foreign debt liabilities of domestic sectors should trend downward. Other income in the current and capital account might also edge up due to both revenues from compensation of employees working abroad and the value of net transactions with the EU budget.

In 2018, the overall surplus in the current and capital account might stand at 3.7% of GDP, the decrease from the previous year being mostly the result of the continued growth of the goods trade deficit and the weaker effect of the Agrokor Group on the primary income balance. This trend should be mitigated by positive developments in the trade in services and higher transfers.

Positive effects of non-price competitiveness might continue to contribute to stronger growth of goods exports than foreign trade demand, and with its mild slowdown in 2018, mainly in trading partners in the euro area, the growth of Croatian exports might slow down. Moreover, the relatively stronger growth of imports is based on the strengthening of domestic demand and increased use of EU funds, while in line with the moderate slowdown of exports, and having in mind the Croatian economy import dependency, the growth of imports might slow down. Moreover, higher global prices of oil will contribute to the widening of the goods deficit.

Having in mind that tourism is highly sensitive to the changes in macroeconomic developments and political and safety conditions, we have kept a conservative estimate of tourism revenues (relative to the outturns in the past few years) of about 5% for 2018, slightly above the expected growth of prices in the tourism industry. Although expectations include a further increase in net exports of other services, the growth of the total trade surplus in services will slow down due the dominant influence of the projected growth in tourism.

In 2018, the shortfall of investment income, after a temporarily halt in 2017, might trend up again as a result of much lower effect of the Agrokor Group. With the continuation of economic growth, the rise in the profits of foreign-owned enterprises will work in the same direction. Income from debt investments should not change to a large extent, their developments being determined by further deleveraging and by an expected mild increase in interest rates on foreign financial markets. For more details on the impact of the income yield on foreign investment on the current account balance see Box 2. Other private sector income might continue to increase slightly, like net receipts from transactions with the EU budget, which at the end of 2018 might still stay below 2% of GDP.

As for the risks to the projected current and capital account balance, negative risks, inter alia, include a pronounced growth in interest rates and volatility in the global financial market. By contrast, considering the competitive advantages of Croatian tourism in the global environment and the relatively conservative projection of the growth in tourism revenues, the upside risk to the projection involves a possibly stronger growth of tourism revenues.

Box 2 Income yield on foreign investment in Croatia and comparable countries

This Box analyses income from foreign investment and the impact of the accumulation of net foreign liabilities, i.e. the relative costs of financing these liabilities (implicit yield), on the current account balance. Croatia's net foreign liabilities surged in the 2000-2016 period, while its net expenditures on foreign investment grew at a moderate rate. This indicates that relative non-resident income (yield) from these investments have trended down in both debt and equity investment. However, it is expected that the relative yield on equity investment in Croatia and equity investment inflows will improve in the future, which, notwithstanding deleveraging and the relatively small costs of debt liabilities financing, might contribute to a more pronounced growth of expenditures in the primary income account of the balance of payments in Croatia, as has been the case in other CEE countries.

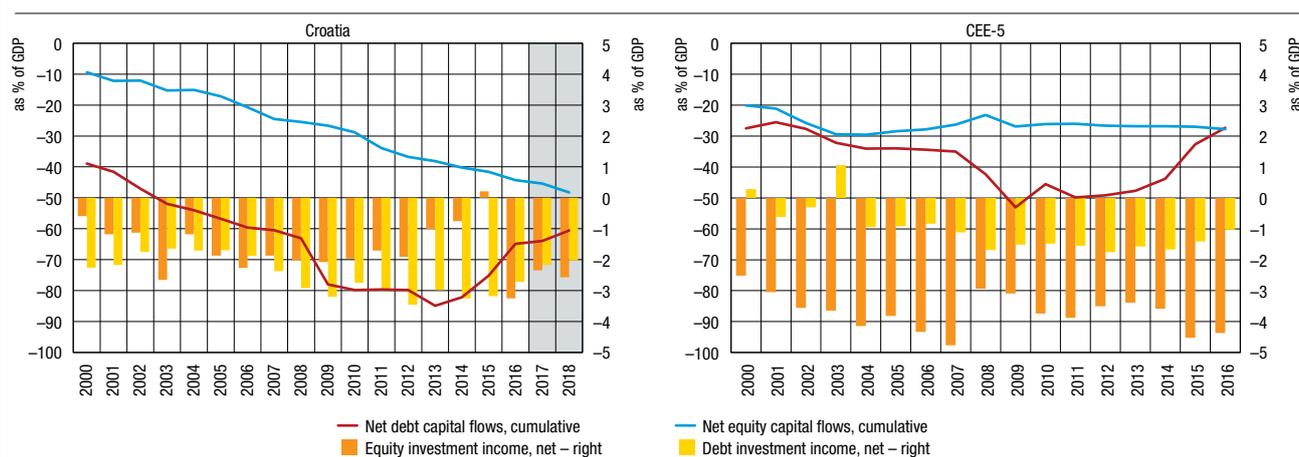
For almost two decades, i.e. until 2013, Croatia continuously recorded a deficit in the current account of the balance of payments. This deficit was financed from foreign savings (inflow of foreign capital), which in turn generated net expenditures in the primary income account of the balance of payments. In the balance of payments statistics, the primary income from equity investment refers to the profit of non-resident owners of business entities⁹, while the primary income from debt investment includes yields on debt securities and interest income from credit relations between residents and non-residents. The volume of total net expenditures is set on the one hand by the level of accumulated net foreign liabilities and on the other by the relative cost (implicit yield) of the individual types of capital used to finance the current account deficit.

Croatia increased its net foreign liabilities from -50% of GDP to -110% of GDP in the 2000-2016 period.¹⁰ These net liabilities

generated on average about 4% of GDP annually of net expenditures on foreign investment in the account of primary income (Figure 1). The share of total net expenditures in GDP was relatively stable in the reference period, although the level of net foreign liabilities at the same time grew by as much as 60% of GDP. By comparison, in the same period CEE countries accumulated on average additional net foreign liabilities of only 10% of GDP (from -60% of GDP to about -70% of GDP) due to the strong growth in liabilities being offset by the concurrent increase in foreign assets. However, notwithstanding the smaller level of net liabilities, these countries recorded on average somewhat higher annual net expenditures on foreign investment than Croatia (about 5% of GDP), and they also trended up much faster. This raises the question how the structure of capital flow and its relative price (cost) influence the net expenditures on investment. In the remaining part of the Box we therefore estimate relative costs (so-called implicit yield rate¹¹) of individual types of foreign investment and their effect on developments of total net expenditures in Croatia's balance of payments and that of comparable CEE countries. Separately are analysed yields on debt and equity investments due to their different determinants and macroeconomic implications.

Income generated by non-residents on the basis of equity investment should reflect economic trends in the country of investment. It also depends on sectoral allocation of capital as well as on relative profitability of enterprises owned by non-residents relative to enterprises in predominantly domestic ownership. Because it involves transition markets it is not surprising that relative yields generated by non-resident investors in CEE countries are quite high (Figure 2.b), notably in those countries which during the transition period generated higher rates of

Figure 1 Capital flows and foreign income

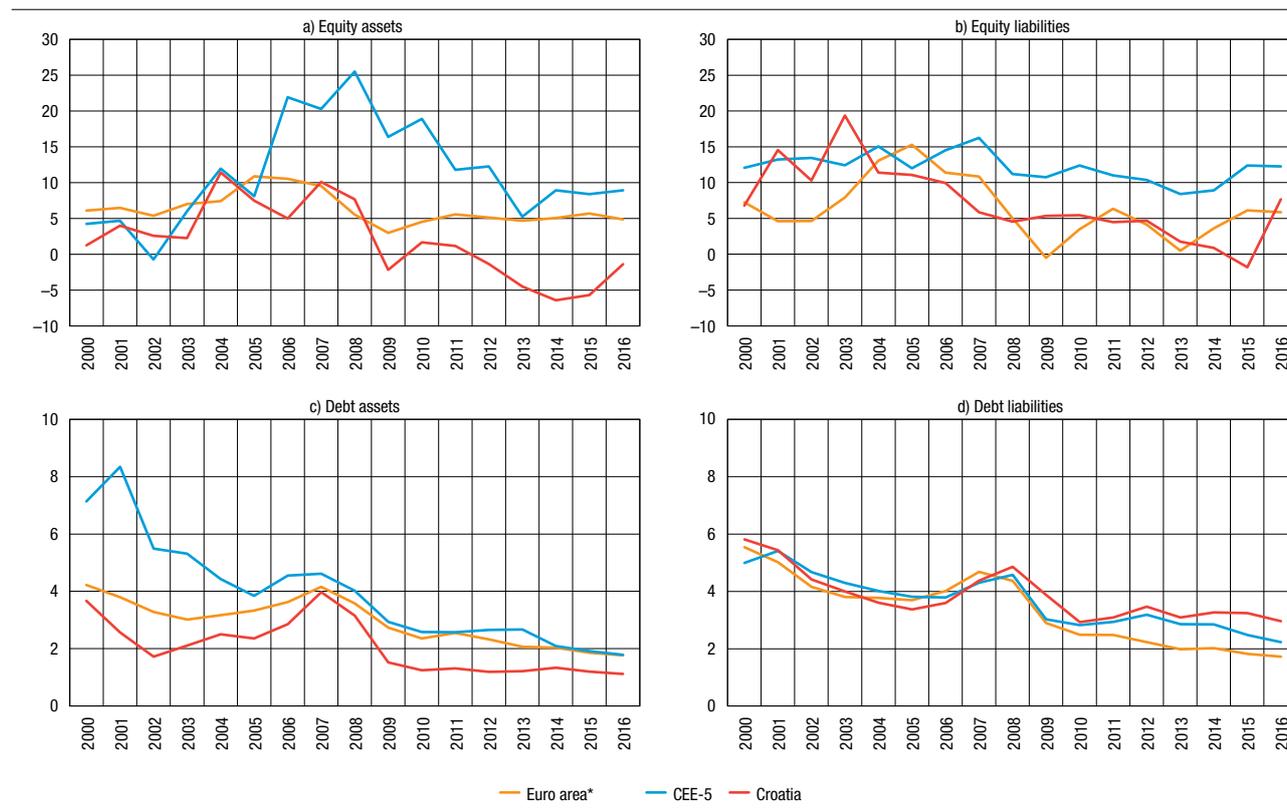


Note: CEE-5 countries include the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia.

Sources: Eurostat and CNB projection.

- 9 In addition to primary income, foreign investors also generate a capital gain, which is shown in the statistics of the international investment position as the change in market value of financial assets/liabilities. However, due to the absence of more detailed data on value adjustments it is not possible to separate capital gains from other value adjustments (exchange rate differences etc.) so that the return on foreign investment is estimated in this Box only on the basis of the realised income.
- 10 Net foreign liabilities represent the difference between foreign assets and foreign liabilities which include direct, portfolio and other investment in the balance of payments statistics. The balance of assets and the balance of liabilities do not correspond to the international investment position and as of 2000 they are constructed as cumulative of the financial account flows in order to exclude the effect of value adjustments. Equity assets and liabilities include direct equity and portfolio equity shares, with the remaining part being accounted for by debt assets and liabilities. International reserves are excluded from the analysis.
- 11 An implicit yield rate is calculated as the ratio of the primary income paid out in a year (t) and the balance of the respective foreign assets/liabilities at the end of the previous year ($t-1$), constructed in line with the cumulative financial account flows.

Figure 2 Implicit yield rates on foreign assets and liabilities



Note: CEE-5 countries include the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia.
Sources: Eurostat and CNB calculations.

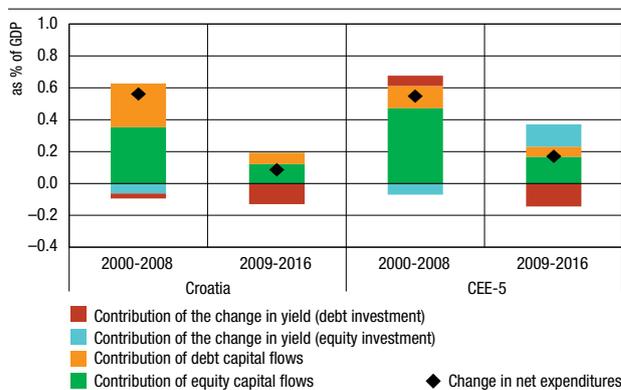
economic growth. Hence, the implicit yield rate is the highest in the Czech Republic and Poland, which is most probably the result of the favourable structure of foreign direct investments (in highly profitable and mostly export-oriented activities), and in part of weaker effects of the crisis on the profitability of enterprises in these countries. After the outbreak of the crisis, the relative yield on equity investment edged down, which is expected considering the weakening of the process of real convergence and the impact of the crisis on the profitability of enterprises. Croatia, in addition to Slovenia, is the country with the lowest yield rate generated by non-residents based on their equity investment. As a result, yields from investments in Croatia stood at an average of 7% annually or 4 percentage points less than in CEE countries. After the outbreak of the crisis, yields resumed a downward trend and went into negative territory in 2015 due to the one-off effect of the conversion of Swiss franc loans on the profits of Croatian banks in non-resident ownership. Among comparable countries, the only similar case was that of Slovenia, in 2012, when that country was hit by the banking crisis.

The analysis of debt investment income shows that the dynamics of relative yields (implicit borrowing cost) was very different from that of equity investment. Specifically, the relative costs of borrowing were only in part related to economic trends in the domestic market (through country risk perception), with a more prominent role played by conditions in the foreign financial market. For almost a decade, since the outbreak of the financial crisis, the foreign market was under the influence of exceptionally low interest rates which enabled cheaper borrowing and refinancing of existing debts under more favourable terms.

These trends also affect implicit borrowing costs of Croatia, their downward trend being less pronounced than in comparable

countries (Figure 2.d), while the difference is especially pronounced in portfolio investments. While implicit yields of non-residents on bonds of most countries have trended downward since the crisis, yields on bonds of Croatian debtors have trended upward. One portion of that increase refers to the government sector. The growth of the yield on bonds of the domestic corporate sector is even more pronounced, exceeding 8% annually since 2008. It is also significant that the implicit cost of the external debt in the euro area countries, including new member

Figure 3 Impact of yields and capital inflows on net expenditures on foreign investment



Notes: Contributions of the change in yields (capital flows) in a year represent the change in net expenditures on investment which would arise under the assumption of the absence of the change in capital flows (yields) in that year. Contributions are normalised by the GDP share for the purpose of simplified comparability among countries.
Sources: Eurostat and CNB calculations.

states (the Baltic countries, Slovenia and the Slovak Republic), is as a rule lower than in other EU member states outside the monetary union.

From the perspective of CEE countries as investors in foreign markets, their direct investors also generated relatively high yields, which exceeded the average yields generated by euro area investors (Figure 2.a). Croatian investors, however, generated on average much smaller yields, which were even negative after the outbreak of the financial crisis. The major contributor to this trend was the oil industry due to significant losses related to the value adjustments of assets in countries hit by war or political instability. Croatia also generated yields on debt assets lower than those in comparable countries (Figure 2.c), with these assets being largely composed of money assets and deposits of banks abroad and foreign assets of investment funds.

Figure 3 shows how in the previous period the described implicit yields and capital flows affected the growth of net expenditures on foreign investment. The decrease in relative yields in the 2000-2016 period alleviated the negative impact of the growth in Croatia's net foreign liabilities. The largest positive contribution came from the fall in relative costs of borrowing, while the changes in yields on equity investment had a positive effect on the

balance of payments only after the decrease in profitability of enterprises after 2009. In contrast to Croatia, in CEE countries yields on equity investment remained relatively high even after the outbreak of the global crisis due to strong economic activity, which increased net expenditures in the balance of payments. Concurrently, after 2009, equity capital inflows in these countries were also somewhat more pronounced than in Croatia, which additionally contributed to the growth of net expenditures on investment.

In line with the analysis made it is expected that after the one-off decrease in equity yields in 2017¹² their impact on the current account balance might increase in Croatia in the coming period. While on the one hand the costs of foreign borrowing, notably after recent decrease in risk perception for Croatia, might remain relatively low during a certain time period, yields on equity investment of non-residents might begin to improve at a much faster pace, approaching the level currently recorded by other CEE countries. As it is simultaneously expected that most of the capital inflow in the forthcoming period will come from equity investments, which as a rule bear a higher yield rate, the growth of net expenditures on foreign investment might become an increasingly important factor for the deterioration of the current account balance.

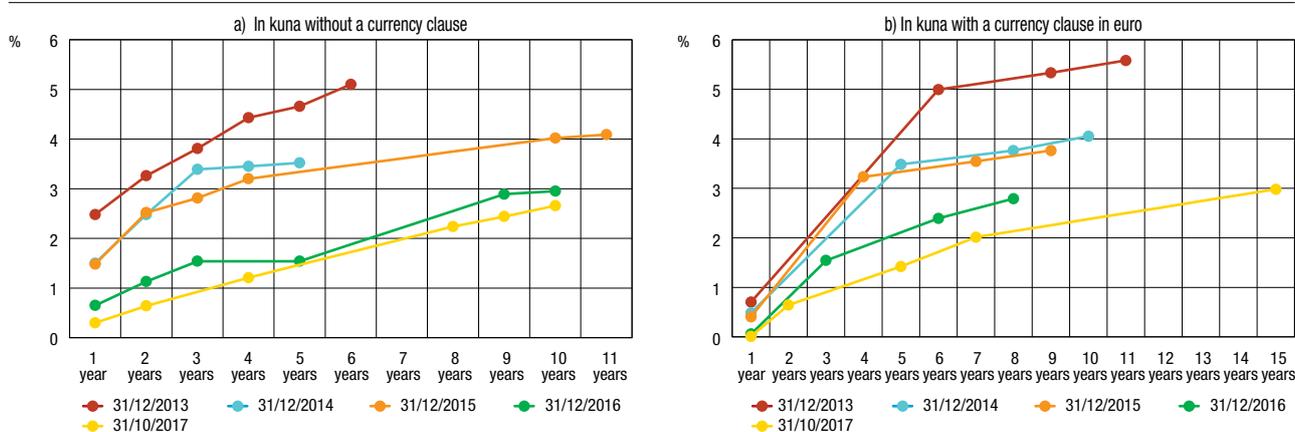
7 Private sector financing

Domestic sectors' financing conditions generally continued to improve in the second half of 2017. The interest rate paid by the government on short-term borrowing through one-year kuna T-bill issues in the domestic market fell from 0.65% in December 2016 to a record low of 0.25% in November 2017, while the interest rate on one-year euro T-bills decreased to 0.01% in October 2017. The government in November refinanced EUR 1.5bn worth of maturing T-bills by a new 455-day T-bill issue with an interest rate of 0.1%, which was 0.6 percentage points lower than that charged on the previous issue. The yield curve on Croatian government bonds indicates that longer-term government financing conditions were also more favourable than in the previous years (Figures 7.1a and 7.1b). In addition, in July 2017 the

government issued a HRK 3bn bond with a euro currency clause, with an interest rate of 3.25% and a maturity of 15 years, with the result that the kuna yield curve for bonds with a currency clause was extended (Figure 7.1b). November saw two more bond issues: a 12-year EUR 1.275bn bond with an interest rate of 2.75% and a 6-year HRK 5.8bn bond with an interest rate of 1.75%.

The government's foreign borrowing cost, estimated by the sum of the EMBI for Croatia and the yield on the German government bond, continued to decline. Standing at 2.3% in late November this year, it was about 0.7 percentage points lower than at the end of the previous year (Figure 7.3). CDS for Croatia narrowed by around 120 basis points during the past year, reaching about 100 basis points at the end of November,

Figure 7.1 Yield-to-maturity on RC bonds



Notes: The dots show the achieved yields, while other values have been interpolated. Data for one-year yield refer to the achieved interest rate on one-year kuna T-bills without a currency clause.

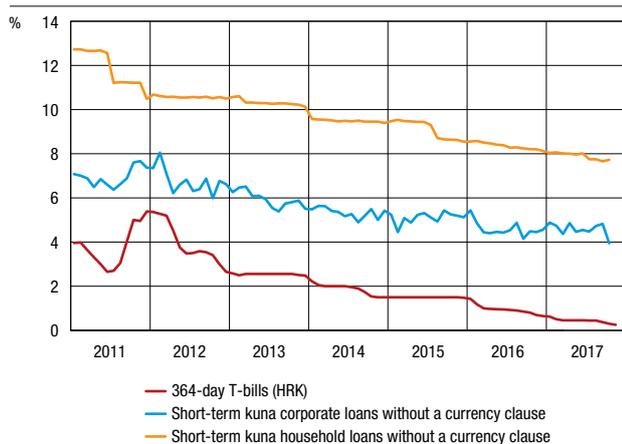
Source: CNB.

Notes: The dots show the achieved yields, while other values have been interpolated. Data for one-year yield refer to the achieved interest rate on one-year kuna T-bills with a currency clause in euro, while data for the end of 2016 refers to November.

Source: CNB.

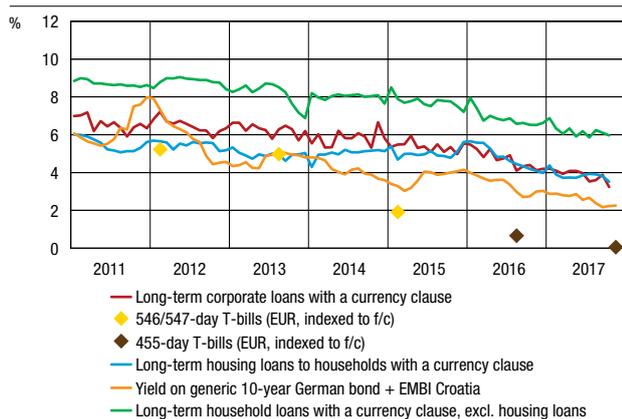
12 One-off decrease in 2017 reflects lower profitability of banks in foreign ownership due to their exposure to the Agrokor Group.

Figure 7.2 Short-term financing costs in kuna without a currency clause



Sources: MoF and CNB.

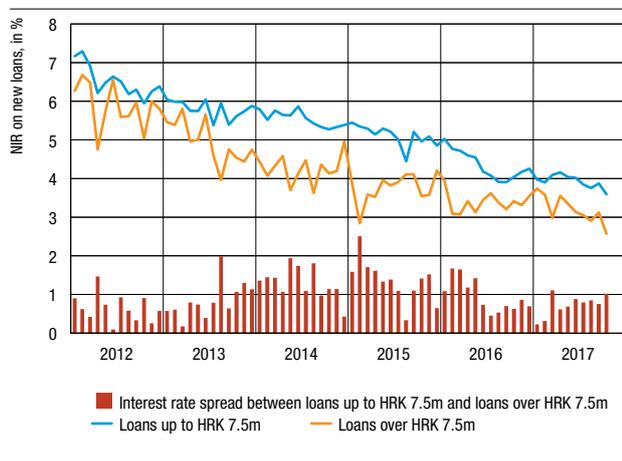
Figure 7.3 Long-term financing costs in kuna with a currency clause and in foreign currency



Note: EMBI, or the Emerging Market Bond Index, shows the spread between yields on government securities of emerging market economies, Croatia included, and risk-free securities issued by developed countries.

Sources: MoF, Bloomberg and CNB.

Figure 7.4 Bank interest rates on loans to non-financial corporations by volume



Source: CNB.

another indication of improving financing conditions. Due to such conditions, Standard & Poor’s upgraded Croatia’s long-term credit rating outlook from stable to positive in September.

Corporate financing costs continued to decrease slowly. In the third quarter of 2017, the average interest rate on short-term corporate borrowing hovered around the levels it reached in the first half of the year before falling below 4% in October. Interest rates on longer-term corporate loans continued a downward trend (Figures 7.2 and 7.3). A breakdown of financing costs by the amount of loans granted (Figure 7.4) shows that interest rates on loans exceeding HRK 7.5m remained lower than interest rates on loans of smaller amounts, the reason being that larger amount loans are mostly used by large enterprises with greater collateral potential and stronger creditworthiness. The high financing cost remained one of the main reasons why small enterprises refrained from the use of loans, which is also suggested by the findings of the Survey on the access to finance of SMEs (see Box 3).

Interest rates on long-term household loans on average decreased slightly from July to October 2017 compared with the first half of the year and the end of 2016 due to a decline in interest rates on consumer and other loans, while interest rates on housing loans displayed a significant decrease as late as in October. The costs of short-term household borrowing also edged down (Figures 7.2 and 7.3).

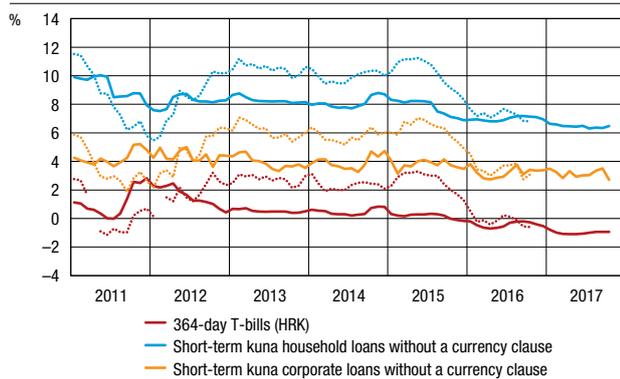
The continued maintenance of high liquidity in the banking system and the reduction of the costs of banks’ sources of funds were the causes contributing to more favourable trends in interest rates on private sector financing. Both the national reference rate (NRR)¹⁵ and the EURIBOR rates declined steadily, the latter falling to record low levels. Real interest rates, deflated by expected inflation, on average stagnated in 2017 at somewhat lower levels than in 2016 (Figure 7.5).

After easing for six successive quarters, credit standards on loans to enterprises tightened mildly in the second and third quarters of 2017 (Figure 7.6), with credit standards on loans to medium-sized and small enterprises tightening the most. The results of the bank lending survey show that the tightening of credit standards was primarily due to the industry or firm-specific outlook, while interbank competition growth and favourable liquidity conditions made a continued impact on the easing of credit standards. Demand for all types of corporate loans continued to grow, although the pace of growth decelerated slightly in the third quarter, with the deceleration once again especially noticeable in demand from small and medium-sized enterprises. Demand growth was primarily driven by enterprises’ needs for the financing of inventories and working capital as well as gross fixed capital formation.

Credit standards for household loans continued to ease in the third quarter of 2017 (Figure 7.7). The easing of credit standards for housing loans as well as for consumer and other loans, was primarily the consequence of interbank competition, reduced costs of banks’ sources of funds and positive expectations regarding general economic activity. There was almost no growth of demand for consumer and other loans in the third quarter, in contrast with demand for housing loans, which rose strongly in the second and third quarters. The main factors driving the growth of demand for housing loans include consumer confidence, a favourable real estate market outlook and the government’s housing loans subsidy programme, which probably temporarily halted the growth of demand for other loan

¹⁵ The national reference rate (NRR) is the average interest rate paid on deposits by the banking sector. It is used as one of the benchmark interest rates for determining the level of the variable component of variable interest rate on loans, in accordance with Article 11a of the Credit Consumer Act (pursuant to the Act on Amendments to the Consumer Credit Act, OG 143/2013).

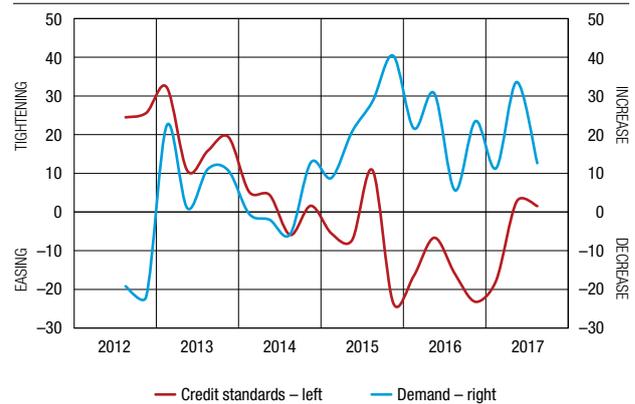
Figure 7.5 Achieved and expected real interest rates



Note: Full lines show the expected real interest rates, i.e. the nominal interest rates deflated by the expected values of the consumer price index under the CNB's official projection, and the accompanying dotted lines show the achieved real interest rates, i.e. the nominal interest rates deflated by the achieved values of the consumer price index.

Sources: CNB, CBS and CNB calculations.

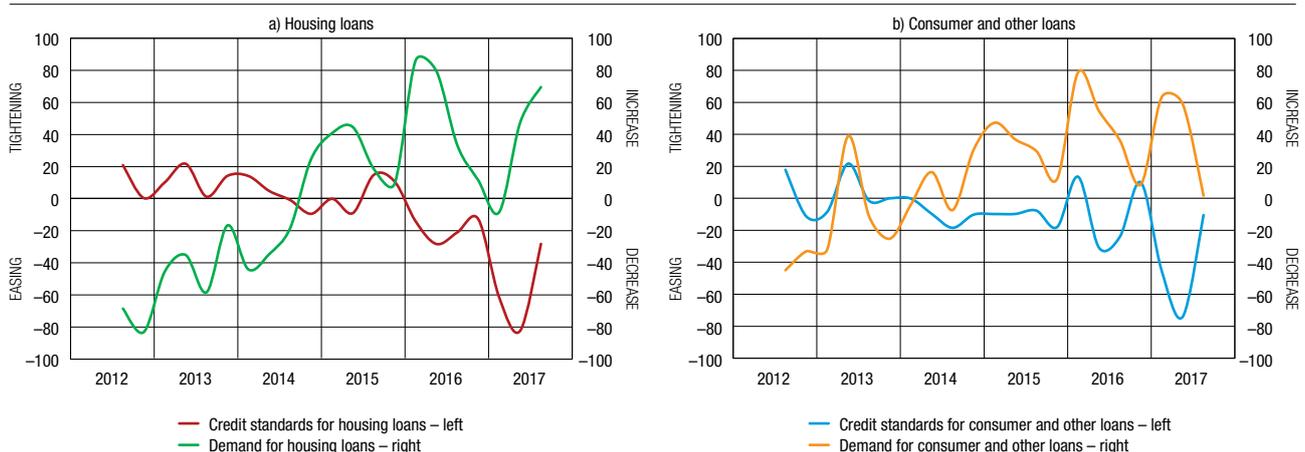
Figure 7.6 Credit standards and corporate demand for loans



Note: Data show the net percentage of banks weighted by the share in total corporate loans.

Source: CNB.

Figure 7.7 Credit standards and household demand for loans



Note: Data show the net percentage of banks weighted by the share in total household loans.

Source: CNB.

types (according to banks' responses in the survey, demand for consumer and other loans is expected to resume growth in the fourth quarter).

The total debt of non-financial corporations¹⁴ decreased in the third quarter of 2017, primarily due to the deleveraging of enterprises vis-à-vis foreign creditors and, in a smaller degree, with respect to domestic creditors. However, this had no significant effect on the annual growth rate of total corporate debt (1.2%, transaction-based), which remained at almost the same level for a year (Figure 7.8). The annual growth resulted from an increase in borrowing by private enterprises (in the domestic and foreign markets), while the total debt of public enterprises decreased. Public enterprises mildly increased their domestic debt and deleveraged abroad.

Domestic credit institutions' placements to non-financial corporations rose by HRK 1.5bn (1.6%) in the first ten months of 2017 (transaction-based, Figure 7.9). The rise was almost entirely generated in the first half of the year, while the period

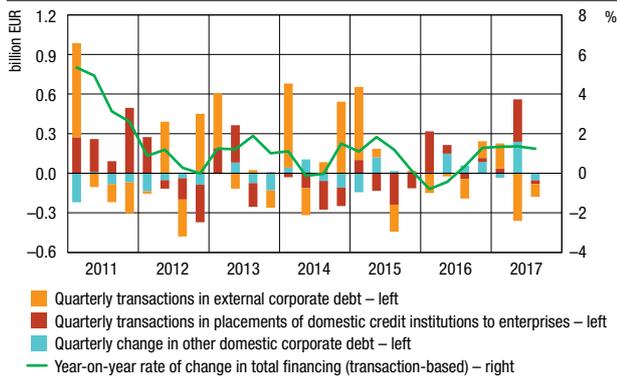
from July to October saw a decline in corporate placements. As a result, the annual growth of corporate placements decelerated to 1.4% at the end of October (transaction-based), which is half the growth recorded at the end of June. In contrast, the annual rate of change in corporate placements calculated on the basis of nominal values remained negative, standing at -2.4% at the end of October, as a result of the sale of non-performing placements.

The breakdown of the distribution of loans by activity shows that the growth of corporate loans in the first ten months of 2017 was mostly driven by lending to accommodation and food service activities (Figure 7.10). In contrast, deleveraging continued in construction and this year started in trade. The analysis of loans by purpose indicates that the strong annual growth of investment loans slowed down considerably in September and October, which, in turn, resulted in the deceleration of total credit activity (Figure 7.11).

In contrast with corporate placements, household placements had been increasing at an accelerated annual rate since October

14 The total debt of non-financial corporations includes the debt of private and public enterprises (excluding public enterprises included in the general government sector).

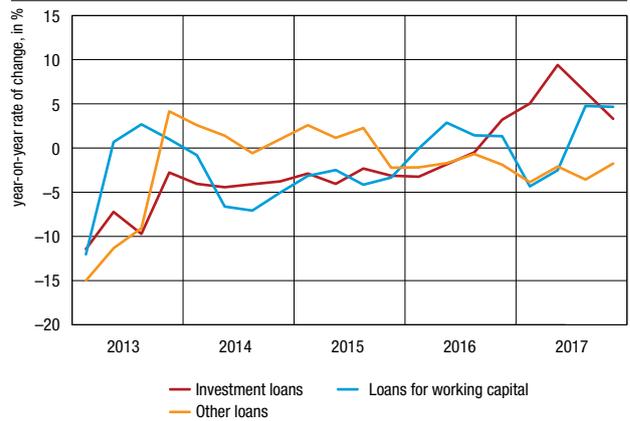
Figure 7.8 Corporate financing



Notes: Other domestic financing includes borrowing from domestic leasing companies and the CBRD. Foreign financing includes borrowing from foreign banks and foreign affiliated enterprises and excludes the effect of debt-to-equity transactions. Rate of change was calculated according to transactions (except for other domestic debt).

Sources: HANFA, CNB and CNB calculations.

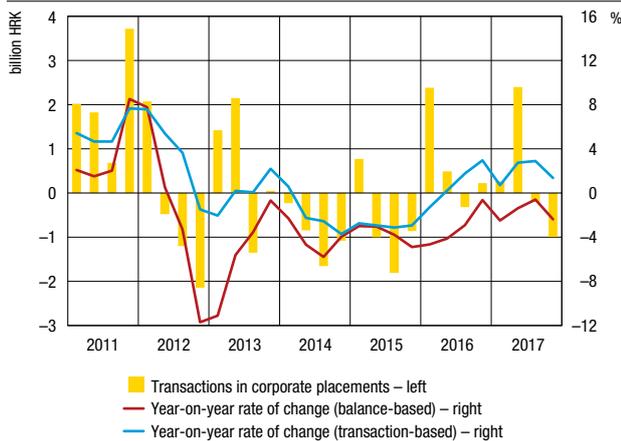
Figure 7.11 Growth of corporate loans by purpose transaction-based



Note: Data are up to October 2017.

Source: CNB.

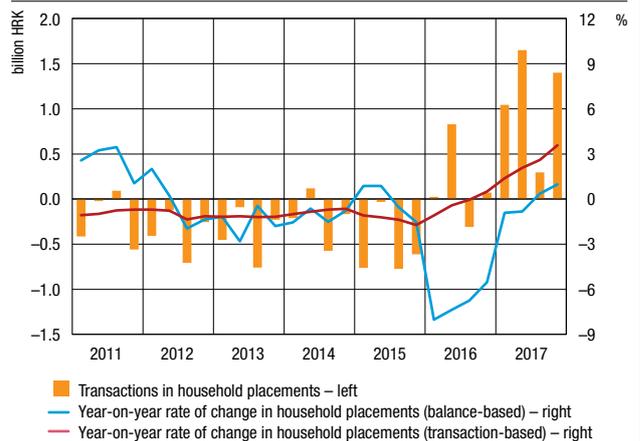
Figure 7.9 Corporate domestic placements of credit institutions



Note: Data for the fourth quarter of 2017 are up to October.

Source: CNB.

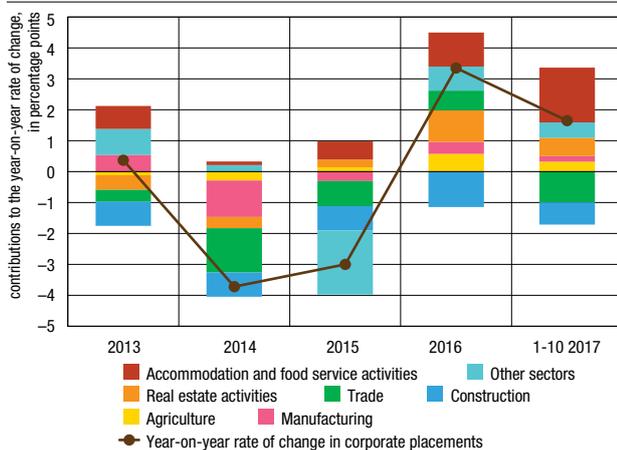
Figure 7.12 Household placements



Note: Data for the fourth quarter of 2017 are up to October.

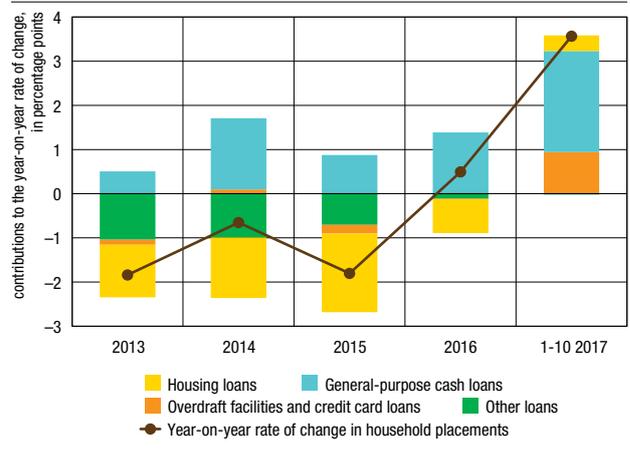
Source: CNB.

Figure 7.10 Growth of corporate placements by activity transaction-based



Source: CNB.

Figure 7.13 Growth of household placements by loan type transaction-based



Source: CNB.

2016, reaching 3.6% at the end of October 2017 (transaction-based, Figure 7.12). The increase was due to favourable trends in financing conditions and consumer confidence as well as to labour market developments. Almost all main types of household loans increased at an annual level (Figure 7.13). The sharpest increase was in general-purpose cash loans, while housing loans also grew at a high rate in October as a result of the housing loans subsidy programme.

Total placements are expected to rise 3.0% (transaction-based) in 2017. The growth of household placements is expected to intensify based on the lending dynamics observed this year, favourable labour market circumstances and the effect of

the government's housing loan subsidy programme. In contrast, the nominal stock of placements is anticipated to grow at a markedly lower rate in 2017 due to the effect of the sale of non-performing placements. Lending to the private sector is expected to intensify further in 2018.

The risks to the realisation of the projected credit growth dynamics are balanced. The restructuring of the Agrokor Group and the spillover of the negative effects on the rest of the economy remained a negative risk. The continued economic recovery, improved domestic financing conditions and a decline in non-performing placements could have a positive effect on bank lending.

Box 3 Survey on the access to finance of SMEs – Survey findings

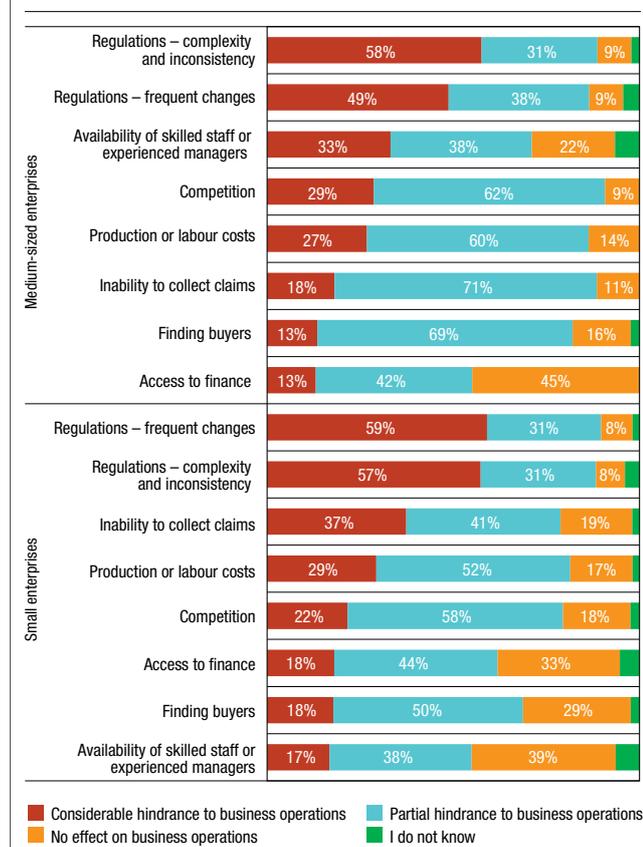
According to the findings of the second Survey on the access to finance of SMEs, the unfavourable regulatory environment remained the principal obstacle to doing business. In addition, pressures from the labour market (lack of adequate labour force, labour costs, rigid labour legislation) posed increasingly large barriers to business operations. However, access to finance was not reported as an obstacle to doing business by surveyed SMEs, and the findings suggest the diversification of SME financing sources and the easing of financing conditions.

The Survey on the access to finance of SMEs¹⁵ was carried out for the second time in October and November 2017 following

the first Survey conducted in 2015. The enterprises participating in the Survey replied to questions covering three business areas: current conditions, enterprise financing and business plans and growth projections.

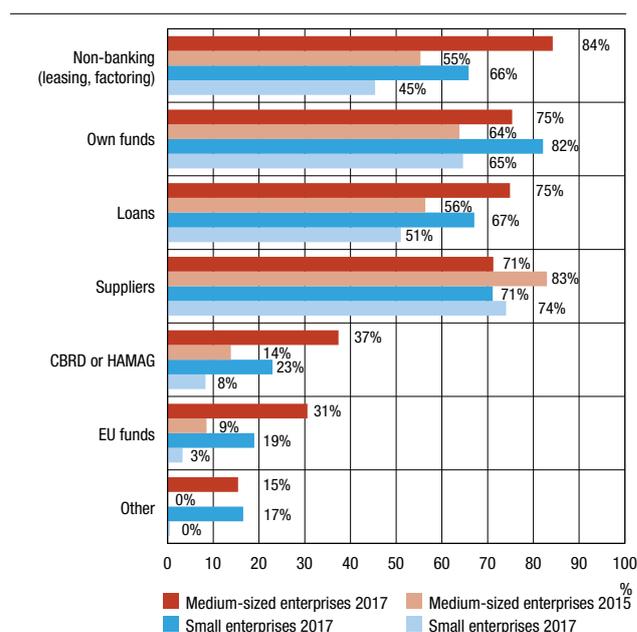
The unfavourable institutional and business environment, including a complex regulatory environment, subject to frequent changes, was once again singled out as the greatest obstacle to doing business (Figure 1). More than half of the SMEs surveyed stated that the complexity and inconsistency of regulations as well as their frequent changes made it very difficult for them to do business. In addition, in contrast with 2015, when the problem of hiring labour was barely mentioned, medium-sized enterprises stated that it was very difficult to recruit experienced workers, which suggests mounting pressures from the labour market. The inability to collect claims remained the third major obstacle to doing business for small enterprises, while medium-sized enterprises (having larger administrative capacities and/or

Figure 1 Reported problems and their effect on SMEs' business operations



Source: Survey on the access to finance of SMEs, CNB and Ipsos, 2017.

Figure 2 Sources of financing of small and medium-sized enterprises

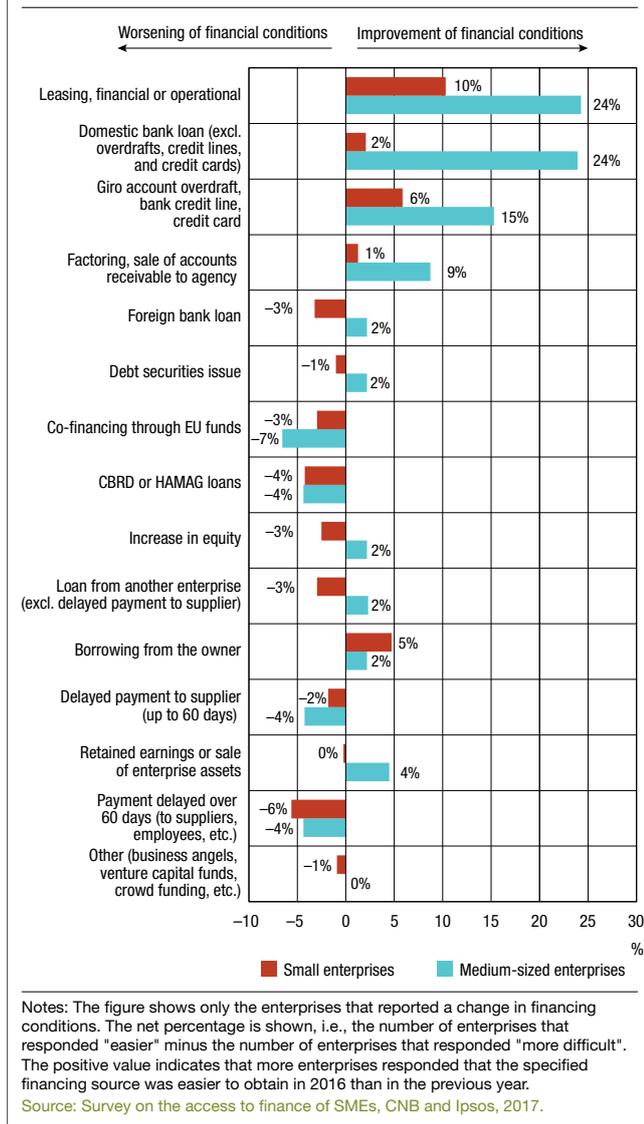


Notes: The figure shows the percentage of enterprises that responded: "We used it in 2016" and "We did not use it in 2016, but we have experience with this source". Other possibilities are not displayed.

Source: Survey on the access to finance of SMEs, CNB and Ipsos, 2017.

15 The Survey was carried out on a sample of 3,600 enterprises and had a response rate of 21%

Figure 3 Which of these sources was more difficult or easier to obtain in the previous year (2016) than in the year before that (2015) and which was equally difficult to obtain?



greater market power) obviously solve this problem more easily. Still, fewer small enterprises reported this problem in this round of the Survey than in 2015.

The sources of financing of SMEs became much more diverse in the previous two years (Figure 2). Non-bank financing became the source of financing most often used by medium-sized enterprises. Supplier financing (including trade credits, deferred payments and delayed payments to suppliers) was the only form of financing that was less significant than in 2015. While own funds remained the most important source of financing for small enterprises, a noticeably larger number of these enterprises reported that they also obtained financing from external sources, including loans, non-bank financing, EU funds and financing through the CBRD and HAMAG-BICRO. In the previous round of the Survey, the respondent enterprises voiced their discontent with the low levels of financing obtained through the CBRD and HAMAG-BICRO, while in this round medium-sized enterprises reported that they used twice the amount of such financing and the amount used by small enterprises was as much as three times as high. The increase in the use of EU funds is even more significant.

Leasing was once again reported to be the most accessible source of financing for enterprises. The respondent enterprises also stated that they had easier access to bank loans, including

Figure 4 What are, in your opinion, the main reasons why you did not use a domestic bank loan in the previous year?

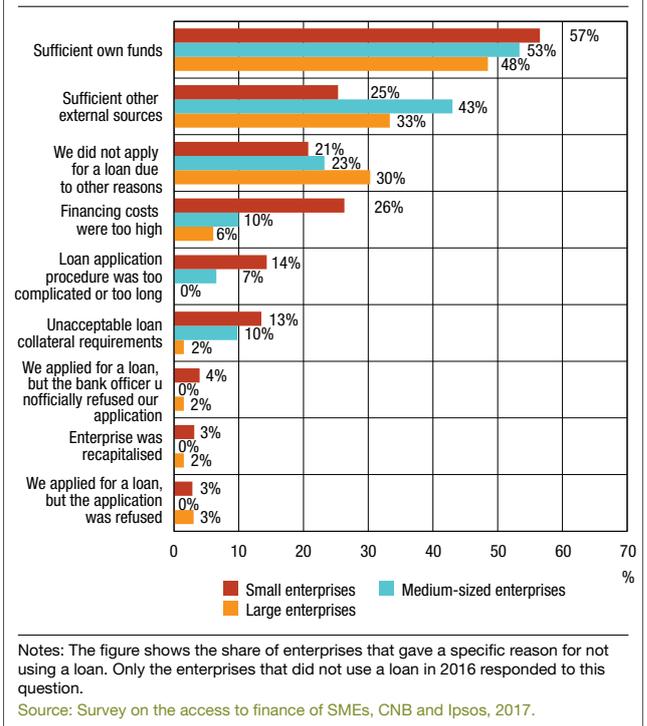


Figure 5 Can you provide an estimate as to how much of the required funds you actually obtained?

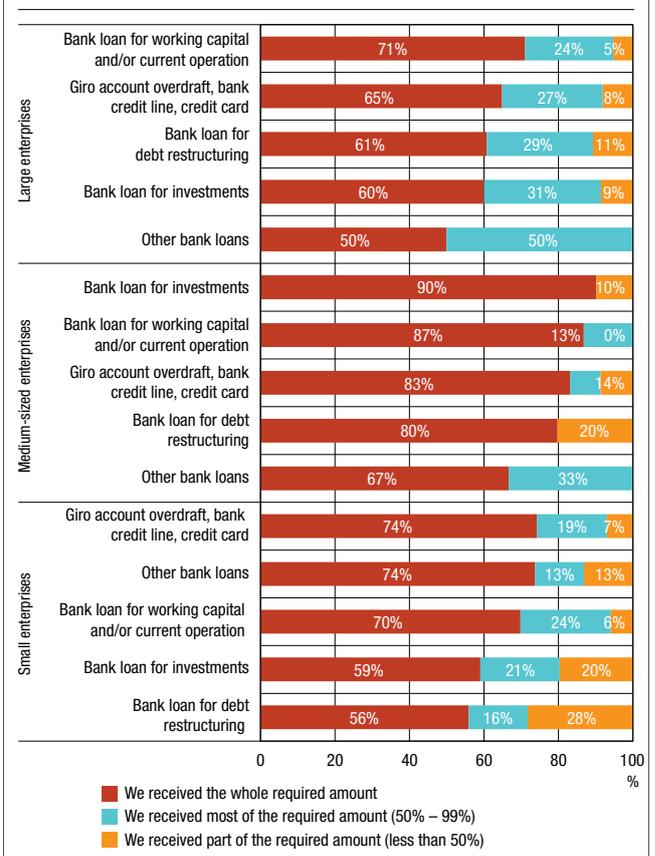
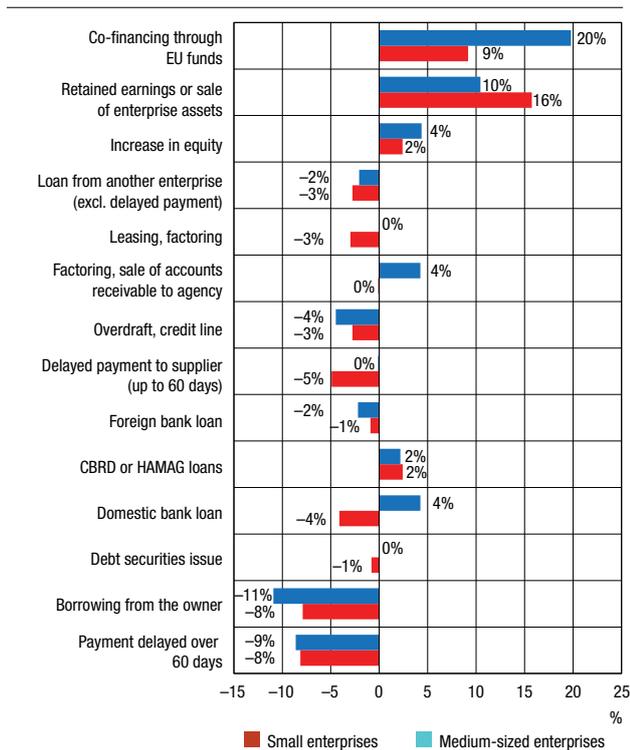


Figure 6 Share of enterprises (net) expecting an increase in the sources of financing in 2017



Notes: The figure shows the enterprises expecting a change in the use of a financing source, that is, the enterprises that responded "An increase in the use of this financing source is expected" minus the enterprises that responded "A decrease in the use of this financing source is expected". The positive value indicates that more enterprises responded that they "expected an increase in the use of a financing source in 2017 relative to 2016".

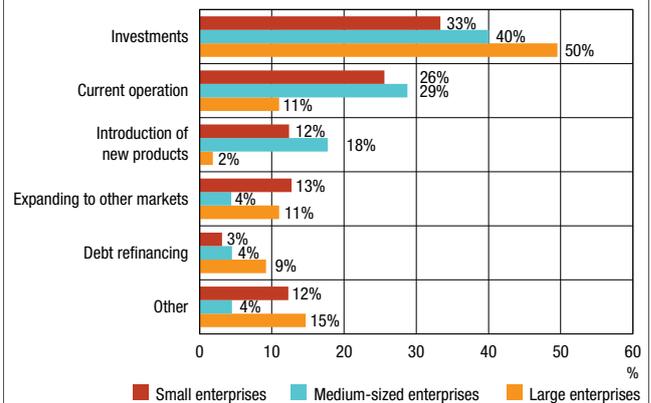
Source: Survey on the access to finance of SMEs, CNB and Ipsos, 2017.

longer-term loans as well as overdrafts and credit lines (Figure 3). The improved accessibility of this financing source was due to high liquidity-supporting monetary policy measures, the easing of bank credit standards and favourable economic indicators. The responses of enterprises to the questions on financing through the CBRD and HAMAG-BICRO and the use of EU funds were very varied and slightly less favourable than in the previous Survey, which shows the continued need to improve their access to these sources.

Most of the enterprises that did not apply for loans in the previous years refrained from doing that because they did not need a loan, whether because they had enough own funds or sufficient access to other external sources (Figure 4). However, one fourth of small enterprises reported that the high costs of obtaining loans prevented them from borrowing. This is another proof, in addition to the fact that more than one third of small enterprises reported the inability to collect claims as a major obstacle to doing business, that small enterprises operate in a much tighter financial environment than medium-sized and large enterprises. This makes them more vulnerable and constrains their investments and hiring of new employees. The level of interest rates and loan processing costs, collateral requirements and refusal by banks due to other reasons are less frequently mentioned by other enterprises as reasons not to use loans.

The enterprises that used a loan in the previous year (2016) in most cases obtained the total or most of the requested loan amount (Figure 5). This primarily refers to shorter-term (and more expensive) loans, which require less collateral and have simpler approval procedures. However, the ratio of funds granted to funds requested increased for all loan types and enterprise sizes

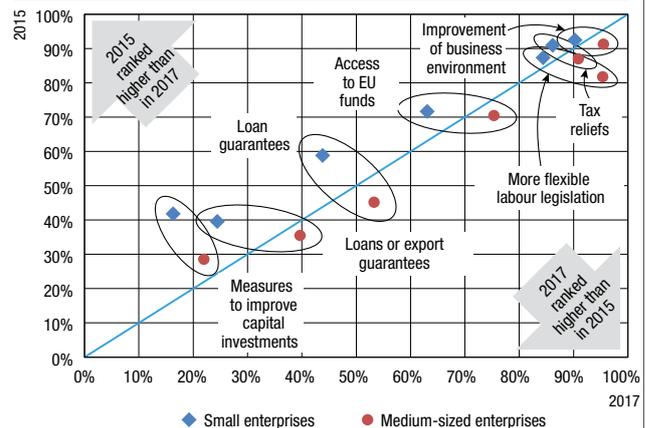
Figure 7 Reasons for external financing in 2017



Notes: The enterprises expecting an increase in the use of a financing source (or of more of them) responded to this question. The figure shows the share of enterprises that gave a specific business-related reason to increase financing.

Source: Survey on the access to finance of SMEs, CNB and Ipsos, 2017.

Figure 8 What do you consider to be important for your enterprise's business operation in the future?



Notes: All enterprises responded to this question. The figure shows the share of enterprises that responded "important".

Source: Survey on the access to finance of SMEs, CNB and Ipsos, 2017.

in comparison with the same ratio in 2015.

The participating enterprises also answered the questions about financing plans (Figure 6). The enterprises of all sizes expect an increase in financing from their own sources, in the use of EU funds and in CBRD and HAMAG-BICRO loans, while planning to reduce the financing by foreign loans, domestic loans (small enterprises), loans from owners and delayed payments.

As regards enterprises' financing needs, investments were reported as the main reason for obtaining external financing, rather than "current operations" (Figure 7). In the last round of the Survey, the majority of respondent enterprises reported current operations to be the main reason for obtaining finances and only one fourth of them mentioned investments, while in this round more than one third of small and medium-sized enterprises stated that they needed financing primarily for investments. Even more importantly, one half of large enterprises responded that they needed external financing for investments.

The respondent enterprises considered the improvement of structural factors more important for their future business operations than the improvement of the financial environment (Figure 8). The improvement of the business environment, tax cuts

and more flexible labour regulations were considered important for future business operations by a large majority of enterprises. Similar findings were obtained in the previous round of the Survey, with small enterprises considering financial factors slightly more important in that round, while medium-sized enterprises assigned greater importance to rigidities in the labour market in this round of the Survey.

To sum up, the responses given by the enterprises participating in this Survey suggest that they more easily deal with market

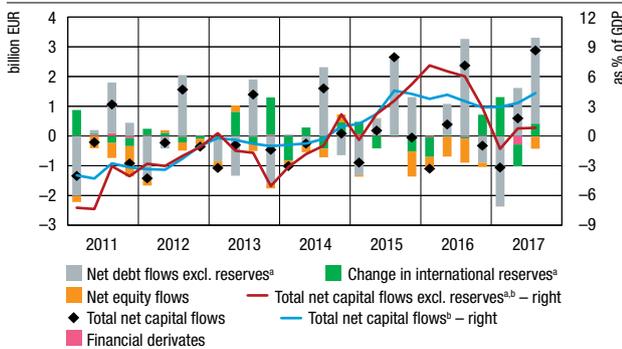
challenges (competition, buyers, financing) than with structural and institutional problems (business environment, labour market conditions). The enterprises' access to financing has been improving and financial constraints mainly do not constitute an impediment to doing business. In line with the above, the continued implementation of structural reforms and the removal of regulatory barriers would contribute to growth acceleration and to the increase of employment in small and medium-sized enterprises.

8 Foreign capital flows

The increase in the current and capital account surplus in 2017 was accompanied by the continued net capital outflow from Croatia. Excluding changes in reserves and liabilities of

the CNB,¹⁶ net foreign liabilities dropped by EUR 2.5bn in the third quarter of 2017, almost the same as in the same period in 2016. This was the outcome of the sizeable decrease in net debt

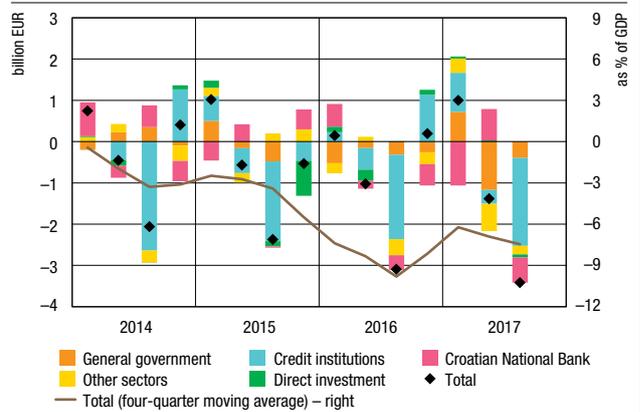
Figure 8.1 Flows in the financial account of the balance of payments



^a Changes in gross international reserves net of CNB liabilities.
^b Sum of the previous four quarters.
 Notes: Net flows mean the difference between changes in assets and liabilities. Equity flows comprise changes in foreign direct equity investments, reinvested earnings and portfolio equity investment, while net borrowing from affiliated enterprises is composed of debt equity flows. Positive value means net capital outflow abroad.

Source: CNB.

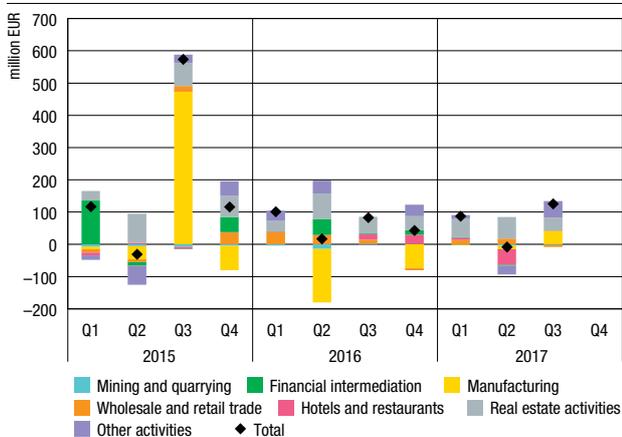
Figure 8.3 Net external debt transactions by sectors



Notes: Transactions refer to the change in debt excluding cross-currency changes and other adjustments. Net external debt is calculated as the gross external debt stock net of foreign debt claims.

Source: CNB.

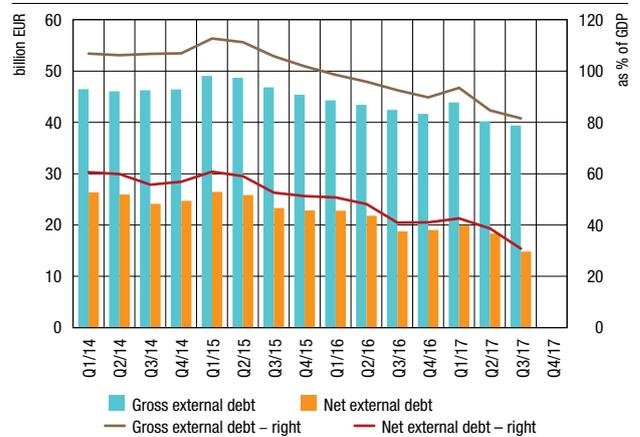
Figure 8.2 Foreign direct equity investment in Croatia by activities



Note: Equity investment net of debt-to-equity transactions and round-tripping investments.

Source: CNB.

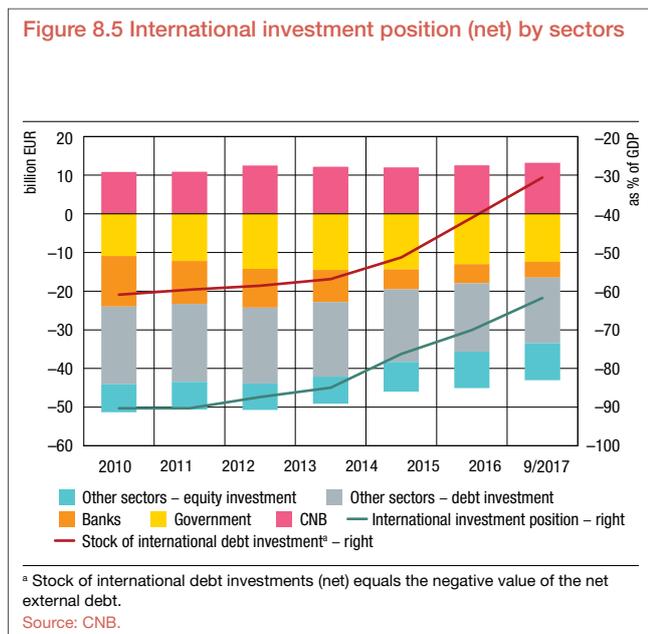
Figure 8.4 Stock of gross and net external debt



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

Source: CNB.

16 The investment of a share of international reserves in repo agreements resulted in an increase in gross international reserves and an increase in the external debt of the CNB in the same amount.



liabilities of domestic sectors, triggered primarily by the further improvement in the net foreign position of banks. International reserves (excluding the change in CNB liabilities) grew at the same time so that the total net outflow in the financial account was larger, standing at EUR 2.9bn.

The net inflow of equity investment of EUR 0.4bn in the third quarter was mostly driven by reinvested earnings on the liabilities side, particularly in financial activity, accommodation activity and trade. Nevertheless, as a result of lower profits of credit institutions, total reinvested earnings were lower than in the same period in 2016. By contrast, new equity investments in Croatia were noticeably larger in the third quarter of 2017 than in the same quarter a year earlier. Investments took place mainly in sports activities and entertainment and recreation activities, the real estate sector and manufacture of transport equipment.

As regards debt investments, the third quarter of 2017 saw a large net capital outflow (of EUR 2.9bn, excluding the CNB), lower, however, than in the same period of the previous year. The net outflow was mostly the outcome of the parallel increase in foreign assets and further deleveraging by credit institutions, which triggered a noticeable improvement in their net foreign position, with the value of debt assets outstripping the value of debt liabilities in the third quarter. The decrease in net debt liabilities was also due to deleveraging by the government, although to a much smaller extent than deleveraging by credit institutions, and the increase in assets of other domestic sectors.

Continued deleveraging by domestic sectors further improved the relative indicators of external debt. Gross external debt stood at EUR 39.4bn (81.6% of GDP) at the end of September 2017, down by 8.2 percentage points from the end of 2016. The decrease in the first nine months of 2017 was mostly

due to deleveraging by credit institutions and the government, with other domestic sectors also reducing their liabilities. The debt reduction was also attributable to cross-currency changes and other adjustments, with the improvement in the relative indicator also being due to the nominal GDP growth. While gross external debt declined, assets increased, particularly those of the central bank and credit institutions. In line with this, the reduction in the net external debt was even more pronounced in 2017. The net external debt stood at EUR 14.9bn in late September (30.8% of GDP), which is 10.2 percentage points less than at the end of 2016.

The net international investment position improved in the first three quarters of 2017, from -70.1% of GDP at end-2016 to -61.8% of GDP at end-September 2017. A noticeable improvement in the position was evident in all sectors, mostly due to the ongoing external deleveraging.

Projected developments

In line with the developments so far in 2017, the year as a whole is expected to see a net capital outflow for the fourth consecutive year. Capital inflows are expected in the last quarter, with a seasonal drop in assets of credit institutions and growth in government debt. In particular, in November the government issued the second bond this year in the international market, worth a total of EUR 1.3bn. The funds raised are to be used for the early repayment and refinancing of debt by enterprises in the road sector, including both foreign and domestic liabilities.

The estimated net capital outflow in the whole of 2017 points to deleveraging, albeit of a lower intensity than in 2016, while the net inflow of equity investments is smaller (due mostly to lower reinvested earnings). International reserves are also expected to grow sharply.

The net capital outflow might decrease further in 2018. As deleveraging by domestic sectors is expected to continue, the relative indicators of external debt might also improve. Gross external debt might account for around 75% of GDP, while net external debt might fall below 30% of GDP by the end of 2018. In contrast with the reduction in debt liabilities, net equity liabilities are expected to grow more than in 2017. This is mostly due to the sizeable increase in reinvested earnings on the liabilities side and a slightly larger inflow of new equity investments in Croatia. In addition, gross international reserves are projected to grow further, with a positive influence on reserve adequacy indicators.

Notwithstanding the projected significant improvement in the relative indicators of external debt, total foreign liabilities of the Republic of Croatia are still relatively large. This is particularly evident in the indicator for the net international investment position, which is to surpass by a large margin the threshold under the macroeconomic imbalance procedure even at the end of the projection period. Therefore, Croatia is very vulnerable to risks of a possible tightening of financing conditions in the international market and a deterioration in the investment climate.

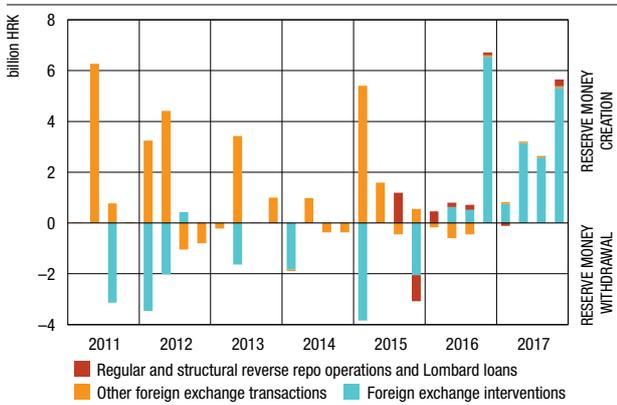
9 Monetary policy

The CNB continued to pursue an expansionary monetary policy in the second half of 2017, supporting the high liquidity in the monetary system. Due to the appreciation pressures on the domestic currency, the central bank purchased from banks a total of EUR 1.6bn from the beginning of 2017 through to mid-December. In the same period, the CNB purchased EUR 29.4m from the Ministry of Finance, while there were no transactions with the European Commission. All foreign exchange transactions resulted in the net purchase of foreign exchange of EUR 1.6bn, which created HRK 12.0bn (Figure 9.1) from the beginning of the year to mid-December¹⁷.

The CNB continued to support the high kuna liquidity in the monetary system not only by the purchase of foreign exchange but also by kuna operations. For the first time in a year, the CNB held a structural auction in November, placing HRK 0.5bn to

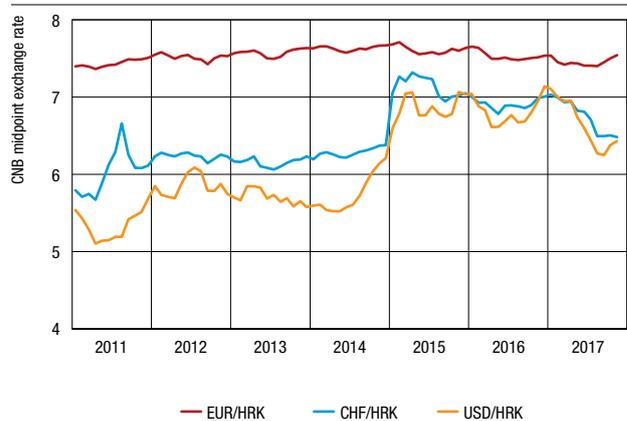
banks, so that the total balance of funds placed via structural repo operations amounted to HRK 1.3bn at end-November. Compared with the auction in November 2016, the interest rate was cut from 1.4% to 1.2%, while the maturity of funds placed was extended from 4 to 5 years. An incentive to continued implementation of structural repo operations was also provided by the new Decision on monetary policy implementation of the CNB of September 2017 (OG 94/2017), introducing a system of collateral management by means of the pool of eligible assets for all credit operations of the CNB, which now includes all government debt securities issued by the Republic of Croatia in the domestic capital market. This has enabled credit institutions to raise long-term kuna loans from the CNB on the basis of a wide range of collateral, including short-term securities. The CNB continued to conduct regular weekly reverse repo operations at a fixed repo rate of 0.3%. However, the average balance of funds placed via the regular weekly repo operations was only HRK 32.3m in the first eleven months of 2017 due to the low

Figure 9.1 Flows of reserve money (M0) creation



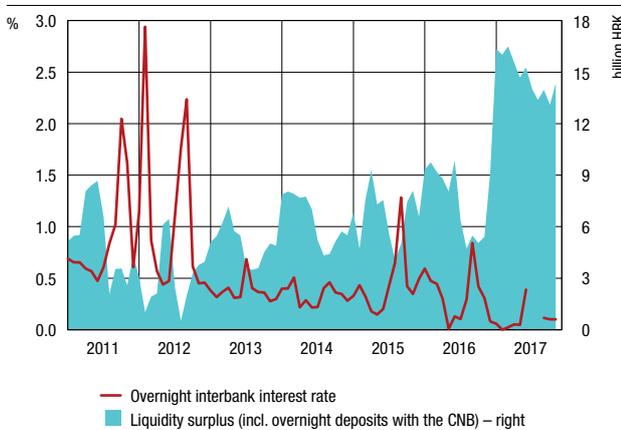
Notes: Other foreign exchange transactions include the purchase of foreign exchange from and the sale of foreign exchange to the MoF and the EC and foreign currency swaps with banks, where the positive values refer to the purchase of foreign exchange by the CNB. Data for the fourth quarter of 2017 are up to the first half of December.
Source: CNB.

Figure 9.3 Nominal exchange rates of the kuna against selected currencies



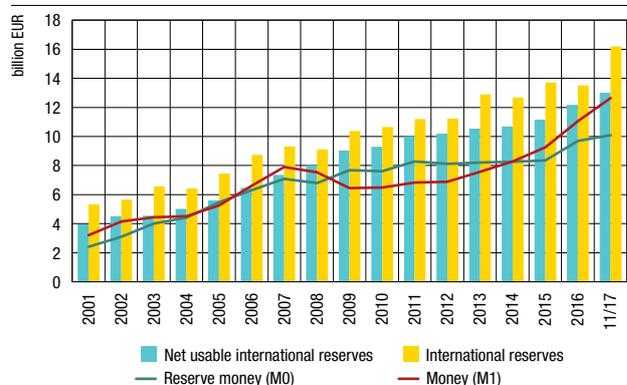
Source: CNB.

Figure 9.2 Bank liquidity and overnight interbank interest rate



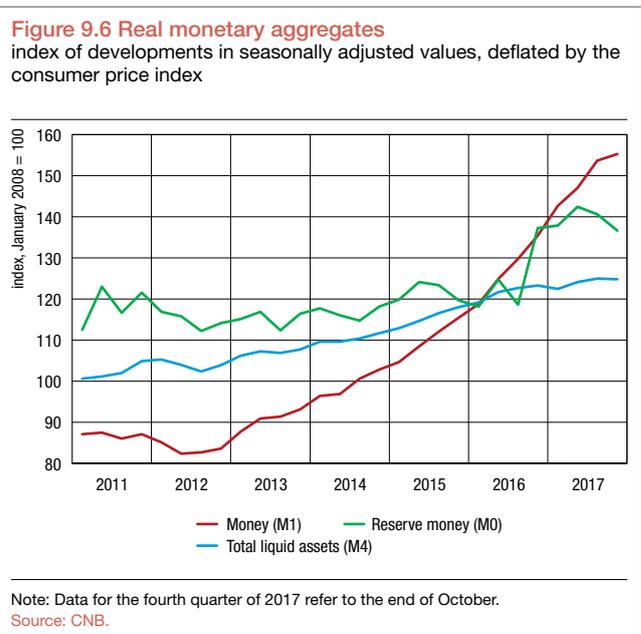
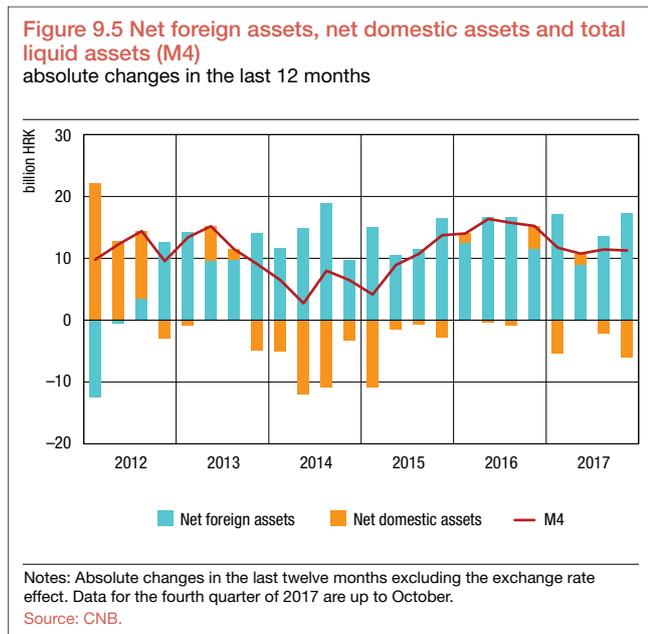
Source: CNB.

Figure 9.4 International reserves of the CNB and monetary aggregates



Notes: Net usable international reserves are defined as international reserves net of CNB foreign liabilities, reserve requirements in f/c, government foreign currency deposits and off-balance sheet liabilities (swaps). The most recent data available for M1 refers to the end of October 2017.
Source: CNB.

¹⁷ Data up to mid-December 2017 include a direct purchase of foreign exchange from banks outside auctions of EUR 100.0m on 29 December 2016 as the value date of that transaction was 2 January 2017.



interest of banks in conditions of abundant kuna liquidity.

The average surplus kuna liquidity nearly doubled in the first eleven months of 2017, growing from HRK 7.6bn in 2016 to HRK 14.8bn (Figure 9.2), which was mostly the result of reserve money creation by the purchase of foreign exchange from banks. Against this background, the average weighted overnight interbank interest rate dipped from 0.41% in 2016 to 0.07% in the first eleven months of 2017. It leaped to 0.39% in June, but this was a reflection of only one transaction made in that month. There was no interbank trading in July and August, and in the months that followed the overnight interest rate stood at 0.1%.

The exchange rate of the kuna against the euro stood at EUR/HRK 7.54 at the end of this November, which was almost the same as at end-November 2016. On the other hand, the average nominal exchange rate of the kuna against the euro was 1.0% lower in the first eleven months of 2017 than in the same period in 2016 (Figure 9.3). Appreciation pressures on the domestic currency are associated with favourable macroeconomic developments, such as the current account surplus, which reflects accelerated exports of goods, a record-high tourist season and stronger inflows from EU funds, as well as reduced fiscal risks and the economic recovery in general. The exchange rate of the kuna against the US dollar and the Swiss franc was noticeably lower in late November than at the end of 2016, reflecting the strengthening of the euro against these two currencies on global financial markets.

Gross international reserves stood at EUR 16.2bn at the end of November 2017 (Figure 9.4bn), growing by EUR 2.7bn (19.9%) from the end of 2016. The increase was largely due to foreign currency inflows from the foreign issue of government bonds in

November and the purchase of foreign exchange, as well as the significantly higher level of agreed repo transactions than at the end of 2016. Net usable reserves went up EUR 0.8bn (6.9%) in the same period. Gross and net international reserves remained at higher levels than money (M1) and reserve money (M0).

Total liquid assets (M4) continued to trend up moderately in the first ten months of 2017, albeit at a somewhat slower pace than in 2016 (Figure 9.5). The annual increase of the broadest monetary aggregate was driven by the strong growth in net foreign assets of monetary institutions.

The first ten months of 2017 saw the continuation of the several-year strong upward trend in real monetary aggregates (Figure 9.6). The sizeable increase in real money (M1) was mostly driven by the rise in kuna funds in transaction accounts, which was, apart from the economic recovery, spurred by the fall in savings and time deposits in a setting of low interest rates. Particularly noteworthy was the decrease in foreign currency deposits of households. Real total liquid assets (M4) grew less than in 2016. On the other hand, the real value of reserve money (M0) decreased in the second half of the year, and was slightly lower in late October than at the end of 2016.

The CNB will continue to pursue the policy of a stable exchange rate of the kuna against the euro and support the high liquidity in the monetary system by means of structural and regular repo operations, resorting to foreign currency interventions depending on exchange rate pressures. The projected continuance of favourable balance of payment developments and a very mild recovery in domestic lending activity point to possible exchange rate pressures. The sustained expansionary monetary policy will support economic growth, while inflation is expected to remain low.

10 Public finance

Fiscal data (in accordance with the ESA 2010 methodology) indicate a sizeable year-on-year reduction of the consolidated general government deficit in the first half of 2017. The general government deficit in the first six months of 2017 stood at HRK 1.1bn, or HRK 2.7bn less than in the same period in 2016. Such results were primarily the outcome of the sharp reduction in the budget deficit in the first quarter of 2017, while

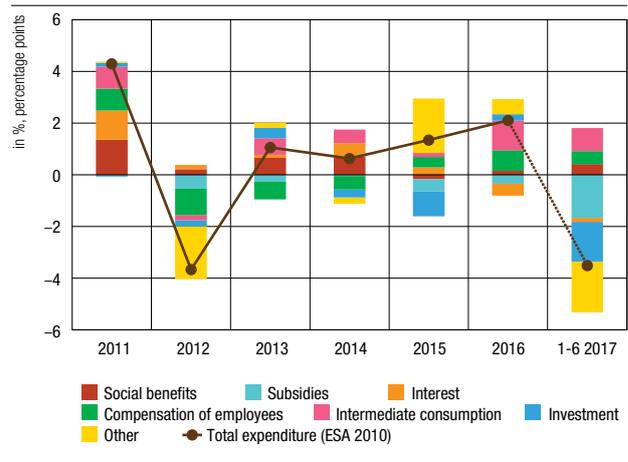
the budget surplus in the second quarter was somewhat smaller than a year ago. At the same time, the deficit reduction in the first six months was due entirely to a reduction in expenditures, while revenues remained almost the same as in the comparable period of 2016.

The Ministry of Finance data on a cash basis suggest the continuation of favourable developments in public finances in

the third quarter of 2017 as well. Under the influence of positive results in the preceding part of the year, in November the Croatian government adopted amendments to the state budget and financial plans of budgetary users to cut the planned deficit of the general government budget. In line with new projections, the general government deficit (ESA 2010) might be 0.6% of GDP in 2017, or 0.7 percentage points less than previously expected. This implies that the downward trend of the nominal general government deficit on an annual level, which began as early as 2014, might continue. The downward revision of the deficit is mainly the result of more favourable developments in revenues than expected. On the expenditure side, there was no revision of expenditures that affect the level of the budget deficit, but some redistributions were made among individual expenditure items.

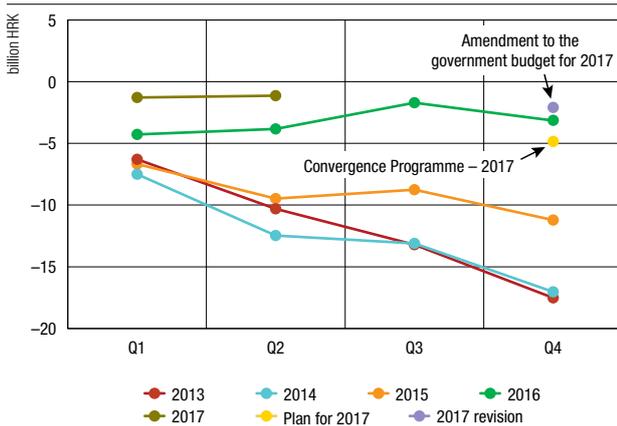
Total revenues were almost the same in the first half of 2017 as in the same period in 2016 (annual rate of change was only -0.2%, ESA 2010), but individual items showed varied trends. A positive contribution was made by revenues from indirect taxes and social contributions, which were supported by an increase in economic activity and employment. Total revenues from direct taxes grew exclusively due to higher profit tax revenues, while

Figure 10.3 Consolidated general government expenditure
ESA 2010, year-on-year rate of change and contributions



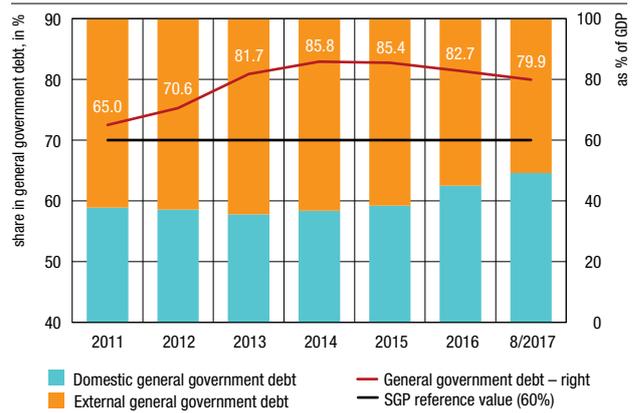
Source: Eurostat (CNB calculations).

Figure 10.1 General government cumulative balance by quarters
ESA 2010



Sources: Eurostat and MoF (CNB calculations).

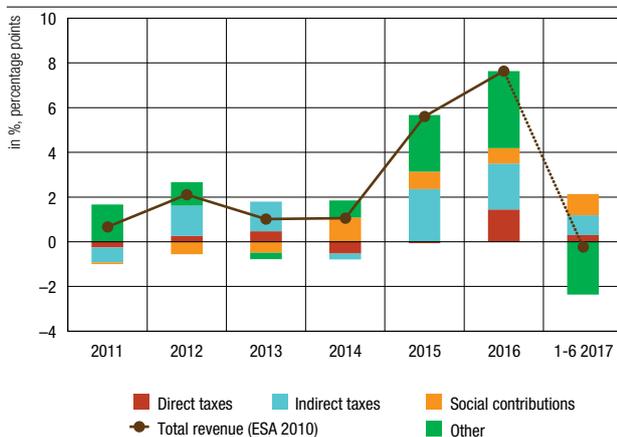
Figure 10.4 General government debt
end-period stock



Note: Nominal GDP calculated as the sum of GDP for the third quarter of 2017 and the last three available quarterly data was used for the calculation of the relative indicator at the end of August 2017.

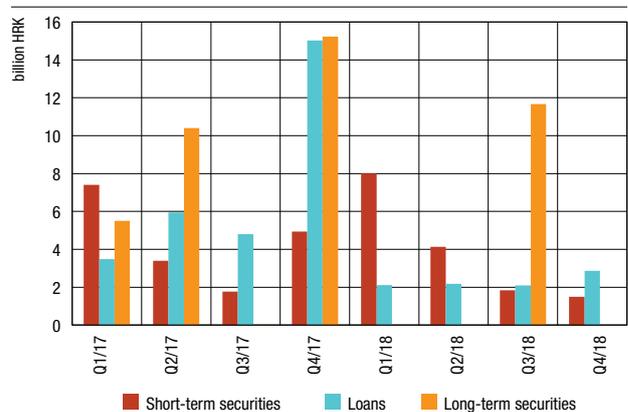
Source: CNB.

Figure 10.2 Consolidated general government revenue
ESA 2010, year-on-year rate of change and contributions



Source: Eurostat (CNB calculations).

Figure 10.5 General government debt maturity



Note: Projection of the repayment of short-term and long-term securities is based on the balances as at 1 December 2017 and projection of the repayment of loans on the balance as at 30 September 2017.

Sources: MoF and CNB.

income tax revenues were smaller because of the tax reform carried out. At the same time, other current revenues were also reduced on an annual level, possibly due, in part, to smaller payments of profit by state-owned enterprises.

Consolidated general government expenditures were 3.5% lower (ESA 2010) in the first six months of 2017 than in the same period the year before. There were noticeable differences in the dynamics of individual expenditure categories. The decrease in total expenditures was mostly due to the noticeable drop in other current expenditures, followed by expenditures for subsidies and investments. In addition, the further decline in government borrowing costs also led to a reduction in interest expenses. By contrast, the first half of 2017 saw a year-on-year increase in expenditures for intermediate consumption and expenditures for social benefits, which was probably due to pension adjustments. Budget expenditures for employee compensation also increased as a result of the agreed gradual increase in the basis for the calculation of the wages of public sector employees.¹⁸

The available MoF data for July and August 2017 (on a cash basis, GFS 2001) suggest a year-on-year increase in revenues and stagnation in expenditures at the beginning of the second half of 2017. Most categories of tax revenues (with the exception of income taxes) recorded annual growth, as did revenues from social contributions, which more than offset the decrease

in revenues from grants and other expenditures. With regard to expenditures, the increase observed in expenditures for employee compensation, the use of goods and services and social benefits was offset by the reduction in other categories. All this led to a cumulative surplus of central government revenues of HRK 2.6bn in the first eight months of 2017, which is in contrast to a deficit of around HRK 1bn recorded in the same period in 2016.

The consolidated general government debt stood at HRK 287.8bn at the end of August, or slightly less than at end-2016. The decrease may be attributed to favourable fiscal trends over the year and the parallel appreciation of the exchange rate of the kuna against the euro. In the preceding part of the year, the government used favourable conditions in financial markets for the repayment of maturing liabilities and deficit financing. Foreign bonds worth EUR 1.25bn and domestic bonds worth HRK 8.5bn were issued in the first half of the year. In addition, EUR 1.275bn worth of foreign bonds were issued in November for the purpose of the early refinancing of part of the debt of road enterprises in the public sector, along with an additional HRK 5.8bn worth of domestic bonds. Euro T-bills worth EUR 1.5bn and maturing in 455 days were also issued in November. All issues were marked by considerably lower yields compared with the previous issues, which reflects the high liquidity on the domestic financial market and the narrower risk premium for Croatia.

Box 4 Strategy for the Adoption of the Euro in Croatia¹⁹

Croatia is ready to start the euro adoption process since it is a member state that has been maintaining low inflation and a stable exchange rate for over two decades. Recently, it has noticeably improved its budget balance and reduced its public debt, as well as other macroeconomic imbalances. The relative GDP and prices in Croatia are at a level similar to those of the current euro area member states at the time they initiated the euro adoption process. Analysis of economic cost and benefits of the adoption of the euro in Croatia indicates that it is in Croatia's best interest to start the process of integration into the euro area as soon as possible. The adoption of the euro will reduce risks to financial and macroeconomic stability arising from the specific structural characteristics of Croatia's economy,

among which the high degree of euroisation stands out.

The Government of the Republic of Croatia and the Croatian National Bank have presented their Strategy for the Adoption of the Euro in Croatia. This document serves as a starting point for a public debate on the adoption of the euro in Croatia and has been prepared for the purpose of informing the public of the process and effects of the euro adoption. The document analyses the economic benefits and costs of the introduction of the euro, describes the process and presents the activities and policies that need to be undertaken to introduce the euro as the official currency in Croatia. It also describes the economic policy instruments at Croatia's disposal after the introduction of the euro.

Table 1 Benefits of euro adoption

	Significance	Effect over time
Elimination of currency risk	Great	Permanent
Reduction of interest rates	Moderate	Permanent
Elimination of the risk of currency crisis and the reduction of the risk of banking and balance of payments crisis	Moderate	Permanent
Lower transaction costs	Small	Permanent
Stimulus to international trade and investments	Moderate	Permanent
Participation in the allocation of the Eurosystem's monetary income	Small	Permanent
Access to the euro area financial assistance mechanisms	Small	Permanent

Source: Strategy for the Adoption of the Euro in Croatia.

Table 2 Costs of euro adoption

	Significance	Effect over time
Loss of independent monetary policy	Small	Permanent
Risk of price increase as a result of conversion	Small	One-off
Risk of excessive capital inflows and accumulation of macroeconomic imbalances	Small	Permanent
Changeover costs	Small	One-off
Transfer of funds to the European Central Bank	Small	One-off
Participation in the provision of financial assistance to other member states	Moderate	One-off

Source: Strategy for the Adoption of the Euro in Croatia.

¹⁸ This reflects the agreement with the unions of government employees and the decision to apply that agreement to civil service employees as well.

¹⁹ This Box is the summary of the Strategy for the Adoption of the Euro in Croatia published at <http://euro.hnb.hr/>.

Costs and benefits of euro adoption

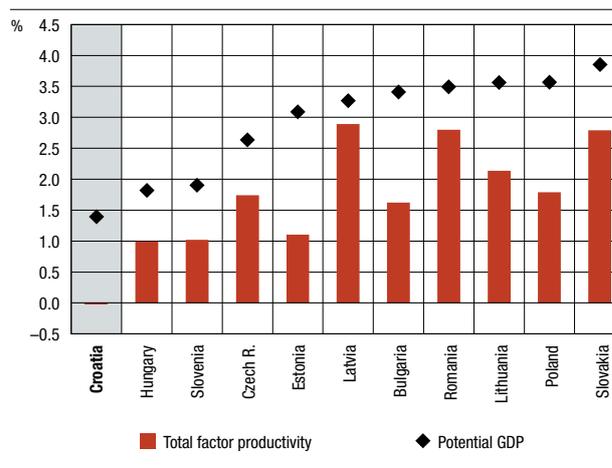
The analysis undertaken shows that benefits of the adoption of the euro in Croatia exceed the costs. While benefits are permanent and relatively considerable, costs are predominantly low and one-off.

The greatest benefit of the introduction of the euro is the elimination of currency risk to which households, corporations and the government are exposed. Due to the high indebtedness of domestic sectors in foreign currencies (some 90% of the total debt of the country, non-financial corporations and households, exceeding HRK 500bn or about 150% of the GDP is indexed to the euro), currency risk is one of the main sources of the vulnerabilities of Croatia's economy. A rather pronounced depreciation of the kuna against the euro would increase the already high level of debt expressed in kuna. The adoption of the euro eliminates this risk and the possibility of a currency crisis. It also diminishes the risk of banking and balance-of-payments crises because in cases of liquidity disturbances the CNB, as part of the Eurosystem, will be able to lend euros to banks in significant amounts. In addition, Croatia will gain access to the European Stability Mechanism (ESM), strengthening its protection in the event of economic disturbances.

The adoption of the euro will most likely contribute to the reduction of interest rates, i.e. borrowing costs, for all sectors of the country's economy because the elimination of currency risk improves the perception of the sovereign risk. Joining the euro area will also reduce regulatory costs for banks. In addition, citizens and corporations will save on currency conversion transactions (exchange rate differences and commissions) and charges for cross-border payments in euros will decrease. Lower interest rates, lower transaction costs and easier comparison of prices paired with the elimination of uncertainty relating to exchange rate movements and the reduction in the vulnerability of Croatia's economy will positively affect the volume of exports and investments. The positive effect is also expected in tourism, given that 60% of total tourist nights is accounted for by tourists from the euro area.

In contrast to the listed benefits, the costs of euro adoption are mostly one-off and by size and importance relatively low. Croatia will have to sustain one-off currency changeover costs, make payments to the capital and reserves of the ECB and the ESM and participate in providing financial assistance to other member states. One of the costs is also the loss of an

Figure 2 Average growth rate of potential GDP and contribution of total factor productivity in the period 2002-2016



Source: EC.

independent monetary and exchange rate policy. However, this will be a relatively small cost for Croatia because the room for active use of a monetary and exchange rate policy has narrowed due to high credit and deposit euroisation and dominance of foreign-owned banks. The monetary policy of the European Central Bank will be well suited for the needs of Croatia's economy because Croatia is, both economically and financially, firmly integrated in the euro area so its business cycle largely mimics developments in the euro area. Should the business cycle start to diverge from developments in the EU core, Croatia will continue to have fiscal, structural and macroprudential policies at its disposal to mitigate divergences.

There is a possibility of a slight one-off increase in price levels. The effect of the adoption of the euro on inflation was estimated at 0.2 percentage points, which is in line with the experiences of other euro area member states (0.23 percentage points on average in new member states). The Government of the Republic of Croatia will pay particular attention to consumer protection and take necessary steps to prevent possible abuse of rounding-up practices relating to the new currency.

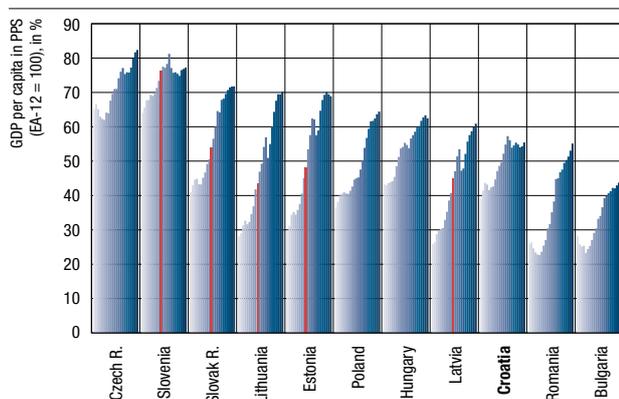
The process of euro adoption

The first formal step towards the adoption of the euro is joining the Exchange Rate Mechanism (ERM II) in which each member state must participate for at least two years, thus showing it is capable of functioning under the conditions of a stable exchange rate against the euro. The conditions for joining the mechanism are not defined in a straightforward manner and the support of the euro area member states and EU institutions depends on their assessment of the economic situation in the candidate country and on the political will for further expansion of the monetary union.

Croatia's macroeconomic fundamentals provide a good starting point for participation in the ERM II. Croatia has a relatively higher level of income and prices than some current euro area member states had at the moment of joining the ERM II (Figure 1). In addition, Croatia has had continuously low inflation and a stable exchange rate since the mid-1990s.

On the other side, however, Croatia has registered an exceptionally weak rise in labour productivity (Figure 2), preventing faster convergence towards income levels prevailing in advanced economies of the euro area. With this in mind, Croatia should commit to implementing structural reforms and attracting

Figure 1 Gross domestic product per capita presented in terms of purchasing power parity, 1995-2016



Notes: The data for Croatia for the 1995-2000 period are estimated by the CNB. The year in which the member state joined the Exchange Rate Mechanism II is shown in red.

Sources: Eurostat and CNB calculations.

productive (export oriented) investments in order to speed up productivity growth. The euro introduction process might help.

After joining the ERM II Croatia must meet the nominal convergence criteria for at least two successive years. The nominal convergence criteria relate to price stability, sustainability of public finances and maintaining sufficiently low long-term interest rates. Among the nominal convergence criteria, the greatest obstacle for Croatia until recently was the criterion of sustainability of public finances. However, thanks to fiscal consolidation, public debt has started decreasing at a satisfactory pace, increasing the odds for Croatia being able fully to meet all the criteria in the future.

Croatia will make a series of institutional and operating adjustments for participating in the monetary union. The majority of adjustments will start after EU institutions establish that the criteria for the adoption of the euro have been met. As for institutional adjustments, Croatia will have to undertake preparatory activities for accession to the banking union and sign the agreement which prescribes the incorporation of strict fiscal rules into its legal framework. Among the operating adjustments, one should stress the procurement or rather the printing and minting of euro banknotes and coins, supply of banknotes and coins to banks and establishment of control mechanisms that will prevent any unjustifiable rise in consumer prices, as well as legislative alignment so that the euro becomes legal tender in Croatia as at the day of conversion.

Economic policies in the context of euro introduction

Fiscal, structural and macroprudential policies will be the main tools of economic policy following the adoption of the euro in Croatia. Croatia's fiscal policy was thus far mostly procyclical and the Government of the Republic of Croatia will additionally reduce imbalances in public finances in the future, thus increasing the resilience of the economy but also enabling its countercyclical activity. The Government will also rely more heavily on structural policies, including the wage policy that will ensure that the growth of wages in the public sector is aligned with the growth of productivity in the economy, improvements in the business environment and greater efficiency of the public administration and the judiciary, the reduction of non-tax levies and a reform of the pension and health care systems that will increase their financial sustainability in the long run. Croatia will continue actively to use microprudential and macroprudential policy instruments, aiming to maintain the financial and overall macroeconomic stability.

Finally, all the economic policy measures Croatia undertakes with the objective of meeting the criteria for introducing the euro need to be implemented anyway, regardless of the adoption of the euro. Economic policy measures directed at reducing fiscal vulnerabilities, increasing competitiveness and mitigating macroeconomic imbalances will increase the resilience of Croatia's economy and reduce its vulnerability to crisis, concurrently boosting growth and employment.

11 Deviations from the previous projection

The projection of real global developments for 2017 and 2018 is more positive than was expected in July 2017. In particular, global growth surprised positively as early as the second quarter, with developments in the following months also outstripping expectations, so that the estimated global growth rate was raised by 0.2 percentage points for 2017 and by 0.1

percentage point for the year ahead (Table 11.1). The major positive changes were seen in expectations for the euro area, including all major Croatian trading partners, due to very good performance over the year and improvements in the general economic climate. As regards the Fed's and the ECB's monetary policies, current expectations are similar to those of July, with

Table 11.1 Basic assumptions, deviations from the previous projection

	2017			2018		
	Previous projection (7/2017)	Current projection	Deviation	Previous projection (7/2017)	Current projection	Deviation
GDP (real rate of change, in %)						
Rest of the world	3.5	3.6	0.2	3.6	3.7	0.1
Euro area	1.7	2.1	0.5	1.6	1.9	0.3
USA	2.3	2.2	-0.1	2.5	2.3	-0.2
Developing countries and emerging market countries	4.5	4.6	0.2	4.8	4.9	0.1
Central and Eastern European countries	3.0	4.5	1.5	3.3	3.5	0.2
Main trading partners of the Republic of Croatia	2.1	2.4	0.3	2.1	2.2	0.2
Prices						
Euro area HICP ^a	1.5	1.5	0.0	1.3	1.2	-0.1
Oil prices (USD/barrel) ^b	50.0	54.2	4.2	49.6	61.1	11.5
Key interest rates						
EURIBOR 3M (end of year) ^c	-0.30	-0.32	-0.02	-	-0.22	-
ECB main refinancing rate ^c	0.00	0.00	0.00	-	0.00	-
US federal funds target rate ^c	1.50	1.50	0.00	-	2.15	-

^a ECB, September 2017. ^b Bloomberg. ^c Bloomberg.

Source: IMF (WEO, October 2017).

Table 11.2 Domestic indicators, deviations from the previous projection

	2017			2018		
	Previous projection (7/2017)	Current projection	Deviation	Previous projection (7/2017)	Current projection	Deviation
National accounts (real rate of change, in %)						
GDP	3.0	3.1	0.1	2.9	2.9	0.0
Personal consumption	3.1	3.8	0.7	2.9	3.2	0.3
Government consumption	1.4	1.7	0.4	1.5	1.5	0.0
Gross fixed capital formation	6.1	4.2	-1.9	7.2	7.1	-0.1
Exports of goods and services	6.6	6.6	0.1	5.2	5.8	0.6
Imports of goods and services	7.5	8.5	1.0	6.4	7.4	1.1
Labour market						
Number of employed persons (average rate of change, in %)	1.7	1.8	0.1	1.4	1.5	0.0
Registered unemployment rate	12.7	12.4	-0.2	11.5	11.3	-0.2
ILO unemployment rate	11.6	11.3	-0.3	10.5	10.2	-0.3
Prices						
Consumer price index (rate of change, in %)	1.1	1.2	0.1	1.2	1.6	0.4
External sector						
Current account balance (as % of GDP)	3.7	3.7	-0.1	2.5	2.6	0.1
Current and capital account balance (as % of GDP)	4.9	4.5	-0.4	3.8	3.7	-0.1
Gross external debt (as % of GDP)	81.5	79.9	-1.6	77.4	74.9	-2.4
Monetary developments (rate of change, in %)						
Total liquid assets – M4	3.1	4.5	1.5	4.1	4.5	0.4
Total liquid assets – M4 ^a	3.3	4.0	0.8	4.1	4.5	0.4
Credit institution placements	0.6	0.6	0.0	4.1	4.1	0.0
Credit institution placements ^b	3.9	3.0	-0.8	4.1	4.1	0.0

^a Exchange rate effects excluded. ^b Rates of change are calculated on the basis of data on transactions.

Source: CNB.

the exception that an increase in the ECB benchmark interest rate is currently not expected before the first quarter of 2019. As a result, favourable financing conditions in the euro area might last longer than expected. Although the global inflation estimate for the current year has been revised marginally upwards, mostly due to slightly higher oil prices, global inflation is expected to remain relatively low in the forthcoming period.

Expectations of domestic economic growth for 2017 have remained the almost same as in the previous projection. The expected growth rate of the overall economic activity has remained almost unchanged (3.1% vs 3.0%), but some changes by components have been made in this projection. Personal consumption might be 3.8% higher in 2017 than in 2016 (as against the previously projected 3.1%). The revision is mainly due to much better performance in the second and third quarters than projected in July 2017. Expected growth in government consumption has also been revised upwards from the previous projection (1.4% vs 1.7%) as a result of higher than expected growth rates in 2017. On the other hand, expectations for capital investments have been revised downwards, largely due to worse performance in the second and third quarters than previously projected. Such developments may be associated with the financial crisis in the Agrokor Group, which probably had a more detrimental effect on investments than expected. The growth in gross fixed capital formation might reach 4.2% in 2017 instead of the previously projected 6.1%. Expectations regarding foreign demand remained the same as in the previous projection so that real

exports of goods and services might grow by 6.6% from 2016. Finally, due to much better expectations regarding personal consumption growth, total imports for 2017 have been revised up, so that the real growth rate might be 8.5% (vs 7.5%), which means that the negative contribution of net foreign demand to overall economic growth increased from -0.2 percentage points to -0.7 percentage points.

The estimated average annual consumer price inflation rate for 2017 is higher by 0.1 percentage point that previously expected and might stand at 1.2%. This is the result of the mild increase in the annual rate of change in food prices due to slightly higher rates in the period from June to October. The rise in energy prices has also been revised slightly upwards, largely due to the more pronounced increase in electricity and gas prices and higher than expected prices of crude oil in the global market. Inflation is expected to pick up to 1.6% in 2018, which is an increase of 0.4 percentage points from the previous projection. This is mostly due to the increase in the annual rate of change in energy prices, which is in turn largely due to the higher pass-through of prices of refined petroleum products from 2017. The average annual growth in food prices and prices excluding foods and energy in 2018 has been revised slightly upwards, mainly due to the higher pass-through of these prices from 2017. The revision of the annual growth rate of prices excluding food and energy also reflects somewhat more pronounced domestic inflationary pressures.

The estimate of the current and capital account surplus in

2017 was lowered from the previous projection by 0.4 percentage points of GDP. The main factors for the downward revision of the expected surplus are foreign trade developments, with the larger service trade surplus based on better tourism results and the stronger than expected increase in personal consumption contributing to the larger foreign trade deficit. Furthermore, the larger deficit in the primary income account is the outcome of better business performance of foreign owned enterprises, which was offset by the more favourable balance in the secondary income account and in the account of capital transactions, resulting from one-off transactions not associated with the EU budget. As a result, the current and capital account surplus for 2018 has also been revised slightly downwards. The lower foreign trade surplus was partly offset by the larger use of EU funds.

The projection of relative indicators of gross external debt has been reduced downwards from the previous projection. While deleveraging by domestic sectors is expected to be less intensive in 2017 than previously projected, the decrease in gross external debt might be stronger due to the more favourable than expected effect of cross-currency changes stemming from the weakening of the US dollar against the euro. The decrease in relative indicators was also due to the upward revision of nominal GDP

data, which was also reflected in historical results.

The projection for growth in credit institutions' placements to the private sector in 2017 falls short of previous expectations. Excluding the effects of the write-offs and sales of placements as well as exchange rate changes (changes in placements based on transactions), placements might grow by 3.0% in 2017, compared with the previously projected 3.9%. Slightly slower expected credit activity is mostly the result of slower lending to corporates in the second half of the year as well as of deleveraging by other financial institutions. On the other hand, stronger than expected lending to households, spurred also by the Croatian government programme to subsidise housing loans, has alleviated the slowdown in the growth of placements. As regards the nominal change in placements, an increase of 0.6% is expected in 2017, which is equal to the previous projection, with the stronger expected exchange rate at the end of the year offsetting the effect of slower lending.

The projected growth of total liquid assets (M4) in 2017 is higher than expected in the previous projection (4.0% relative to 3.3%, excluding the exchange rate effect), largely due to the sharper increase in demand deposits, which was triggered by the economic recovery and a very successful tourist season.

12 Annex A: Macroeconomic projections of other institutions

Table A.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	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Croatian National Bank (December 2017)	3.1	2.9	3.8	3.2	4.2	7.1	6.6	5.8	8.5	7.4	-	-	1.2	1.6
Eastern Europe Consensus Forecasts (November 2017)	2.9	2.8	3.4	2.8	4.6	5.2	-	-	-	-	2.7	3.1	1.1	1.5
European Bank for Reconstruction and Development (November 2017)	2.9	2.6	-	-	-	-	-	-	-	-	-	-	-	-
European Commission (November 2017)	3.2	2.8	3.6	2.8	4.2	5.0	6.2	5.8	6.9	6.3	-	-	1.3	1.5
Raiffeisen Research ^a (October 2017)	2.9	2.3	-	-	-	-	9.6	6.3	9.9	5.4	2.0	2.5	1.2	1.4
International Monetary Fund (October 2017)	2.9	2.7	-	-	-	-	-	-	-	-	-	-	1.1	1.2
Addiko Bank Economic Research ^a (September 2017)	3.0	3.0	3.3	2.9	5.1	6.4	9.3	5.0	8.6	6.4	2.7	3.0	0.8	1.2
The Institute of Economics, Zagreb (September 2017)	3.1	3.3	4.1	3.1	5.1	5.7	8.2	5.7	10.4	6.9	-	-	1.1	1.5
World Bank (June 2017)	2.9	2.5	-	-	-	-	-	-	-	-	-	-	-	-
Ministry of Finance ^a (April 2017)	3.2	2.8	3.5	2.8	6.3	6.9	5.7	5.0	7.3	6.0	-	-	1.5	1.4

^a Rates of change in exports and imports of goods and services refer to the change in the nominal value.

Note: Projection of the Ministry of Finance was taken from Convergence Programme of the Republic of Croatia for the period 2017-2020.

Sources: Publications of the respective institutions.

13 Annex B: Comparison of Croatia and selected countries

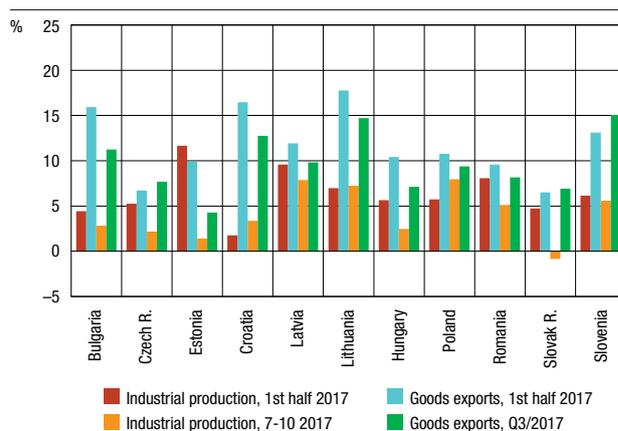
Table 13.1 Gross domestic product

	Year-on-year rate of change, original data			Quarter-on-quarter rate of change, seasonally adjusted data			
	2014	2015	2016	Q4/16	Q1/17	Q2/17	Q3/17
Bulgaria	1,3	3,6	3,9	1,1	0,9	1,0	-
Czech R.	2,7	5,3	2,6	0,4	1,5	2,5	0,5
Estonia	2,9	1,7	2,1	1,5	1,0	1,3	0,3
Croatia	-0,1	2,3	3,2	0,6	0,8	0,9	0,9
Latvia	1,9	2,8	2,1	1,4	1,7	1,4	1,5
Lithuania	3,5	2,0	2,3	1,6	1,1	0,6	0,1
Hungary	4,2	3,4	2,2	0,8	1,3	0,9	
Poland	3,3	3,8	2,9	1,8	1,1	0,9	1,2
Romania	3,1	4,0	4,6	1,7	2,0	2,0	2,6
Slovak R.	2,8	3,9	3,3	-	-	-	-
Slovenia	3,0	2,3	3,1	1,4	1,2	1,2	1,0
Average^a	2,6	3,2	2,9	1,2	1,3	1,3	1,0

^a Simple average.

Sources: Eurostat, EC, CBS and CNB.

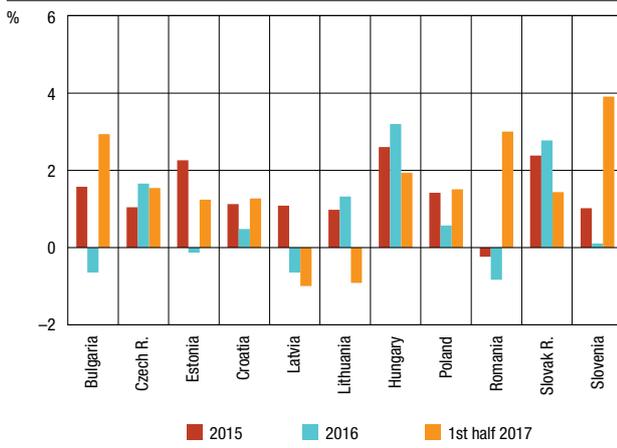
Figure 13.1 Industrial production and goods exports
year-on-year rate of change



Note: The most recent data available for Croatia, Lithuania and Poland refers to October and that for other countries to September 2017.

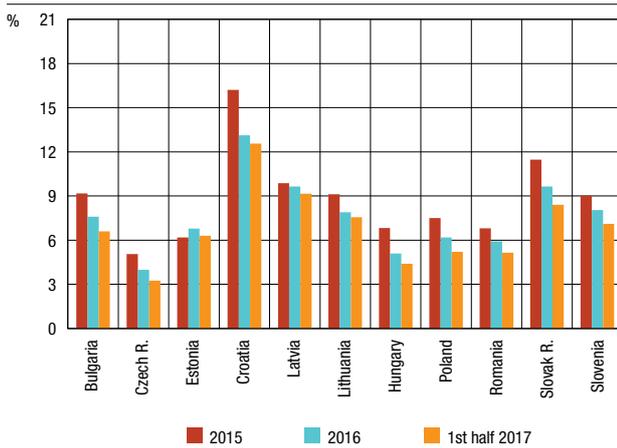
Sources: Eurostat and CBS.

Figure 13.2 Labour Force Survey employment rate
year-on-year rate of change



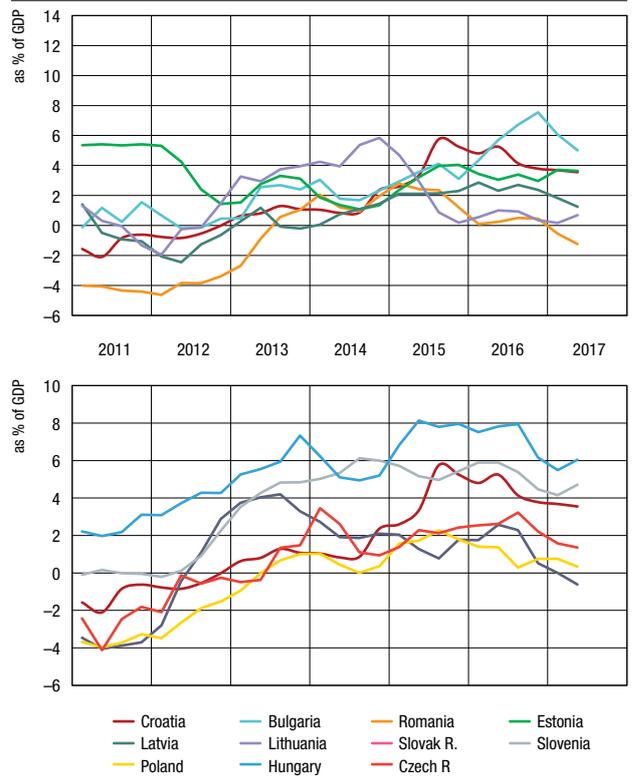
Source: Eurostat.

Figure 13.3 Labour Force Survey unemployment rate



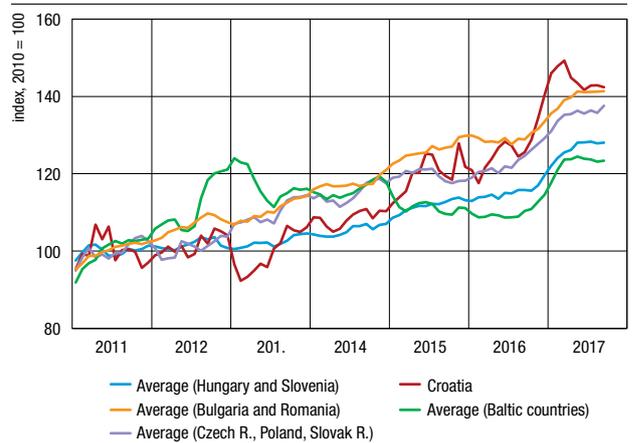
Source: Eurostat.

Figure 13.4 Current and capital account balance
sum of the last four quarters



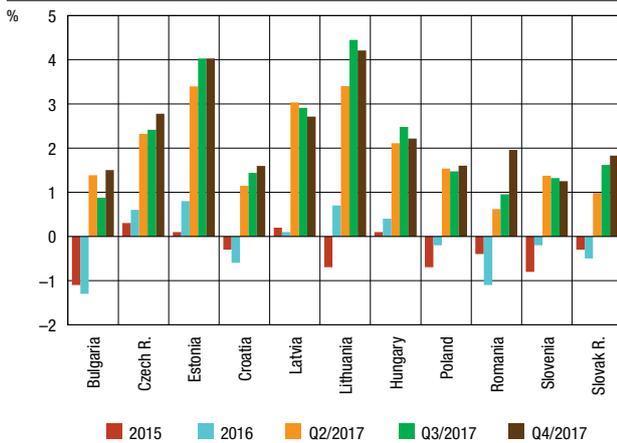
Sources: Eurostat and CNB.

Figure 13.5 Goods exports
quarterly moving average, seasonally adjusted data



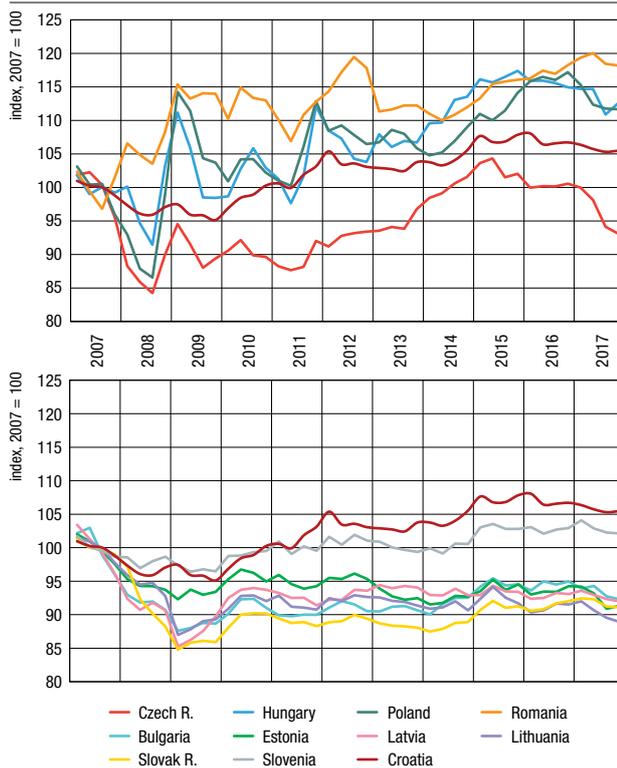
Sources: Eurostat and CNB.

Figure 13.6 Consumer price inflation
average year-on-year rate of change



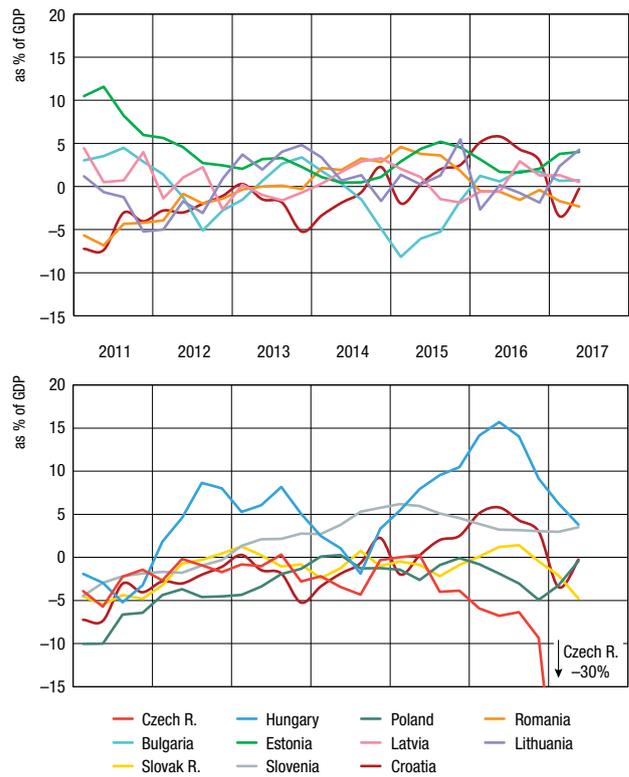
Note: Data for the fourth quarter of 2017 refer to October.
Source: Eurostat.

Figure 13.7 Real effective exchange rate (deflated by consumer prices) in selected countries



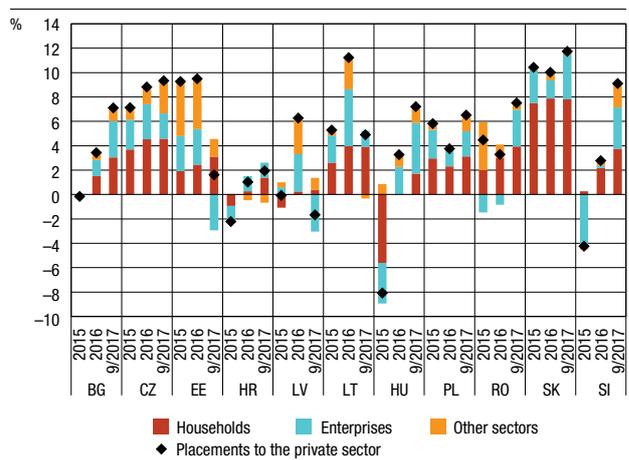
Notes: Data for the fourth quarter of 2017 refer to October. A fall in the index indicates a real effective appreciation.
Sources: BIS and CNB.

Figure 13.8 Balance of payments financial account balance, excluding the change in international reserves
sum of the last four quarters



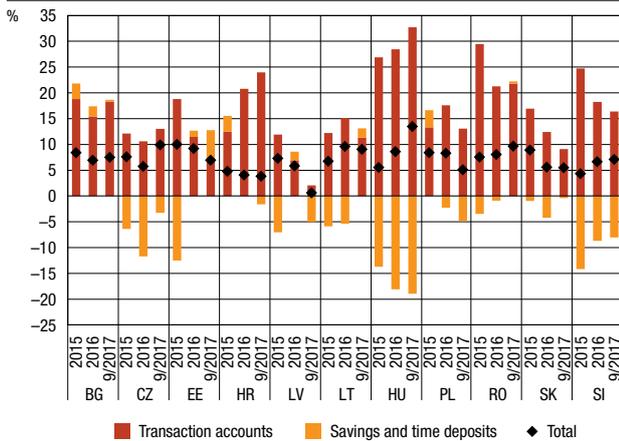
Sources: Eurostat and CNB.

Figure 13.9 Bank placements to the private sector
contributions to the year-on-year rate of change, transaction-based



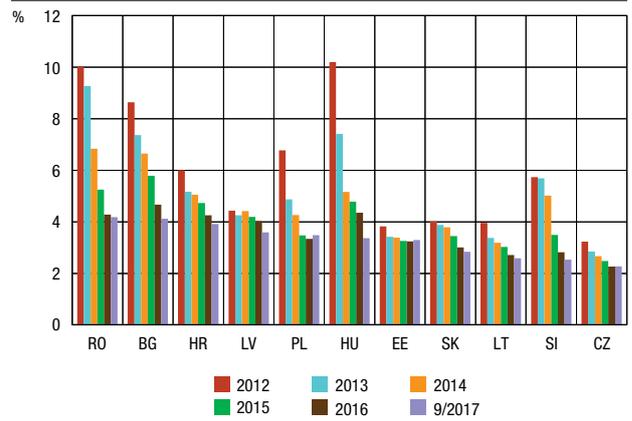
Sources: ECB and CNB.

Figure 13.10 Private sector deposits
year-on-year rate of change, excluding the exchange rate effect



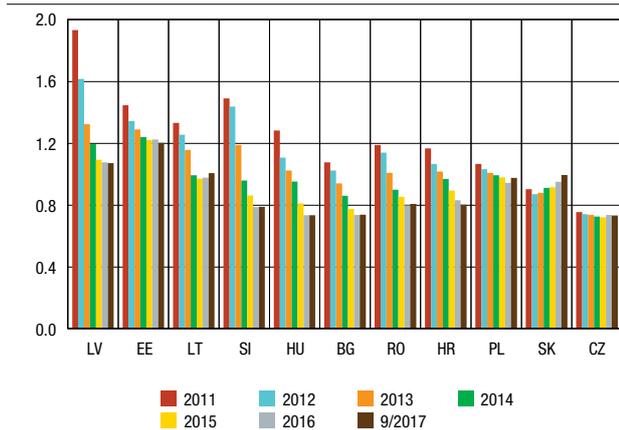
Sources: ECB and CNB.

Figure 13.13 Short-term interest rates on corporate loans



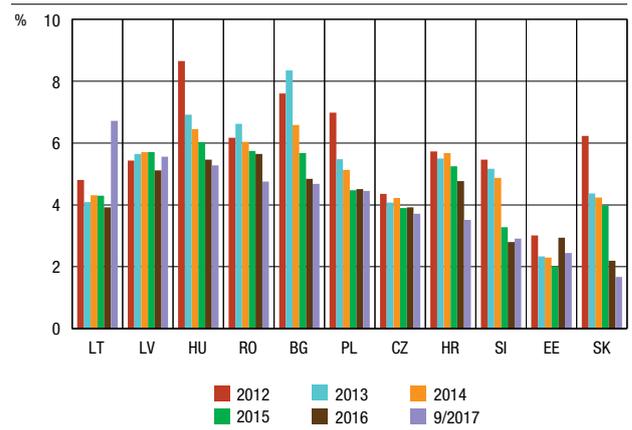
Note: Includes average interest rates on corporate loans up to EUR 1m and with a maturity of up to 1 year.
Source: ECB.

Figure 13.11 Placement to deposit ratio of the private sector



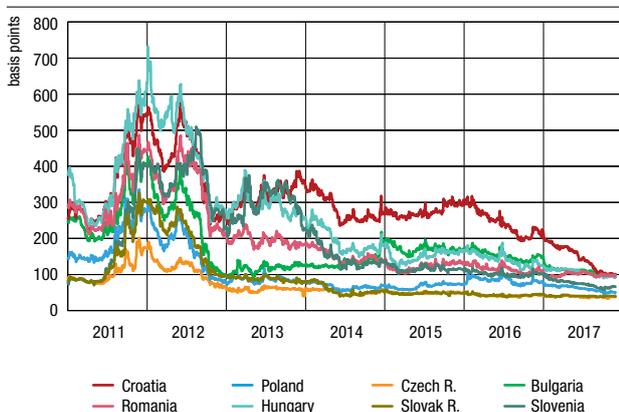
Sources: ECB and CNB.

Figure 13.14 Interest rates on housing loans



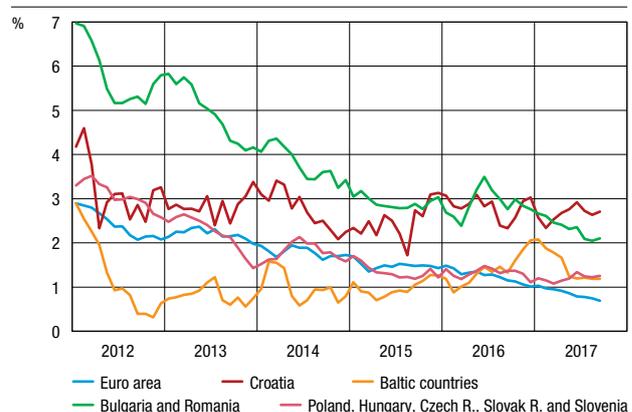
Sources: ECB and NCBS.

Figure 13.12 CDS spreads for 5-year government bonds of selected countries



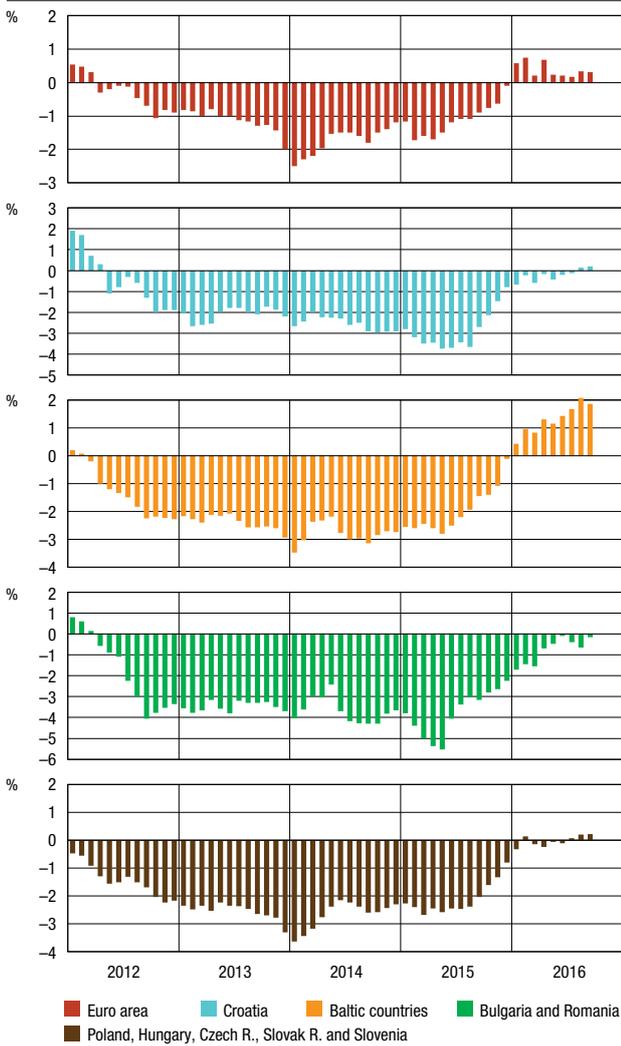
Note: Credit default swaps (CDS) spread is an annual premium that a CDS buyer pays for protection against credit risk associated with an issuer of an instrument.
Source: S&P Capital IQ.

Figure 13.15 Expected real interest rate on corporate loans up to EUR 1m and with maturity up to 1 year



Notes: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts. Country group averages are not weighted.
Sources: ECB and Consensus Forecasts.

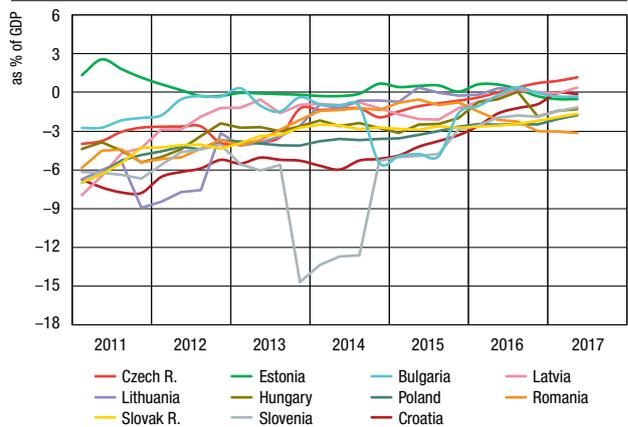
Figure 13.16 Spread between expected and achieved real interest rate on corporate loans up to EUR 1 and with maturity up to 1 year



Notes: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts and the achieved real interest rate equals the nominal interest rate deflated by inflation achieved. Country group averages are not weighted.

Sources: ECB and Consensus Forecasts.

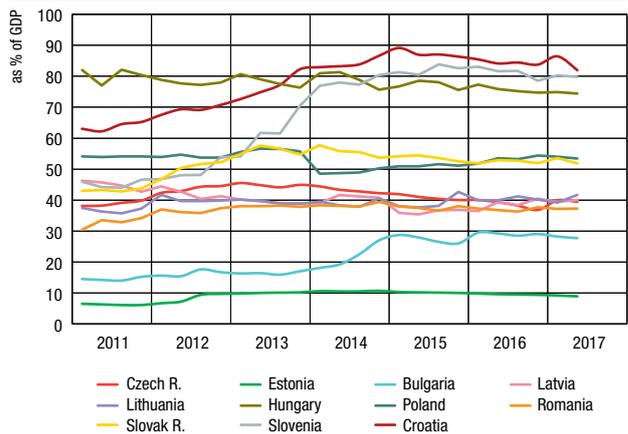
Figure 13.17 Consolidated general government balance four-quarter moving sums



Note: Quarterly data for Croatia in the 2007-2012 period were obtained by linear interpolation of the annual data.

Sources: Eurostat and CNB.

Figure 13.18 General government debt end-quarter stock



Sources: Eurostat and CNB.

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
CHIF	– Croatian Health Insurance Fund
CM	– Croatian Motorways
CLVPS	– Croatian Large Value Payment System
CNB	– Croatian National Bank
CPF	– Croatian Privatisation Fund
CPI	– consumer price index
CPII	– Croatian Pension Insurance Institute
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
NBS	– National Bureau of Statistics of China
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
ULC	– unit labour cost
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

ISSN 2459-8607