



Macroeconomic Developments and Outlook

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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	4.171
GDP (million HRK, current prices) ^b	294,437	322,310	347,685	330,966	328,041	332,587	330,456	329,571	328,109	335,521	345,166
GDP (million EUR, current prices)	40,208	43,935	48,135	45,093	45,022	44,737	43,959	43,516	43,002	44,092	45,843
GDP per capita (in EUR)	9,321	10,189	11,169	10,480	10,495	10,453	10,300	10,225	10,147	10,488	10,992
GDP – real year-on-year rate of growth (in %)	4.8	5.2	2.1	-7.4	-1.7	-0.3	-2.2	-1.1	-0.5	2.2	3.0
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	-298	-15	446	891	2,102	1,198
Current account balance (as % of GDP)	-6.5	-7.1	-8.8	-5.1	-1.1	-0.7	0.0	1.0	2.1	4.8	2.6
Exports of goods and services (as % of GDP)	39.7	39.0	38.5	34.5	37.8	40.5	41.7	43.1	45.8	48.8	49.7
Imports of goods and services (as % of GDP)	46.5	46.3	46.5	38.2	38.1	40.9	41.2	42.7	43.8	46.3	46.7
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	104.2	103.7	103.0	105.3	107.9	102.9	90.9
External debt (as % of exports of goods and services)	186.1	196.6	219.1	292.7	275.8	256.0	247.0	244.1	235.9	211.0	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	42.4	36.9
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	8.1	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	-20,311	-26,090	-17,549	-17,575	-17,726	-11,346	-2,757
Consolidated general government net lending (+)/borrowing (-) (as % of GDP) ^e	-3.4	-2.4	-2.8	-6.0	-6.2	-7.8	-5.3	-5.3	-5.4	-3.4	-0.8
General government debt (as % of GDP) ^e	38.9	37.7	39.6	49.0	58.3	65.2	70.7	82.2	86.6	86.3	83.7
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.

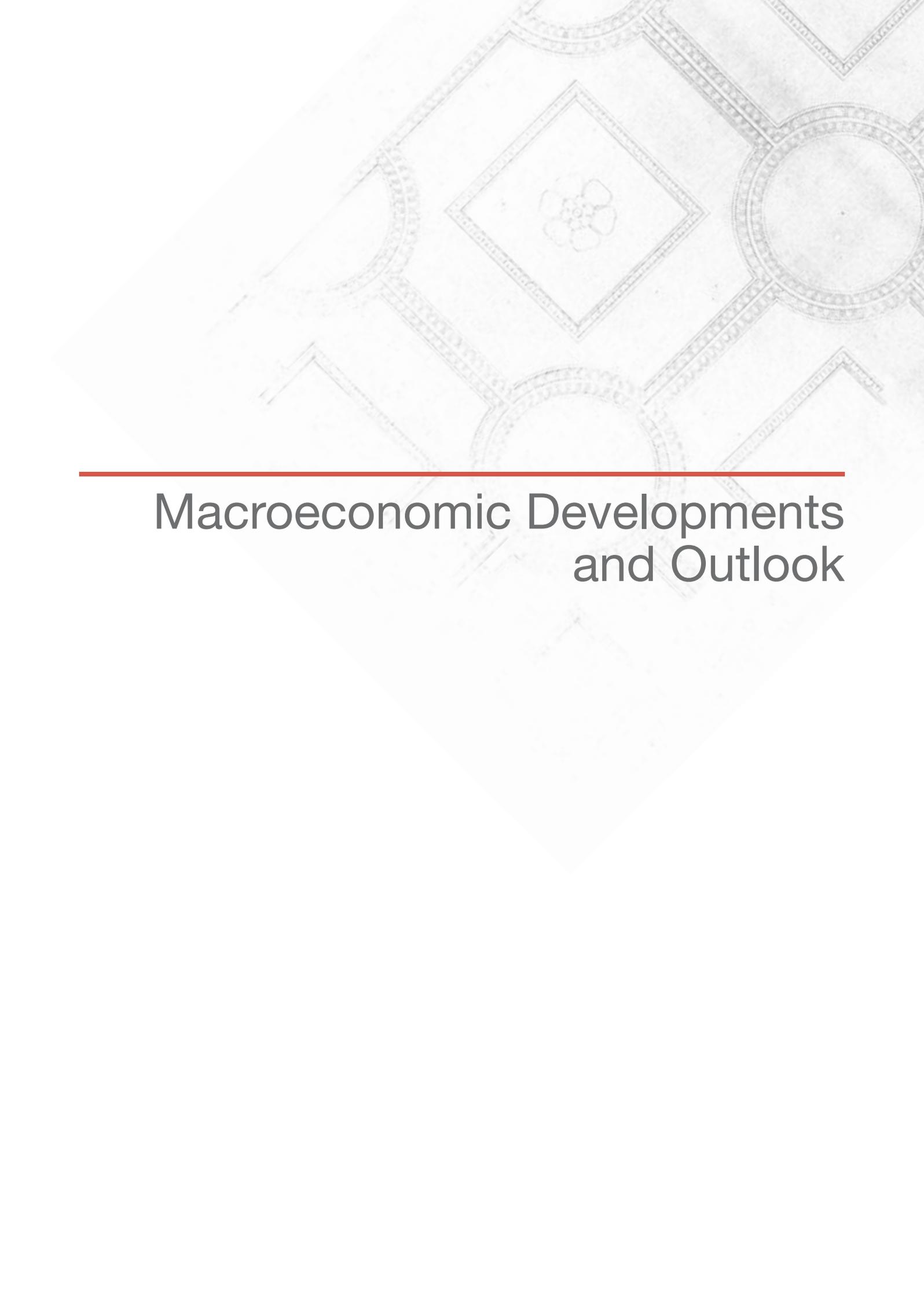
^c Balance of payments and external debt data are compiled in accordance with the methodology prescribed by the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) and the new sector classification of institutional units in line with ESA 2010. Balance of payments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

Economic growth in Croatia continued in the first half of 2017 on the back of strong foreign and stable domestic demand. Expected favourable developments in export demand, above all for tourism services, as well as in investments and household consumption could sustain real growth at levels seen in 2016, while a marginal slowdown is expected in 2018. Driven by import price pressures, consumer price inflation picked up in the first half of the current year. The expected average annual rate of inflation in 2017 is slightly above 1%, with the largest positive contribution to inflation coming from food. With a mild resurgence of domestic inflationary pressures, inflation could grow only marginally in 2018. The current account surplus could grow further in 2017, largely due to the unfavourable impact of problems in the Agrokor Group on bank profits, as well as favourable trends in other transactions, while its decrease in 2018, apart from the perceptibly smaller impact of Agrokor, reflects stronger import demand. Thanks to strong fiscal consolidation in 2016, Croatia's exit from the excessive deficit procedure was confirmed by an EU Council decision in June 2017. Under Ministry of Finance projections, general government deficit could grow only slightly in 2017, while the general government debt-to-GDP ratio should continue to fall. In such conditions, monetary policy remained expansionary, supporting the high liquidity in the monetary system and maintaining the stability of the kuna against the euro. While the CNB plans to continue pursuing an expansionary monetary policy, in 2018 monetary policy in the euro area is expected to tighten and Croatia's output gap is expected to close, which will gradually be reflected in domestic monetary policy as well. As a result, consolidation of public finances should be intensified and macroeconomic imbalances should be reduced in the short run.

In the first quarter of 2017, economic activity continued to grow at a pace similar to that in late 2016, but slowed down in the second quarter despite favourable trends in foreign demand and abundant domestic and international liquidity. Early in the year, growth was largely driven by an upsurge in goods exports and investment, while other components of domestic demand also went up. Monthly indicators of real activity suggest that GDP growth slowed down in the second quarter, which is partly attributable to the onset of the crisis in the Agrokor Group. Notwithstanding the high uncertainty over the materialisation of risks associated with the Group, the CNB expects that, should restructuring be orderly and relatively fast, such risks could have a mildly unfavourable impact on economic activity, mostly in terms of consumer expectations and weaker investment by some parts of the private sector. On the other hand, it is likely that export demand, in particular very good tourism performance, together with sustained significant investments and personal consumption will support economic growth, which could remain in the whole of 2017 at last year's level of 3.0%. 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 on the real disposable income of households, and slower growth in exports of goods and services. Favourable trends in the labour market are expected to continue, with a further increase in employment and wages.

It is estimated that the main risks to GDP projections in the projection period are balanced. Financial problems in the Agrokor Group may have a stronger adverse effect on growth rates of the main macroeconomic aggregates than currently projected. On the other hand, positive risks are related to a stronger than projected growth in exports of tourist services, the expected dynamics of which is weaker than in the previous two years.

Consumer price inflation went up steadily in the first five months of 2017, largely driven by import price pressures. It is estimated that the average annual inflation of consumer prices could pick up to around 1.1% in 2017, up from -1.1% in 2016. The major positive contribution to inflation in 2017 comes from food, while the contribution of energy prices may remain in slightly negative territory. The average annual consumer price inflation could slide up to 1.2% in 2018; inflationary pressures stemming from the domestic environment may be slightly stronger, bearing in mind the closing of the negative GDP gap, while pressures arising from changes in crude oil prices in the global market should be largely absent.

Along with stable domestic economic activity, the downward trend in external imbalances has carried on. The current account surplus, which has been recorded for the fifth year in a row, could increase further in 2017, mostly due to the unfavourable impact of the crisis in the Agrokor Group on bank profits, which arises from increased expenses on loss provisions for placements to that group. The balance could go slightly up in other transactions as well because the growth in net exports of services and transfers from the EU budget may exceed the increase in the goods deficit. The current account surplus is expected to fall in 2018; in addition to the much smaller effect of Agrokor, this will be influenced by the increase in the foreign trade deficit triggered by the continued recovery in domestic economic activity and stronger import demand. As regards financial flows, the deleveraging of domestic sectors vis-à-vis other countries will certainly continue. On the other hand, direct equity investments in Croatia are expected to recover gradually, but they might be held back by heightened uncertainty and risk aversion of global investors, as well as long-term structural weaknesses of the Croatian economy.

Pursuing an expansionary monetary policy in the first half of 2017, the CNB continued to support high kuna liquidity and maintain financial stability. The kuna liquidity in the banking system was further strengthened by foreign currency interventions that alleviated appreciation pressures on the domestic currency and added to gross international reserves. As the creation of a large amount of reserve money resulted in a record high liquidity surplus in the monetary system, there was no demand for kuna operations of the CNB in the period under review. Against this background, domestic financing conditions improved, including interest rates on almost all types of bank loans, while the persistent easing of credit standards and the growth in loan demand were accompanied by the recovery in placements to domestic sectors, in particular households.

With regard to fiscal policy, the EU Council confirmed Croatia's exit from the excessive deficit procedure in June 2017 as the general government deficit was cut to 0.8% of GDP in 2016, with the continued decrease in general government debt at an adequate pace being expected over the medium term. Following a sharp two-year decline, general government deficit could edge up in 2017 according to the Ministry of Finance's projection, which is largely due to the tax reform aimed at reducing the overall tax burden. Nevertheless, the general government debt-to-GDP ratio could continue to fall.

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	-1.7	-0.3	-2.2	-1.1	-0.5	2.2	3.0	3.0	2.9
Personal consumption	-7.5	-1.5	0.3	-3.0	-1.9	-1.6	1.0	3.3	3.1	2.9
Government consumption	2.1	-1.6	-0.3	-1.0	0.3	-0.8	-1.4	1.3	1.4	1.5
Gross fixed capital formation	-14.4	-15.2	-2.7	-3.3	1.4	-2.8	3.8	5.1	6.1	7.2
Exports of goods and services	-14.1	6.2	2.2	-0.1	3.1	6.0	9.4	5.7	6.6	5.2
Imports of goods and services	-20.4	-2.5	2.5	-3.0	3.1	3.1	9.2	5.8	7.5	6.4
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	1.7	1.4
Registered unemployment rate	14.9	17.4	17.8	18.9	20.2	19.6	17.0	14.8	12.7	11.5
ILO unemployment rate	9.2	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.6	10.5
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	1.1	1.2
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	1.0	1.2
External sector										
Current account balance (as % of GDP)	-5.1	-1.1	-0.7	0.0	1.0	2.1	4.8	2.6	3.7	2.5
Current and capital account balance (as % of GDP)	-5.0	-0.9	-0.6	0.1	1.2	2.2	5.5	3.8	4.9	3.8
Gross external debt (as % of GDP)	101.1	104.2	103.7	103.0	105.3	107.9	102.9	90.9	81.5	77.4
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	3.1	4.1
Total liquid assets – M4 ^a	-0.8	0.7	4.6	3.9	3.6	2.4	5.0	5.3	3.3	4.1
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	3.9	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 30 June 2017.

Sources: CBS, MoF and CNB.

Monetary policy will keep its expansionary character in the rest of 2017 and in 2018. This implies support to the high liquidity in the monetary system, which is conducive to the maintenance of low domestic interest rates and acceleration of placement growth, having a favourable effect on overall economic developments. Medium-term risks are mostly associated with

the possible tightening of monetary policy in the global environment, the euro area in particular, which may also be reflected in monetary policy in Croatia. This suggests that persistent efforts are necessary to further consolidate public finances and continue to reduce macroeconomic imbalances.

2 Global developments

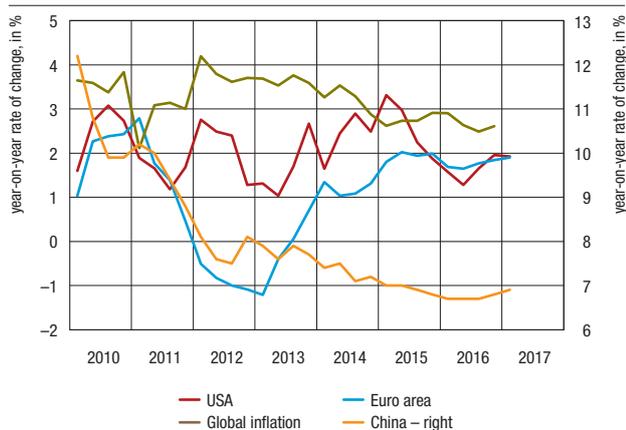
Economic activity accelerated slightly in the second half of 2016, with favourable global developments continuing early in 2017. World trade also accelerated after growing at the slowest rate in 2016 from the outbreak of the global crisis. Financing conditions remained relatively favourable despite uncertainty and the heightened risk aversion. Positive trends notwithstanding, uncertainty about global policies and structural weaknesses in individual large markets continued to curb more dynamic economic and financial flows in the world. Early in 2017 inflation trended up in many countries, most notably developed countries due to the recovery in energy prices. However, core inflation remained subdued at a global level.

Among developed countries, the continuation of the positive trend from the end of 2016 was the most evident in the euro area which grew by 0.6% in the first three months of 2017, with economic activity growing at the strongest rate in Germany and Spain and decelerating markedly in France. Economic recovery is still largely generated by domestic demand, with a significant resurgence in personal consumption being observed in the past

months, while investment activity of the private sector remained subdued. The growth of the US economy, the world's largest, slowed down to only 0.3% in the first quarter of 2017 from the previous quarter, mainly as a result of the slowdown in the growth of personal and government consumption following the presidential elections, which was partly offset early in the second quarter.

As for developing and emerging market countries, early in 2017 favourable developments were seen in large Asian markets, notably China, in which economic activity accelerated. By contrast, some markets in Latin America faced increased uncertainty, in part due to economic relations with the USA, while the heightened geopolitical risks slowed down the growth of countries in the Middle East. Exporters of oil and other raw materials are still in the process of adjustment to low price levels. The Russian and Brazilian economies pulled out of recession at the end of 2016, which had a positive impact on the regional markets.

Figure 2.1 Economic growth in selected markets and global inflation



Sources: Eurostat, BEA, NBS and IMF.

Croatia's main trading partners

Most of Croatia's major trading partners continued to be marked by positive developments at the beginning of 2017. The German economy was among the most dynamic in the euro area, the major contributor to this trend being the recovery of investment activity in the construction sector. Economic trends are also becoming more favourable in Austria and Slovenia, with domestic demand increasing slightly in Italy at the beginning of the year despite still pronounced structural weaknesses in that economy. The continuation of positive trends from 2016 was also observed in Bosnia and Herzegovina and Serbia, while the Macedonian economy is facing growing pressures caused by a prolonged political crisis.

Prices, exchange rates and financing conditions

The agreement between OPEC countries and Russia on daily output restrictions caused a hike in crude oil prices in the first quarter of 2017. However, the suspicions of market participants as regards the adherence to the agreement and the growth of output based on the use of new technologies in the USA contributed to a considerable fall in crude oil prices until the end of June, to 47 USD per barrel, which was more than 10% lower than at the end of March and almost 15% lower than at the end of 2016. Raw material prices excluding energy also edged down in April and May, which only partly offset their sharp increase late in 2016 and early in 2017. The major contributor to this trend was the decrease in metal prices (primarily iron ore) caused by the fall in demand in China. By contrast, prices of food products mostly trended up, with meat prices growing at the strongest rate.

The divergent trends in the monetary policies of the US and the euro area continued in the first half of 2017. After increasing its benchmark interest rate in December 2016, the Fed continued to tighten its monetary policy stance in line with market expectations, raising the rate by a total of 50 basis points in March and June 2017. Concurrently, the ECB kept its benchmark rate unchanged in the first half of 2017; however, in line with its programme of unconventional monetary policy measures, it began reducing the volume of bond purchases (in April, the bond purchase programme was cut from EUR 80bn to EUR 60bn a month). It is foreseen that net security purchases will be carried out until the end of 2017 or longer if the sustained adjustment to the inflation target is not achieved.

Although it was expected to slightly weaken in line with the previous projection forecast, the euro exchange rate mostly strengthened against the major currencies in the first half of 2017. Hence, the exchange rate of the US dollar against the euro stood at EUR/USD 1.14 at the end of June 2017, which is an increase of 8.2% from the end of 2016. In addition to good economic indicators in the euro area and the weakening of political pressures after the presidential elections in France, the major contributors to this were the absence of the reforms announced by the new US president and the uncertainty about the future economic policy of new administration. At the same time, the strengthening of political risks in the UK and the decision of the European Commission to begin the negotiations on the UK's exit from the EU contributed to the weakening of the pound sterling against the euro.

Financing conditions for European emerging market economies, Croatia included, mostly improved in the first half of 2017, which is also corroborated by the movement of the EMBI index, which fell by about 30 basis points from the end of 2016. However, short-term and stronger volatility of the EMBI index is also evident, indicating that high uncertainty is still present in financial markets.

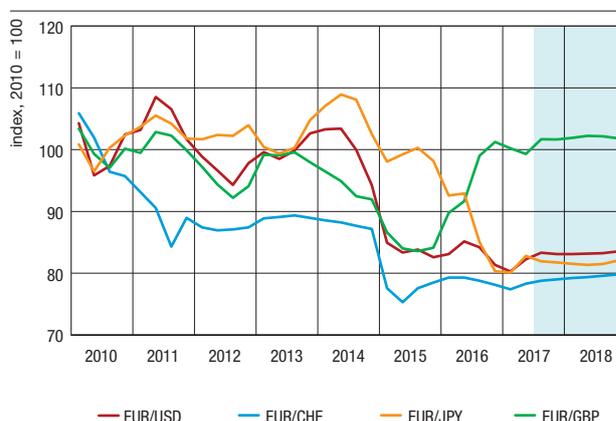
Projected developments

The projection is based on the assumptions of favourable outlooks for global economic growth in comparison to expectations prevailing at the end of 2016, a gradual strengthening of the euro against major global currencies, the continuation of a rise in the US benchmark interest rate and the keeping of the key euro area interest rates at current levels. Prices of crude oil and other raw materials might increase only slightly in the forthcoming period.

In line with expectations published in the Foreign Exchange Consensus Forecast in June 2017, the average dollar/euro exchange rate might reach EUR/USD 1.09 in 2017, which is only slightly lower than in 2016. In 2018, the exchange rate of the euro might edge up. The exchange rate of the Swiss franc against the euro might achieve EUR/CHF 1.08 in 2017, which is also slightly lower than in 2016, with the euro exchange rate expected to slightly trend up until the end of 2017 and in 2018.

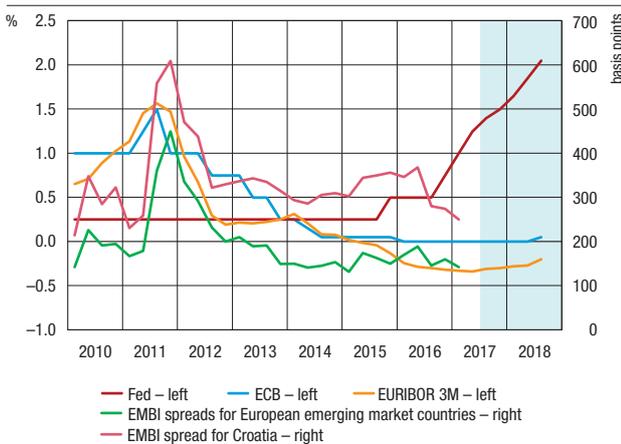
As for key interest rates, the Fed's projection presented at its meeting in June 2017 provides for an additional rise in the benchmark interest rate of 0.25 basis points by the end of 2017

Figure 2.2 Exchange rates of individual currencies against the euro



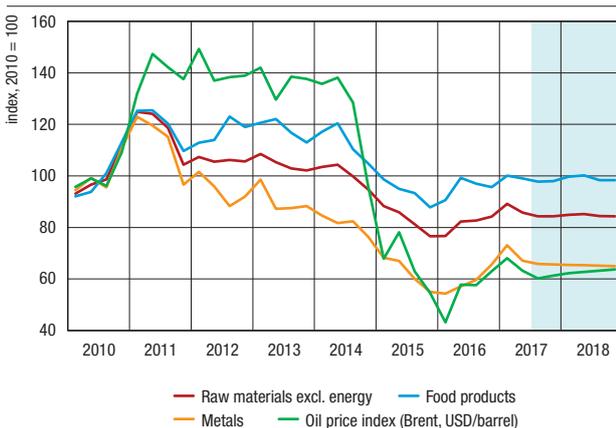
Note: A growth in the index indicates a depreciation of a currency against the euro.
Sources: Eurostat and Foreign Exchange Consensus Forecasts (June 2017).

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



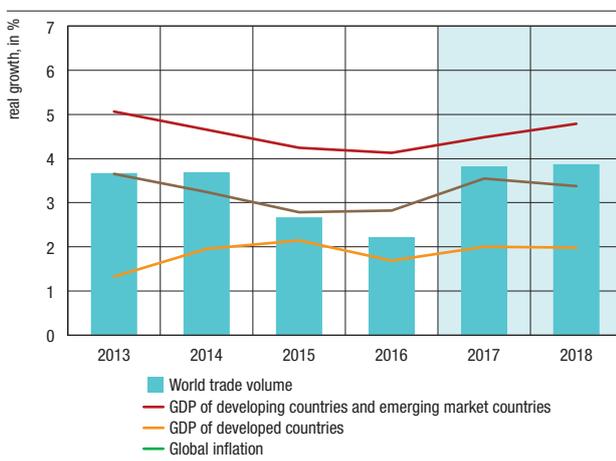
Source: Bloomberg (forecast), 16 June 2017.

Figure 2.4 Prices of raw materials on the international market



Sources: IMF (May 2017) and prices of oil: Bloomberg (Brent crude oil futures, 30 June 2017).

Figure 2.5 Global economic developments



Source: IMF (WEO, April 2017).

and three more hikes in 2018. In addition, a gradual decrease in the Fed's balance sheet through smaller repurchases of T-bills has also been announced. This dynamics of monetary stance tightening is in accord with earlier forecasts but it will nevertheless depend on the intensity of economic expansion and labour market conditions as well as on the implementation of the announced fiscal policy incentives. At its last meeting held in June 2017, the ECB announced that it would keep its key interest rates at current or even lower levels over a longer time horizon. The bond purchase programme will remain in force at least until the end of 2017 or until the sustainable inflation level set by the ECB targets is achieved.

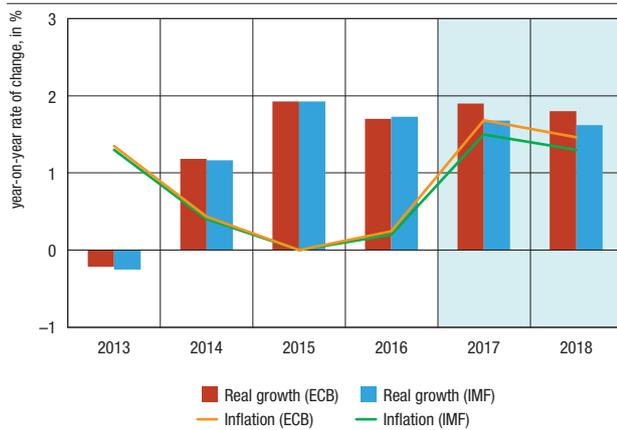
As regards price developments, most recent market expectations point to the stagnation of crude oil prices until the end of 2017 and their slight increase in 2018. Although the agreement between OPEC countries and Russia on the reduction of daily output has been extended until March 2018, the growth in crude oil supply from new technologies in the USA might continue in the coming period. Additional pressure might be exerted also by further output increases in Libya and Canada. Accordingly, the expected average price of Brent crude oil fell to 50 USD in 2017 from the 56 USD stated in the last projection (December 2016). The prices of raw materials excluding energy might record an annual growth rate of 5.4% in 2017, up by 4.4 percentage points from the previous projection. This above all mirrors the developments in individual raw material prices in the first quarter of 2017, while a slight decrease in the prices of other raw materials may be expected in 2018.

The global economy, according to the IMF's projections (WEO, April 2017), might accelerate from 3.2% in 2016, the lowest rate since the outbreak of the global financial crisis, to 3.5% in 2017 and 3.6% in 2018. World trade is also expected to further intensify as the recovery of aggregate demand picks up speed. Developing and emerging market countries will remain the main generators of global growth, although the continuation of the restructuring of the Chinese economy will remain a setback to global recovery. By contrast, Russia and Brazil will continue to recover from recession, while a slight increase in prices might somewhat facilitate the recovery of exporters of raw materials.

As regards developed countries, a gradual revival of their economic growth in 2017 and 2018 should benefit from the economic incentive policy measures and the recovery of world trade. Hence, the euro area is expected to see a continuation of moderate economic growth (about 1.7%) in the current year and in 2018. Investment activity in some euro area countries might remain subdued for a while. Growing at a moderate rate, inflation in the euro area might also remain below the targeted ECB level. Specifically, after reaching 2% in February 2017, inflation trended down in the following months due to the fading of the one-off effect of the rise in the prices of energy and food observed at the end of 2016. Considering that the world prices of raw materials are not expected to continue growing at a very significant rate in the future and that core inflation might remain subdued due to moderate domestic demand, the overall inflation in the euro area might reach at most 1.5% in the coming period.

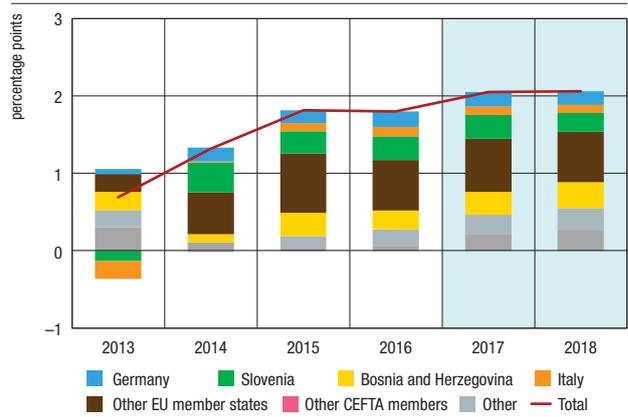
Economic growth in the USA, despite a mild weakening early in 2017, should intensify gradually again and amount to 2.5% in 2017 and 2018. The major contributor to this trend should be the strengthening of personal consumption in the conditions of almost full employment and the growth in disposable income, with some positive incentives coming from expansionary fiscal policy measures whose implementation in the initially planned volume is still uncertain. Expectations for the UK are also favourable. However, possible negative consequences of increased

Figure 2.6 Economic growth and inflation in the euro area



Sources: IMF (WEO, April 2017) and ECB (June 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, April 2017).

political instability after the parliamentary elections held in June, which inter alia triggered a new wave of uncertainties about the process of exiting from the EU, remain to be analysed.

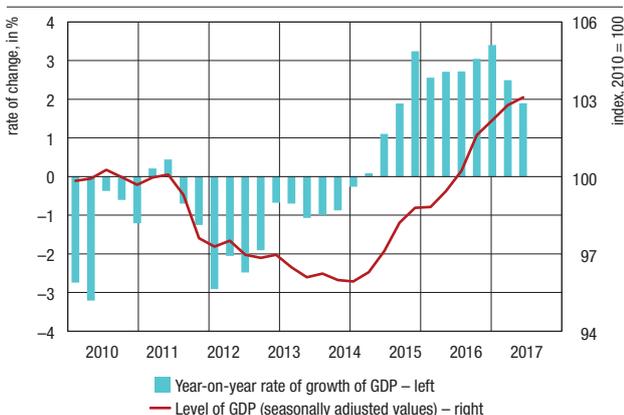
In line with the expected pick up in world trade, the growth of demand for Croatian export products might also become slightly stronger in the coming period (Figure 2.4). Concerning major Croatia's foreign trade partners, the most significant strengthening of demand is expected in the newest EU member states and in the countries in the region, notably in Bosnia and Herzegovina. Nonetheless, demand from Croatia's major foreign trade partners from the euro area should remain stable. The growth dynamics of the German economy should remain favourable owing to stable personal consumption and the recovery of investments and exports. Forecasts for the Slovenian economy are

also improving, unlike for Italy whose economic growth is still significantly below the euro area average.

Positive expectations notwithstanding, the global economy remains largely exposed to negative risks, which predominantly stem from uncertainties about global policies, notably a growing protectionism that might slow down world trade. Significant also is the risk of a possible stronger deterioration of global financing conditions which may materialise if the USA tightens its monetary policy more sharply. In particular, a strong fiscal stimulus from the new American administration might in the conditions of full employment raise inflation and demand a faster increase in benchmark interest rates. The spillover of these effects would most affect countries with accumulated imbalances and large financing needs.

3 Aggregate supply and demand

Figure 3.1 Gross domestic product real values



Note: Data for the second 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 June 2017.

Source: CBS (seasonally adjusted by the CNB).

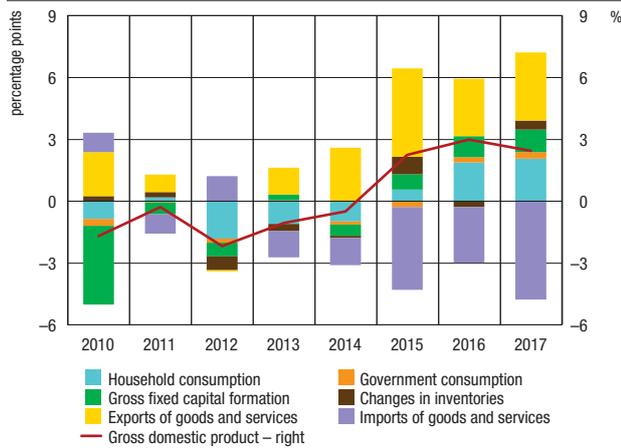
Economic activity in the first quarter of 2017 continued to grow at a pace similar to that in the last quarter of 2016. Real GDP grew by 0.6% from the previous three months, with continued favourable developments being mostly due to larger exports of goods as well as the rise in all components of domestic demand. Available monthly indicators show that economic growth continued into the second quarter, albeit at a slightly slower pace than early in the year.

Observed on an annual level, real GDP grew by 2.5% in the first quarter of 2017, with robust exports of goods and the steady increase in domestic demand being reflected in imports growth, which means that the contribution of net foreign demand to economic activity was negative. The production side of the GDP calculation shows that gross value added grew by 2.2% annually, which can be attributed to an annual increase in all activities, except for agriculture, forestry and fishing.

Aggregate demand

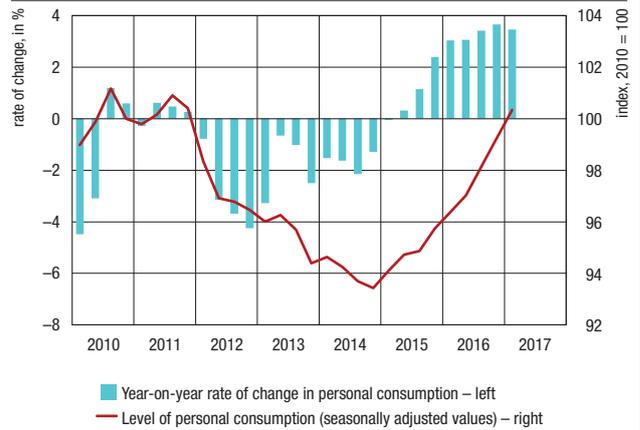
Real exports of goods and services continued to surge in the first quarter of 2017, albeit at a slightly lower pace than in late 2016. The slower quarterly growth was due to reduced exports

Figure 3.2 GDP rate of change contributions by components



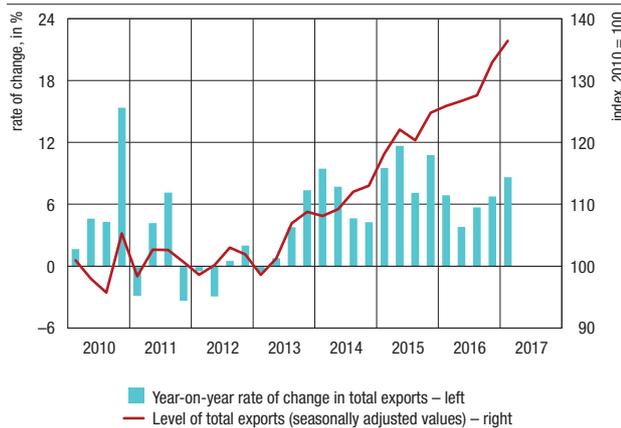
Note: Data for 2017 refer to the first quarter.
Source: CBS.

Figure 3.5 Personal consumption real values



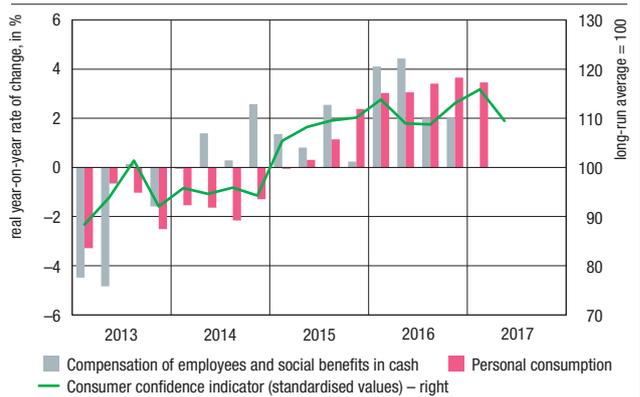
Source: CBS (seasonally adjusted by the CNB).

Figure 3.3 Exports of goods and services real values



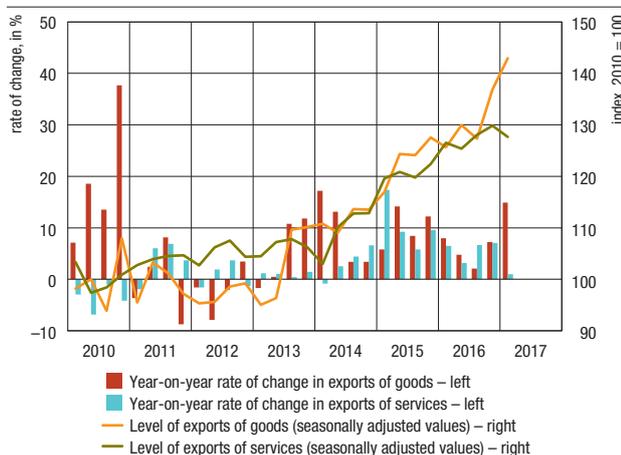
Source: CBS (seasonally adjusted by the CNB).

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 June 2017.
Sources: CBS, Ipsos and CNB.

Figure 3.4 Real exports of goods and services



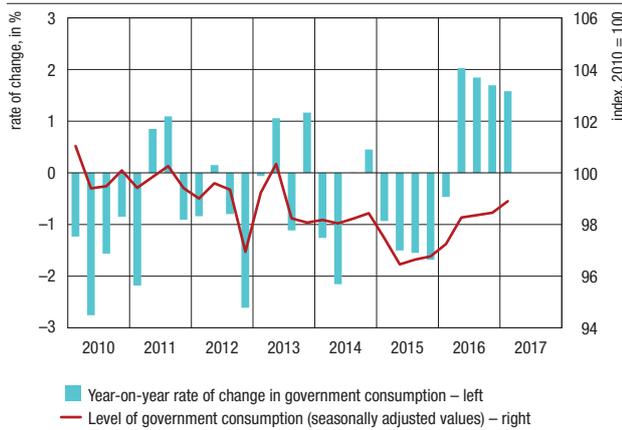
Source: CBS (seasonally adjusted by the CNB).

Figure 3.7 Gross fixed capital formation real values



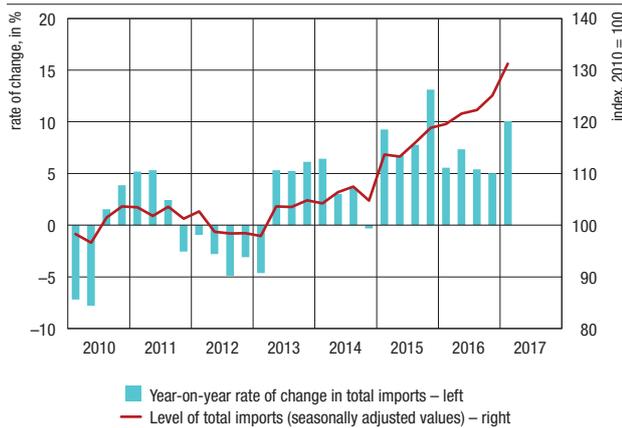
Source: CBS (seasonally adjusted by the CNB).

Figure 3.8 Government consumption
real values



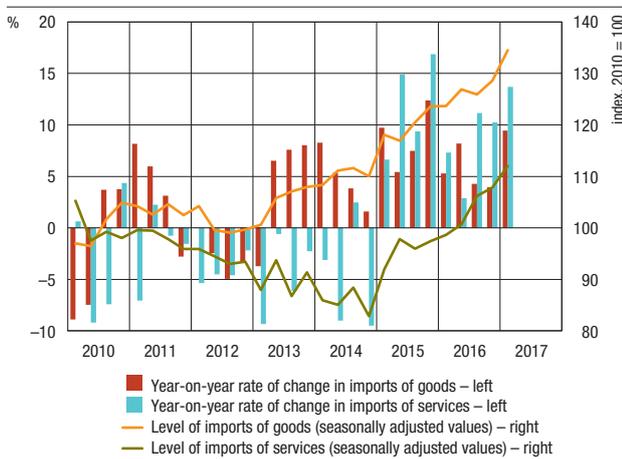
Source: CBS (seasonally adjusted by the CNB).

Figure 3.9 Imports of goods and services
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).

of services and a slower increase in exports of goods compared with the end of 2016. On an annual level, total exports steadily picked up steam, growing by 8.6% in the first quarter of 2017. Exports of goods rose by 14.9% while exports of services grew by only 1.0%, which is attributable to the moving Easter holidays (this year in April, and last year in March).

Personal consumption was 1.1% larger in the first quarter of 2017 than in the preceding three months, growing uninterrupted for more than two years. Favourable trends reflect the steady increase in employment and real net wages, as of last year accompanied by an increase in household loans. In addition, the high level of consumer confidence had a favourable impact on the propensity to consume. The consumer confidence index reached a historical high in February 2017, largely thanks to favourable expectations concerning the financial situation of households in the next year. Personal consumption went up 3.5% on an annual level and was second only to exports of goods and services as regards its contribution to the overall economic growth.

The growth in gross fixed capital formation remained stable and relatively high in the first quarter of 2017 (2.1% on the previous quarter) so that its annual rate went up to 5.4%. Such developments were mostly driven by favourable movements in the private sector, as confirmed by monthly indicators on construction works on buildings and imports of capital goods. At the same time, the available nominal fiscal data and data on civil engineering works suggest a stagnation in investment activity from the government.

In early 2017, government consumption went up 0.5% from the previous quarter, growing by 1.6% on an annual basis. Nominal data on government expenditures suggest that the annual increase was related to larger intermediate consumption.

The robust growth in exports and domestic consumption led to a noticeably stronger quarterly increase in imports of goods and services. The growth rate of total imports in the first quarter was twice as high as that recorded in late 2016 (4.9% vs 2.3% in the last quarter of 2016), which is primarily due to larger imports of goods.

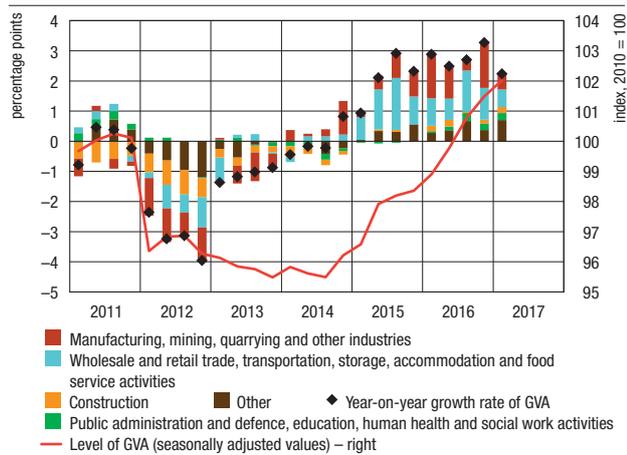
Nominal data on trade in goods show growth in imports in all main industrial groupings, with the exception of non-durable consumer goods. Total imports soared on an annual level as well, with an intensified annual increase in imports of goods and services.

Aggregate supply

Gross value added continued to trend up in the first quarter of 2017, growing by 0.5% from the previous three months. The increase was slightly slower than in late 2016, largely due to the decrease in GVA in industry. The 2.2% annual increase in GVA in the first quarter of 2017 was mostly the result of retail trade, transportation and storage, which may be attributed to the increase in household consumption.

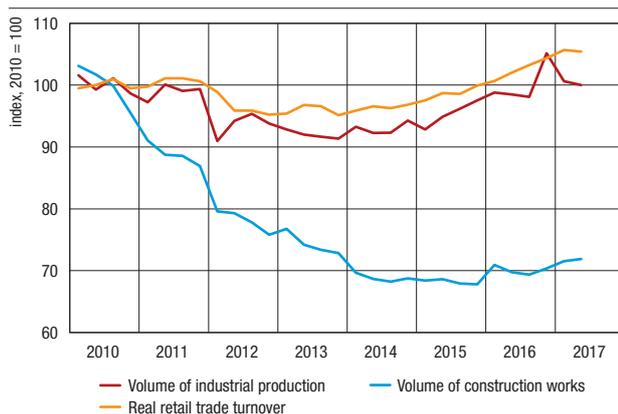
The GDP nowcasting model based on high-frequency data that are available for April and May shows that real economic activity growth slowed down in the second quarter of 2017 from the beginning of the year. Developments were favourable in May, while in April the financial problems of Agrokor had a negative effect on current trends. Industrial production slid down by 0.6% in April and May compared with the average for the preceding three months, which is much less than the 4.3% decrease in the first quarter. Nominal data broken down by main industrial groupings show that the quarterly drop was particularly pronounced in the production of energy, with the production of intermediate goods following suit. Real retail trade turnover held steady in April and May compared with the first

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



Source: CBS (seasonally adjusted by the CNB).

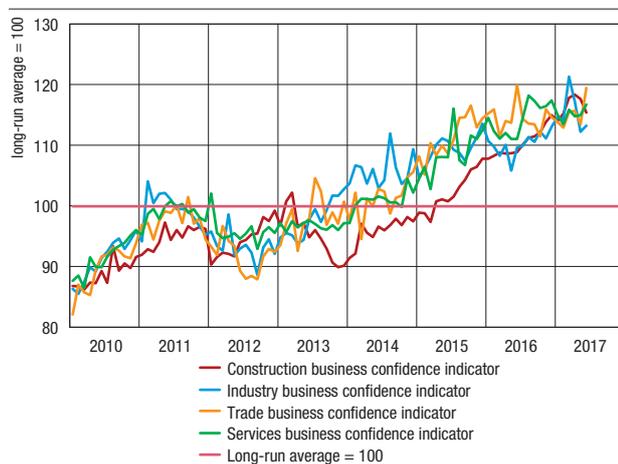
Figure 3.12 Short-term economic indicators
seasonally adjusted values



Notes: Quarterly data are calculated as an average of monthly data. Data on construction in the first quarter of 2017 refer to April and data for industry and trade refer to April and May.

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).

quarter. In contrast, construction grew marginally in April from the first quarter. The volume of construction works on buildings increased, while civil engineering works, which primarily related to infrastructure facilities, levelled off.

Consumer confidence improved slightly in May and June, after having fallen substantially in April due to poorer expectations regarding the economic and financial situation, which may be associated with the uncertainty related to the financial problems of the Agrokor Group. As regards business confidence, the second quarter was characterised by unfavourable developments in industry, where confidence dropped to the level reached in late 2016. Services business confidence remained at a level similar to that in the first quarter, whereas trade recorded positive trends, largely because respondents assessed that the business situation had improved in the previous three months. While expectations in construction deteriorated in May and June, confidence in that activity remained at relatively high pre-crisis levels.

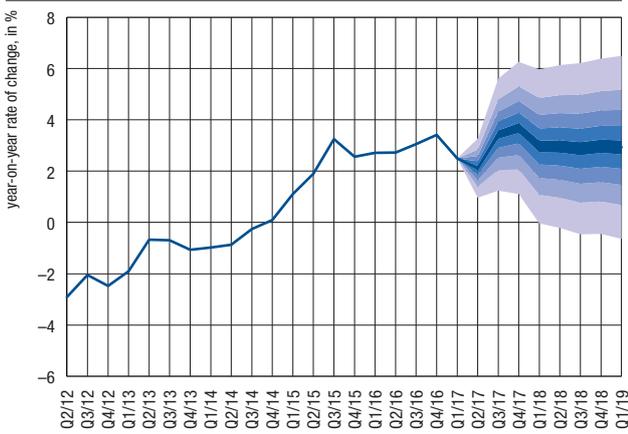
Projected developments

Economic activity may continue to move in 2017 at a pace similar to that in the preceding year, so that real GDP may grow by 3.0% on the back of the steep upturn in exports of goods and services, increasingly stronger investment activity and the steady growth in personal consumption. Economic growth may slow down mildly in 2018 due to the expected lower increase in exports of goods and services and a slightly lower expected growth rate of personal consumption.

The rise in total exports may pick up in 2017 and reach 6.6%. Real growth in exports of goods and services 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, capital investment is expected to pick up steam and grow by 6.1% in 2017, so that the positive contribution of gross fixed capital formation to economic growth may be larger in the current year than in 2016. Personal consumption may continue in 2017 at a pace similar to that seen in 2016, largely supported by the ongoing positive trends in the labour market and the steady rise in household loans. In 2017 as a whole, the number of employed persons is expected to grow further, and the growth in real net wages is expected to pick up momentum due to the Croatian government's decision to raise the wages of civil servants and government employees, favourable changes to the income tax act, and a mild increase in private sector wages. Based on these assumptions, household consumption may grow by 3.1% in 2017 and provide the strongest boost to real growth of all domestic demand components. Government consumption may increase by 1.4% in 2017 on the back of expected growth in intermediate consumption and social benefits in kind. Finally, the steady growth in foreign and domestic demand is expected to be reflected in faster growth in imports of goods and services, so that the contribution of net foreign demand to total economic growth in 2017 may be slightly negative (-0.2 percentage points, in contrast to 2016, when it was 0.1 percentage point).

As economic activity may continue to trend upwards in 2018, albeit at a slightly slower pace than in 2017, the real GDP growth rate is expected to reach 2.9%. The mild slowdown in economic activity is mainly attributable to the expected lower increase in total exports, partly due to the assumption that exports of tourist services may slow down in 2018, after growing exceptionally strongly for several years. In addition, although household consumption is expected to continue to contribute strongly to economic growth on the back of steady favourable movements

Figure 3.14 Projection of real GDP dynamics



Sources: CBS and CNB.

in the labour market and the ongoing recovery in household loans, its growth may be slightly slower than in the year before. In particular, 2018 is expected to witness the waning effects of tax changes and therefore a slower increase in real net wages, as well as a lower rate of employment growth. On the other hand, investment activity is expected to pick up, largely spurred by the strong growth in private investment, so that the positive contribution of investment to economic growth may come close to that of personal consumption. The ongoing increase in total exports and domestic demand will lead to further growth in imports of goods and services, while the negative contribution of net foreign demand to total growth may remain slightly negative in 2018.

It is estimated that the risks to GDP projections in the projection period are balanced. In view of the high degree of uncertainty over the restructuring process, the negative impact of the Agrokor Group on real activity may be more severe than the quantifications presented in the projection. On the other hand, upside risks stem from possibly more favourable growth in exports of tourist services.

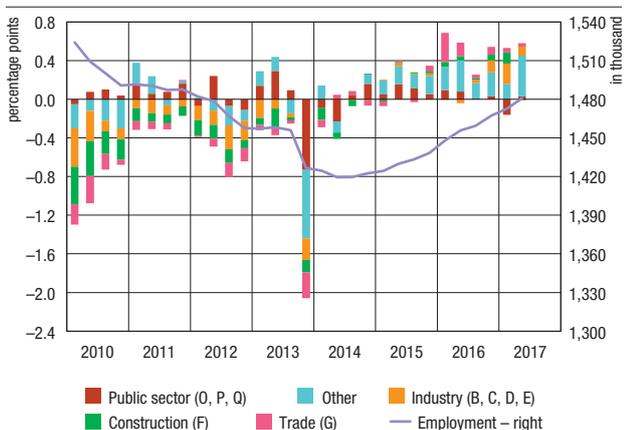
4 Labour market

Employment and unemployment

After edging down at the beginning of 2017, the growth in the number of employed persons stepped up again in April and May. Broken down by activity, the number of employed persons grew primarily in private sector service activities associated with tourism (accommodation and food service activities and trade) in the second quarter, while industry contributed less to the trend (Figure 4.1). In addition to economic recovery, the major contributor to employment growth was in government measures aimed at reducing labour costs. This specifically relates to the full-time employment of young persons, with employers being exempted from the payment of wage contributions in the five-year period.

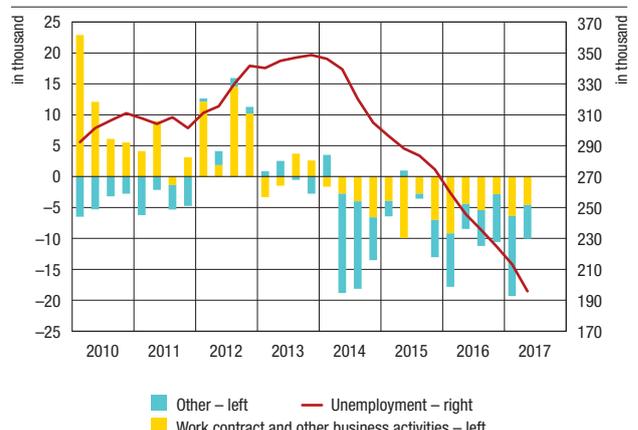
In addition to the growth in employment, the beginning of 2017 was marked by the continued decrease in the number of registered unemployed persons which gradually accelerated in the first five months. As a result, the unemployment rate reached its historical low in May 2017 from 1997 (around 190,000, according to seasonally adjusted data). Outflows from the CES register for other reasons (mainly removal from the register because of non-compliance with the legal provisions and registration cancellation) and newly employed persons contributed equally to the decrease in unemployment in the second quarter of 2017 (Figure 4.2). A significant share of those removed from the register of unemployed persons is probably to a certain extent accounted for by stronger emigration of working age

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



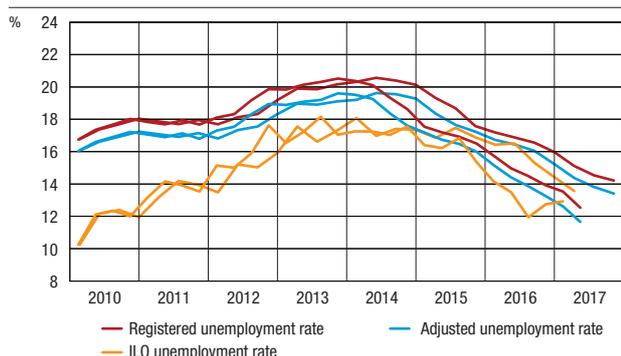
Note: Data for the second quarter of 2017 refer to April and May.
Source: CPIA (seasonally adjusted by the CNB).

Figure 4.2 Total unemployment and net unemployment inflows seasonally adjusted data



Note: Data for the second quarter of 2017 refer to April and May.
Source: CES (seasonally adjusted by the CNB).

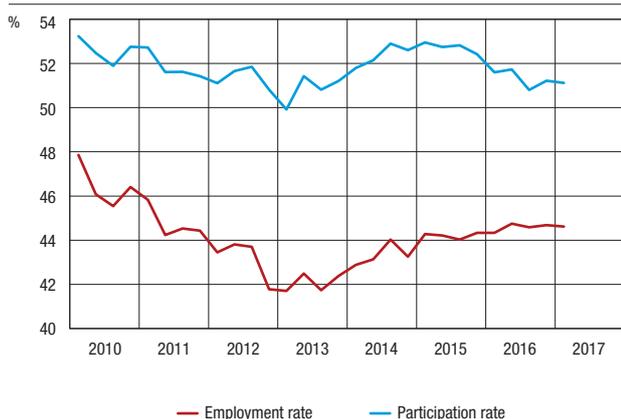
Figure 4.3 Unemployment rates
seasonally adjusted data



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 CPIA. 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. Data for the second quarter of 2017 refer to April and May.

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

Figure 4.4 Labour Force Survey
seasonally adjusted series



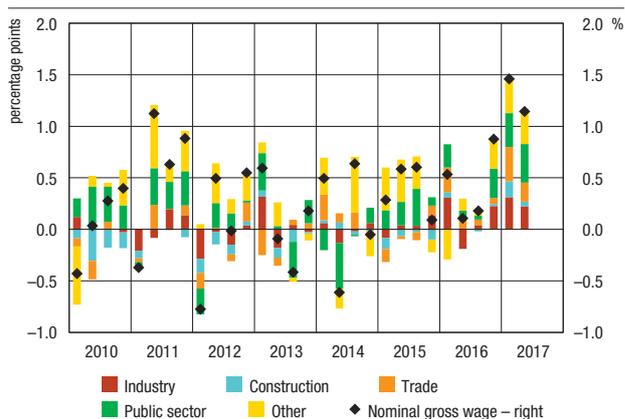
Source: CBS (seasonally adjusted by the CNB).

population since Croatia's accession to the European Union.¹

Following the decrease in the number of unemployed persons, the registered unemployment rate dropped to 13.5% in the first quarter of 2017 (from 13.9% in the fourth quarter of 2016) and to 12.2% in May² (according to seasonally adjusted data) (Figure 4.4). In contrast, according to the latest available data for the first quarter of 2017, the ILO unemployment rate edged up to 12.9% from 12.7% in the fourth quarter of 2016 due to the rise in the number of unemployed persons (Figure 4.3).

In addition, the trend in the number of employed persons according to the ILO survey was also less favourable than according to administrative indicators. In the first quarter of 2017, employment edged down, while the employment rate and the participation rate remained almost unchanged (Figure 4.4).

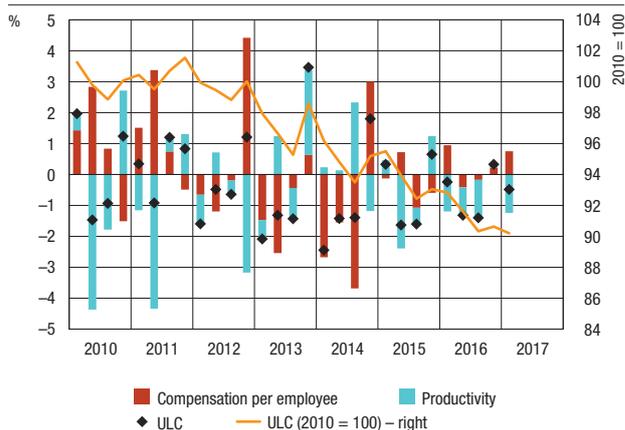
Figure 4.5 Average nominal gross wage by NCA activities
seasonally adjusted data, contributions to the quarterly rate of change



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 second quarter of 2017 refer to April and May.

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

Wages and unit labour costs

After a perceptible increase at the beginning of 2017, the growth of the average gross wage slowed down somewhat in April and May owing to weaker growth in wages in all private and public sector activities (Figure 4.5). The growth in real wages was in line with developments in nominal wages in the second quarter of 2017 as consumer prices did not change in the reference period.

At the beginning of 2017, unit labour costs continued to trend downward in nominal terms due to the growth in compensation per employee remaining lower than the growth in labour productivity according to national accounts data (Figure 4.6).

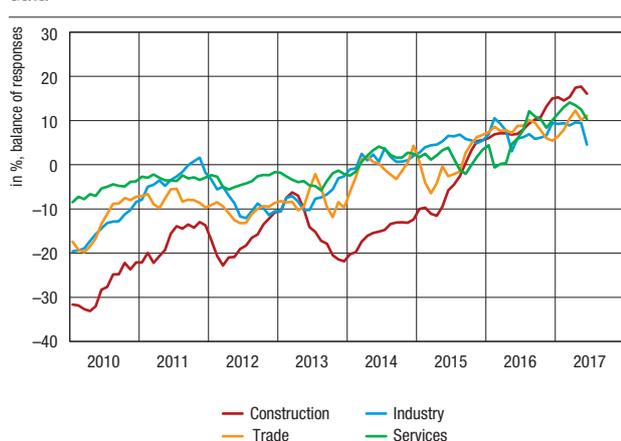
Projected developments

The movement in the number of employed persons in the first five months of 2017 and the expected growth of GDP in

¹ The official CBS data show that a total of 18,000 citizens (net) emigrated from the country in 2015, which is almost twice as much as in 2014. The official statistics of the Republic of Croatia most likely underestimate the actual number of emigrants. Specifically, the official data of the German statistics office show that around 35,000 persons with Croatian citizenship (net) immigrated to Germany in 2015 from 2014.

² If, instead on the basis of data from the JOPPD form which are collected and processed by the CBS, the registered unemployment rate was to be calculated on the basis of data on the number of persons insured with the CPIA, the unemployment rate would amount to 11.3% in May 2017.

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).

the rest of the year suggest that employment might increase by about 1.7% at the entire 2017 level. It is assumed that the number of employed persons will primarily trend up in the private sector, while it might remain unchanged in the public sector. The continuation of favourable developments in employment during the summer months is confirmed by data from the survey on business expectations (Figure 4.7). The continuation of the downward trend in the number of unemployed persons is also expected to materialise in 2017. As a result, the ILO unemployment rate might edge down to 11.6% in 2017 under the assumption that the decrease in the number of unemployed persons will continue to be more pronounced than the growth in the number of employed persons.

As regards labour costs, the growth of gross wages is expected to accelerate in 2017 due largely to the developments in the

Table 4.1 Projection of labour market indicators for 2017 and 2018

year-on-year rate of change

	2012	2013	2014	2015	2016	2017	2018
Number of employed persons	-1.2	-1.5	-2.0	0.7	1.9	1.7	1.4
Unemployment rate (ILO)	15.9	17.3	17.3	16.2	13.1	11.6	10.5
Average nominal gross wage	1.0	0.8	0.2	1.3	1.9	2.9	2.9
ULC	-1.2	-2.2	-2.3	-1.3	-2.8	1.6	1.4
Productivity	1.5	1.6	-3.1	1.0	2.7	1.3	1.5

Notes: The year-on-year rate of change in the number of employed persons refers to data on the number of persons insured with the CPIA. 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. The year-on-year rate of change of unit labour costs and productivity refer to data from the national accounts. The projection of unit labour costs (and productivity) assumes that the growth in the number of employed persons and total employment in the national accounts will equal the expected rise in the number of persons insured with the CPIA.

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

public sector stimulated by the decision of the Government of the Republic of Croatia to increase the basis for the calculation of the wages of civil servants and government employees by 6% in 2017. An acceleration in wage growth is also expected in the private sector due to the continuation of the growth in labour productivity and the increasingly pronounced problem of labour shortage in specific sectors. The growth in net wages will be somewhat stronger in 2017 owing to legislative changes to income tax that have been in effect from the beginning of the year.

In 2018, the annual growth rate of total employment might slow down to 1.4%, due also to the possible effect of the announced restructuring of enterprises in the Agrokor Group on the developments in the labour market. By contrast, the ILO unemployment rate is expected to decrease further in 2018, while the average nominal gross wage might continue to grow at a pace similar to that in 2017.

Box 1 Wage adjustments in Croatia and EU countries: results of a firm survey

Downward nominal wage rigidity occurs when firms exposed to adverse economic shocks are more inclined to wage freezes and/or reductions of labour input than to downward wage adjustments. Downward wage rigidity was significant in the EU in the 2010-2013 period, and it was somewhat less pronounced in Croatia as a smaller share of firms opted for base wage freezes and a larger share of firms for base wage cuts in comparison with the EU. By and large, this may be a reaction of firms to the deep and prolonged recession in Croatia. In part, it may also be due to a difference in the institutional environment – the coverage of employees by collective agreements in Croatia is lower than the average for the EU, with collective agreements signed at firm-level prevailing in Croatia.

The latest firm survey on labour market characteristics and wage setting within the framework of the Wage Dynamics Network (WDN) of the European System of Central Banks was carried out late in 2014 and in the first half of 2015 in 25 countries of the European Union.³ The survey gives an insight into the shocks

(e.g. decrease in demand, access to foreign financing, customers' ability to pay etc.) with the greatest impact on firms' activity, the methods of employment and wage adjustments to these shocks and the widespread use and centralisation of collective agreements; it also assesses firms' efficiency as regards the reforms carried out in the labour market. In the 2010-2013 period (on which the most recent, third, survey, WDN3, was focused) economic developments in the EU countries were divergent. In line with this and for the purpose of the comparative analysis of the results⁴, three groups of countries were set up with respect to GDP developments and unemployment. The first group of countries included those in which the unemployment rate fell and GDP increased in the 2010-2013 period, the second group comprised the countries in which both the unemployment rate and GDP grew in the reference period, while the third group of countries included those marked by an increase in the unemployment rate and a decrease in GDP.

Inter alia, the aim of the surveys was to examine the extent to

³ The previous two WDN surveys carried out late in 2007/early in 2008 and in mid-2009 focused on the period of economic growth from 2002 to 2006, i.e. on the period immediately after the outbreak of the financial crisis in which most EU countries saw a fall in GDP and unemployment growth. Surveys are marked chronologically with WDN1, WDN2 and WDN3.

⁴ As in Izquierdo, M. et al. (2017): *Labour market adjustment in Europe during the crisis: microeconomic evidence from the Wage Dynamics Network survey*, ECB Occasional Paper No. 192, June.

Table 1 Wage freezes and cuts under various shocks

percentage of firms that froze or cut base wages at least once in the 2010-2013 period

	Share of firms that froze wages, in %	Share of firms that cut wages, in %	Share of firms that experienced a fall in demand and cut wages, in %	Share of firms that experienced a fall in demand and financial restrictions and cut wages, in %	Share of firms that experienced a strong fall in demand and financial restrictions and cut wages, in %
Total, 1st group	30.5	4.8	5.7	10.0	18.6
Czech R.	26.6	6.8	10.6	17.7	17.0
Germany	14.1	3.5	4.3	7.6	0.0
Estonia	11.6	12.4	23.5	11.0	31.1
Hungary	6.8	1.2	2.5	3.7	11.9
Ireland	65.4	23.1	28.7	31.0	33.3
Lithuania	35.4	10.0	14.6	21.2	30.5
Latvia	29.9	16.3	24.4	47.5	76.6
Slovak R.	36.8	9.8	16.8	35.4	66.4
United Kingdom	53.3	5.1	2.3	6.4	17.0
Total, 2nd group	19.1	2.3	3.0	4.2	3.3
Austria	6.9	3.0	2.2	2.6	0.0
Belgium	19.0	1.4	0.8	2.1	0.0
Bulgaria	18.5	5.0	11.9	21.8	14.4
France	22.7	1.2	2.0	1.9	0.6
Luxembourg	19.9	0.8	1.6	5.5	7.3
Netherlands	29.8	1.9	2.7	3.5	3.2
Poland	10.7	2.9	3.2	4.2	3.7
Romania	19.0	6.7	13.6	17.6	22.1
Total, 3rd group	22.4	8.0	10.2	13.4	21.7
Cyprus	78.8	37.5	45.0	44.3	40.1
Spain	21.6	7.5	10.6	10.5	14.6
Greece	63.3	54.6	61.8	70.9	79.8
Croatia	17.6	25.7	37.5	50.7	70.0
Italy	16.3	2.3	2.6	4.6	11.4
Portugal	42.3	6.7	9.2	14.9	16.0
Slovenia	8.4	13.0	17.0	23.9	25.6
Total (EU-24)	25.4	4.5	5.8	9.2	13.4

Notes: Reported results are weighted by weights that reflect total employment in the population of firms. Results do not include Malta.

Source: Izquierdo et al. (2017).

which downward nominal wage rigidity (DNWR) is present in the economy, i.e. the extent to which firms in adverse conditions use different measures to reduce their operating expenses, in order to see whether they are more inclined to wage cuts, wage freezes and/or reductions of labour input.⁵ As indicators of downward nominal wage rigidity the shares of firms that cut or froze their base wages in a certain period are used. The frequency of wage cuts points to a certain heterogeneity among EU countries. Hence, the results of the WDN3 survey (Table 1) suggest that the share of firms in Croatia that cut their base wages at least once in the 2010-2013 period stood at 25.7%, or significantly above the average for EU countries (4.5%). The share of firms that opted for wage cuts is also sizeable in Ireland (23.1%) and it stands out in the countries that experienced a significant drop in their economic activity in the reference period (e.g. Greece and Cyprus in which the share reached 54.6% and 37.5% respectively).

By contrast, in eleven countries (mostly those from the first and second groups) the share of firms that cut wages hovered below/around 5%.

If only those firms that experienced a strong fall in demand and considerable financial restrictions are taken into account, the share of firms that cut their base wages at least once in the 2010-2013 period is larger and amounts to 13.4% for the EU and as much as 70% for Croatia. Extremely large shares of firms that cut wages in these conditions are found in third group: Greece (79.8%) and Cyprus (40.1%) and in the first group: Latvia (76.6) and Slovakia (66.4%).

If we take into account that the share of EU firms that froze their base wages at least once in the 2010-2013 period amounts to 25.4% and that the share of those that cut wage amounts to only 4.5%, it may be concluded that at the EU level there is significant downward wage rigidity and that in the reference period

⁵ Research results on the impact of downward nominal wage rigidity on employment are diverse. For research papers pointing to employment decrease, see: Barwell, R. D., and M. E. Schweitzer (2007): *The Incidence of Nominal and Real Wage Rigidities in Great Britain: 1978-98*, Economic Journal, Vol. 117; Bauer, T. K., and H. Bonin et al. (2007): *Real and nominal wage rigidity and rate of inflation: evidence from West German micro-data*, Economic Journal, Vol. 117; De-vicenti, F. et al. (2007): *Downward wage rigidity in Italy: micro-based measures and implications*, Economic Journal, Vol. 117; Fehr, E., and L. Goette (2005): *Robustness and Real Consequences of Nominal Wage Rigidity*, Journal of Monetary Economics 52(4). By contrast, much research has failed to establish a link between DNWR and employment growth.

Table 2 Coverage by collective agreements in 2013

	Share of firms that applied collective agreements, in %			Share of employees covered by collective agreements, in %
	Reached at firm level	Reached at higher level	Reached at one of the levels	
Total, 1st group	18.3	29.2	44.0	35.3
Czech R.	30.6	10.0	39.0	33.2
Germany	16.1	47.2	56.9	48.3
Estonia	10.1	2.0	11.3	8.2
Hungary	20.2	6.7	23.2	20.3
Ireland	11.4	9.8	19.9	9.2
Latvia	16.7	2.3	18.9	18.3
Lithuania	17.4	1.9	18.2	16.0
Malta	31.0	0.5	31.0	23.8
Slovak R.	35.1	14.8	38.4	35.7
United Kingdom	17.4	7.2	32.7	21.3
Total, 2nd group	33.1	56.6	72.5	76.0
Austria	27.4	88.0	98.8	80.4
Belgium	30.8	63.0	72.0	94.4
Bulgaria	21.8	7.0	24.3	17.8
France	28.9	82.9	88.8	94.4
Luxembourg	25.1	33.4	54.9	54.0
Netherlands	51.1	54.6	79.7	90.0
Poland	17.9	1.0	20.9	20.9
Romania	69.4	7.7	73.0	71.6
Total, 3rd group	39.3	78.9	91.1	90.8
Cyprus	31.7	41.7	56.4	39.6
Spain	31.0	77.3	95.2	96.3
Greece	26.2	42.8	60.1	71.4
Croatia	35.4	23.3	45.2	47.1
Italy	60.4	89.0	99.5	99.0
Portugal	13.0	62.2	66.3	62.5
Slovenia	57.9	75.9	86.9	79.4
Total (EU-25)	26.8	50.0	63.7	60.7

Note: Reported results are weighted by weights that reflect total employment in the population of firms.

Source: Izquierdo et al. (2017).

it was relatively less pronounced in Croatia (17.6% of firms froze base wages and 25.7% of firms cut them). To a large extent, this may be a reaction of firms to the deep and prolonged recession in Croatia. The firms' responses to the survey questions suggest that, inter alia, certain shocks were more intensive and long-lasting in Croatia (most notably the shock of illiquidity caused by customers' reduced ability to pay and the shock of reduced demand).

Among factors used to explain downward nominal wage rigidity the literature notably points out the employers' concern that a wage decrease may trigger the outflow of the most productive workers and/or the fall in motivation of employees, which in turn may lead to a decrease in labour productivity in firms.⁶ Moreover, the firms' capacity to adapt to negative shocks through wage cuts depends largely also on the institutional environment, most notably the widespread use and centralisation of collective agreements.⁷ Empirical research on the basis of the data from the WDN3 survey showed that the larger the coverage of employees by collective agreements in firms, the lower the probability of wage cuts.⁸ This may result in increased wage inflexibility in countries with a widespread use of collective agreements.

The share of employees covered by collective agreements is the key indicator of the widespread use of collective agreements. The results of a firm survey show that in 2013 in Croatia through collective agreements wages for about 47.1% of employees were regulated (Table 2), which is a share lower than the EU average (60.7%), notably in comparison to the weighted average for the third group of countries which exceeds 90%. By contrast, the share of employees covered by collective agreements is the lowest in the first group of countries, especially in the Baltic countries, Ireland and Hungary (between 8% and 20%).

Moreover, it has been found that the decentralisation of collective bargaining is more pronounced in Croatia, i.e. that collective agreements signed at the firm-level prevail (35.4% in comparison with the EU average of 26.8%). These agreements are as a rule considered more flexible than those signed at a higher level because they enable firms to adapt to a larger extent to the specific shocks to which they are exposed. Agreements signed at a higher level are less accounted for in Croatia (23.3%), while the firm survey showed that their share in the second and third group of countries is large and that it on average amounts to 56.6% and 78.9% respectively, which is an indicator of significant centralisation of collective bargaining. Reforms were carried out in some EU countries during the crisis which enabled firms to conduct wage negotiations, above all, at a firm-level in order to take into account as much as possible the specific circumstances in which some enterprises operate.⁹

6 Efficiency wage theories. For more details see: Du Caju, P. et al. (2015): *Why firms avoid cutting wages: survey evidence from European firms*, ILR Review, Vol. 68, Issue 4.

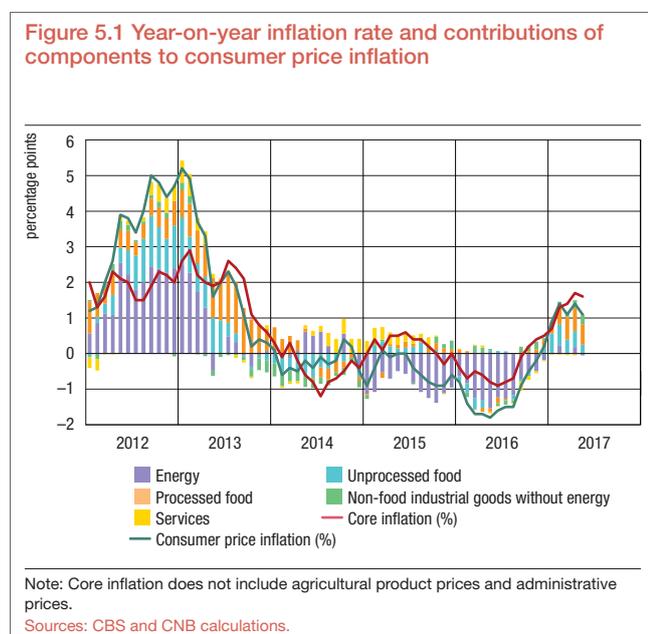
7 See, among others, Anderton, R., and B. Bonthuis (2015): *Downward Wage Rigidities in the Euro Area*, GEP Research Paper Series, No. 2015/09, University of Nottingham, July.

8 Marotzke, P. et al. (2016): *Wage adjustment and employment in Europe*, GEP Research Paper Series, No. 2016/19, University of Nottingham.

9 See box: *Wage adjustment and employment in Europe: some results from the Wage Dynamics Network Survey*, Economic Bulletin, Issue 1, ECB, 2017.

5 Inflation

Consumer price inflation continued to grow in the first five months of 2017. This was largely due to the spillover effect of the rise in the prices of raw materials on the global market at the end of the previous and early this year on domestic prices. Imported inflationary pressures started easing after February, particularly due to a fall in the prices of oil on the global market (a more detailed account of inflationary pressures is given in Box 2 Consumer price inflation heat map in Croatia). The annual rate of consumer price inflation rose from 0.2% in December 2016 to 1.1% in May this year, mainly as a result of a rise in food prices. Core inflation also accelerated, from 0.5% in December to 1.6% in May. Industrial producer prices (energy excluded) also rose and their annual rate of change went up from -0.9% in December to 0.6% in May. The prices of intermediate goods and non-durable consumer goods rose the most (e.g. food products and clothing) which points to stronger production process-related inflationary pressures.



The indicator of current developments in overall inflation fell considerably in the first half of 2017, after rising significantly in the second half of 2016 (Figure 5.2). This mainly reflected a fall in crude oil prices on the global market after February. At the same time, the indicator of current developments in core inflation fell, although at a considerably slower rate. Also, the developments in the inflation diffusion index in the first five months of 2017 show that the number of products in the HICP basket the prices of which are rising fell slightly, although it is still higher than in most of 2016.

All the main components of the consumer price index made a contribution to acceleration in the annual inflation rate in the first five months of 2017 (Figure 5.1). The contribution of processed food prices rose the most, from 0.2 percentage points in December to 0.6 percentage points in May. The prices of milk, which have been rising from mid-2016, contributed the most. This offset almost entirely the constant fall in these prices seen

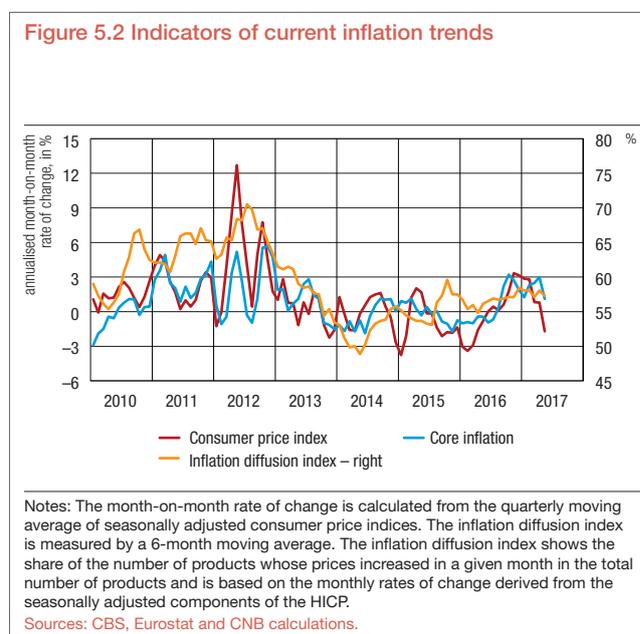


Table 5.1 Price indicators

year-on-year rate of change

	12/2015	3/2016	6/2016	9/2016	12/2016	3/2017	5/2016
Consumer price index and its components							
Total index	-0.6	-1.7	-1.6	-0.9	0.2	1.1	1.1
Energy	-5.0	-7.4	-7.3	-4.2	-1.1	-0.1	-0.3
Unprocessed food	-0.1	-3.4	0.8	-0.8	1.7	4.2	2.7
Processed food	0.5	-0.1	-0.7	0.2	1.0	2.8	2.5
Non-food industrial goods without energy	1.1	0.9	-0.3	0.6	0.2	0.3	1.0
Services	0.0	0.1	-0.1	-1.0	-0.1	-0.1	0.1
Other price indicators							
Core inflation	0.0	-0.5	-0.9	-0.1	0.5	1.4	1.6
Index of industrial producer prices on the domestic market	-4.1	-5.0	-4.8	-3.0	-0.1	1.1	2.3
Index of industrial producer prices on the domestic market (excl. energy)	-0.5	-1.1	-1.5	-1.3	-0.9	0.1	0.6
Harmonised index of consumer prices	-0.3	-0.9	-1.2	-0.7	0.7	1.1	1.0
Harmonised index of consumer prices at constant tax rates	-0.7	-1.3	-1.2	-0.7	0.6	1.0	0.9

Note: Processed food includes alcoholic beverages and tobacco.

Source: CBS.

since Croatia entered the European Union, which has been particularly pronounced since the abolition of milk production quotas in the EU in April 2015. The rise in milk prices might also have been spurred by a fall in milk production.¹⁰ The contribution of unprocessed food prices also rose, from 0.2 percentage points in December to 0.3 percentage points in May. This was mainly due to a rise in meat prices, present since April 2015. This can probably be attributed to increased demand and insufficient supply as a result of a fall in the interest of farms in the production of livestock. In addition, the global market also recorded a sharp rise in meat prices. Vegetable prices also rose sharply in January as a result of a cold winter; having risen much faster than in the previous years, they fell by May and returned to a level approximately similar to that in May 2016. As regards the prices of non-food industrial goods exclusive of energy, their contribution to overall annual inflation rose from 0.0 percentage points in December to 0.2 percentage points in May. A rise in the prices of clothing and footwear and to a lesser extent in car prices, as a result of January tax changes made the biggest contribution to this.

The contribution of energy prices to the overall annual rate of inflation also rose slightly, from -0.2 percentage points in December to -0.1 percentage point in May. This was mainly the result of the waning of the effect of gas price reduction in January and April 2016 on the annual rate of change in these prices in 2017. The contribution of the prices of refined petroleum products also rose as a result of their price increase at the beginning of the year and the effect of the base period, i.e. the fall in these prices in the first five months of 2016. Namely, the prices of refined petroleum products shot up in January 2017 as a result of a rise in crude oil prices on the global market at the end of 2016 and in early 2017. Crude oil prices started to fall after February due to increased production and large oil stockpiles in the USA. This led to a fall in refined petroleum product prices on the domestic market, although they were still higher in May 2017 than in the same month of 2016 (by approximately 6%). The upward pressure on energy prices was largely mitigated by a fall in electricity prices in January, as a result of tax changes and the ensuing reduction in the VAT rate on electricity from 25% to 13%.

The rise in inflation was also partly driven by service prices, particularly prices of restaurant and hotel services which rose as a result of the increase in the VAT rate on these services from 13% to 15% in January. Overall, the year-on-year rate of change

in service prices was stable and relatively low and entered positive territory in May 2017 for the first time in 12 months. The negative annual inflation of service prices from May 2016 to April 2017 was mostly due to telecommunication prices, which contributed on average approximately -0.6 percentage points in the first five months of 2017.

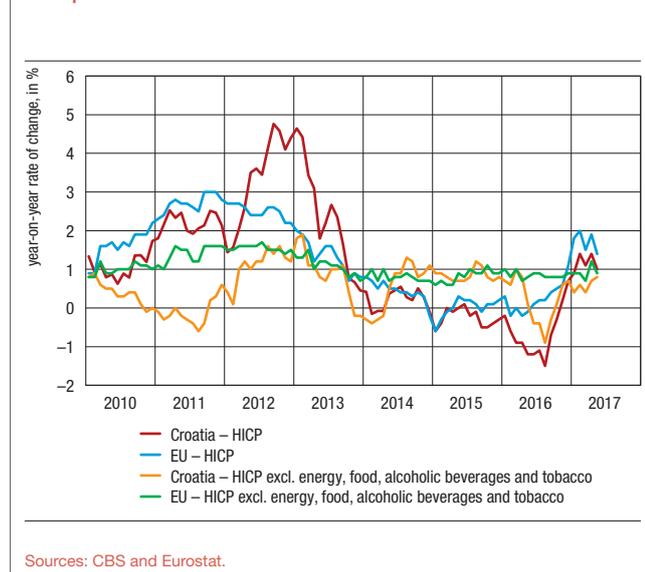
As in Croatia, inflation in the euro area accelerated in early 2017 (Figure 5.3). The rise in the annual rate of inflation in the euro area from 1.1% in December to 1.4% in May was mostly due to accelerated annual growth in the prices of energy and non-food industrial goods without energy. The rise in energy prices was mostly boosted by a rise in refined petroleum product prices, particularly at the beginning of the year, due to an increase in crude oil prices on the global market and the effect of the base period, i.e. the fall in these prices in the first five months of 2016. The prices of processed food also rose, particularly those of milk and milk products. At the same time, core inflation, excluding energy, food, alcoholic beverages and tobacco prices, was relatively stable and stood at 0.9% in May, the same as in December 2016.

For the sake of comparison, the annual inflation rate in Croatia, measured by the HICP, rose from 0.7% in December to 1.0% in May. This was due to the acceleration in the annual rate of growth of processed food prices. Much in the same way as in the euro area, this was mostly due to increased milk prices. The contribution of prices of non-processed food and non-food industrial goods without energy, also rose. The difference between overall inflation in Croatia and the euro area stood at -0.4 percentage points in May, the same as in December. Core inflation (measured by the HICP excluding energy, food, alcoholic beverages and tobacco prices) rose slightly in Croatia, from 0.7% in December to 0.8% in May, and was only 0.1 percentage point lower than that in the euro area. It has to be noted, however, that the core inflation acceleration shown in Figure 5.1 was much more pronounced. The main reason for this is that the measure of core inflation shown in that figure, among others, does not include prices of agricultural products but does include prices of some other food products, such as meat and milk, and those were exactly the products that witnessed a significant price increase in the first five months of 2017.

Projected developments

The average annual consumer price inflation rate might rise in 2017 to 1.1%, from $-1.1%$ in 2016. All the three components of the consumer price index are expected to make a bigger contribution, particularly food and energy. In addition, the direct effects of tax changes on average annual rate of inflation in 2017 might amount to approximately -0.2 percentage points. The projected rise in food prices mirrors in particular the food price increase that has already taken place due to a sharp rise in the prices of vegetables in the middle of the cold winter at the beginning of the year and increased prices of meat and milk. The rise in food raw material prices on the global market last year is expected to spill over to some extent to domestic consumer food prices. The contribution of food prices to the overall average annual inflation rate in 2017 is expected to stand at approximately 0.7 percentage points. The average annual rate of change in energy prices is also expected to rise considerably, although it is expected to remain in slightly negative territory. This increase is expected to be largely due to a considerably high

Figure 5.3 Indicators of price developments in Croatia and European Union



¹⁰ In September 2016, the European Commission adopted a Regulation providing aid for milk production reduction, in an effort, among others, to find a new balance in this sector under the prevailing severe market situation in which the prolongation of the Russian ban on the import of agricultural products and foodstuffs originating in the Union until the end of 2017 has played a role.

Figure 5.4 Domestic and foreign inflation indicators

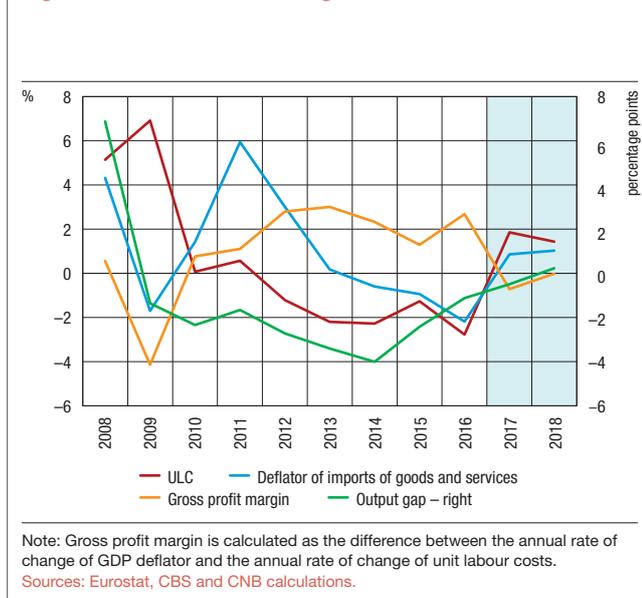
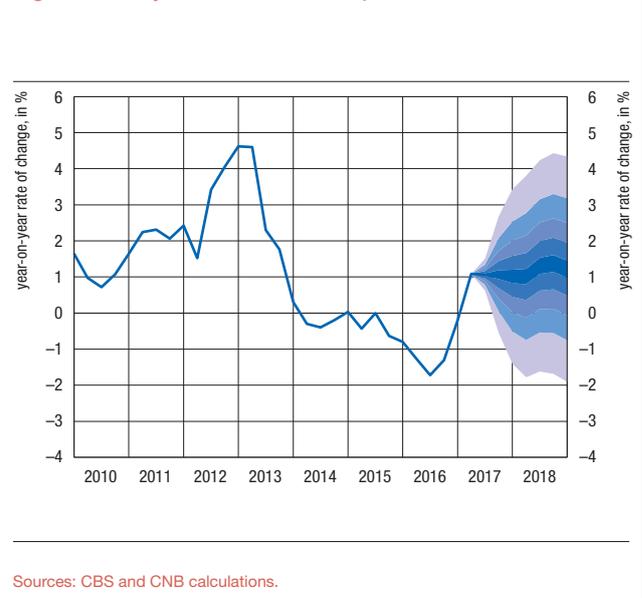


Figure 5.5 Projection of consumer price inflation



pass-through of prices of refined petroleum products from 2016 (due to a sharp rise in crude oil prices on the global market at the end of 2016), and to a lesser extent, the rise in refined petroleum product prices in early 2017. Oil prices are expected to recover slightly in the remaining part of the year and at the end of the year they could be approximately 10% lower than at the end of 2016. The fall in electricity prices in January as a result of tax changes might see a slowdown as a result of the expected increase in tariffs for renewable energy sources in the second half of the year. Prices excluding food and energy are expected to see an average annual growth, largely reflecting the rise in the prices of clothing and footwear, restaurant and hotel services and cars.

In 2018, inflation is projected to accelerate slightly to 1.2%. When observed by components of the consumer price index, the average annual rate of change in energy prices is expected to rise, mostly due to the pass-through of the envisaged rise in electricity prices in the second half of 2017 to developments in energy prices in 2018. The average annual rate of change in prices without food and energy is expected to rise slightly, while that in food prices might fall. Generally speaking, no inflationary

pressures arising from developments in crude oil in the global market are expected, taking it into account that the average crude oil price in 2018 might be on approximately the same level as in 2017. However, oil prices are expected to rise slightly by the end of the year, reflecting a moderate recovery in global demand for oil, possibly as a result of heightened global economic activity. The expectations are that the price of a barrel of Brent crude oil could rise by about 4% at end-2018 from end-2017. Inflationary pressures from the domestic environment might grow slightly, if we bear in mind the further narrowing of the country's negative output gap, which might close in 2018. Inflation could also be influenced by growth in unit labour costs.

It is estimated that the risks of lower than projected or higher than projected inflation are balanced. Risks that might boost higher than projected inflation include a possible faster growth in crude oil prices on the global market, unfavourable weather conditions and higher prices due to administrative decisions. Risks that might lead to lower than projected inflation include possibly lower prices of crude oil and other raw materials on the global market and subdued inflation growth in the euro area.

Box 2 Consumer price inflation heat map in Croatia

An inflation heat map is a tool used to illustrate, by means of different colour shades, the strength of inflationary pressures of the overall consumer price index and its components over time. From the last quarter of 2013 to the end of 2016, a large number of components of the consumer price index were marked blue, which means that the annual growth of the prices of those products was slower than their long-term average. By contrast, in the first five months of 2017, the number of components marked light red or neutral rose, since their annual price growth came close to their long-term average or exceeded it, which points to stronger inflationary pressures. This was largely due to external factors, i.e. the rise in the prices of crude oil and prices of other raw materials on the global market and their spillover to domestic prices.

An inflation heat map¹¹ shows the departure of the annual

inflation rate (overall, and by components) from its long-term average (expressed by the number of standard deviations). Such a map facilitates the analysis of developments in individual components of the consumer price index, since they differ greatly if their average annual growth rate in the past ten years and the degree of their volatility are taken into account. So for instance, the prices of alcoholic beverages and tobacco have a fast average long-term growth rate of 5%, which is mainly the result of several increases in excises on tobacco products (associated with adjustment to EU legislation). By contrast, the prices of clothing and footwear have a negative long-term rate of change of -0.9%. Clothing and footwear are typical international tradables, the prices of which are particularly influenced by price developments on the global market, the exchange rate and import competition (particularly as regards imports from China), and so

11 For a recent paper popularising the inflation heat map, see: McGillicuddy, J. T., and L. R. Ricketts (2015): *Is Inflation Running Hot or Cold?*, Economic Synopses, Federal Reserve Bank of St. Louis, No. 16.

Figure 1 Consumer price inflation heat map
normalised year-on-year rates of change in the CPI and its components

Indicators of consumer prices	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	a)	b)	c)
0 Consumer price index – total												1.1	2.0	2.2
01 Food and non-alcoholic beverages												2.6	2.3	3.7
02 Alcoholic beverages and tobacco												2.2	5.0	4.2
03 Clothing and footwear												1.8	-0.9	3.5
04 Housing, water, electricity, gas and other fuels												-2.8	4.2	4.3
05 Furnishings, household equipment and routine household maintenance												0.7	1.4	1.8
06 Health												2.2	4.0	5.2
07 Transport												2.6	0.6	5.0
08 Communication												-1.6	-1.4	2.4
09 Recreation and culture												0.9	1.1	1.8
10 Education												1.1	-0.1	3.8
11 Restaurants and hotels												3.9	2.3	1.7
12 Miscellaneous goods and services												0.1	2.0	1.6
Energy												-0.3	2.9	6.1
Unprocessed food												2.7	1.9	4.1
Processed food												2.5	3.2	3.4
Non-food industrial goods without energy												1.0	0.8	1.6
Services												0.1	1.8	1.9
Core inflation index												1.6	1.7	2.0
Core inflation index – goods												2.0	1.6	2.1
Core inflation index – services												0.6	1.8	1.7

Departure of inflation from long-term average (expressed by the number of standardised deviations)



Notes: The map is based on normalised data: the annual rate of change in the price of each component in an individual month is reduced by the average annual rate of change in the price of that component from 2006 to 2016 and the result is divided by standard deviation of these changes in the observed period.

The last three columns show: a) original annual rates of change in prices in May 2017, b) long-term average covering the period from 2006 to 2016 and c) standard deviation.

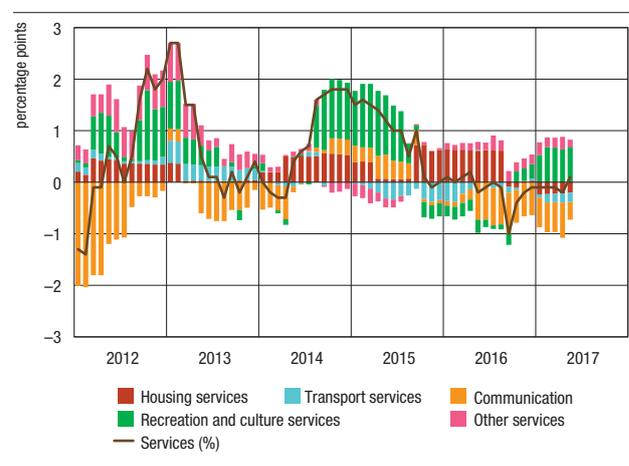
Sources: CBS and CNB calculations.

on. As regards volatility, it is most pronounced in the annual rate of change in energy prices (whose standard deviation in the past ten years stood at 6.2 percentage points) and least pronounced in industrial goods (1.6 percentage points).

Various shades of red and blue are used in an inflation heat map to depict more clearly specific inflationary pressures (Figure 1). Red (blue) on the map means that the annual rate of change in the price of an individual consumer price index component in an individual month was above (below) its long-term average (expressed by the number of standard deviations). Since they are normalised, the price series may be painted with different colours despite recording the same annual rate of change (e.g. transport and food and non-alcoholic beverages in April 2017), i.e. a change in the price of one subgroup of the consumer price index may grow faster than its long-term average and a change in the price of the other subgroup of the consumer price index may grow slower or at a pace similar to its long-term average. The darker the shade, the greater the departure of the annual rate of change in the price of an individual component in an individual month from its long-term average (expressed by the number of standard deviations). The observations have no colour if they are equal to the long-term average or depart only slightly from it. On the heat map of consumer price inflation in Croatia, the observations are shaded dark red (blue) if the annual rate of inflation of an individual product in an individual month is higher (lower) by approximately three standard deviations than its long-term average. This was particularly visible during 2008 when inflationary pressures rose noticeably as a result of a considerable rise in the prices of crude oil and other raw materials on the global market.

The heat map also shows that a large number of subgroups of the consumer price index, as well as overall and core inflation, was largely painted blue from the last quarter of 2013 to the end of 2016, suggesting that the annual growth of these prices was below their long-term average. This was largely the

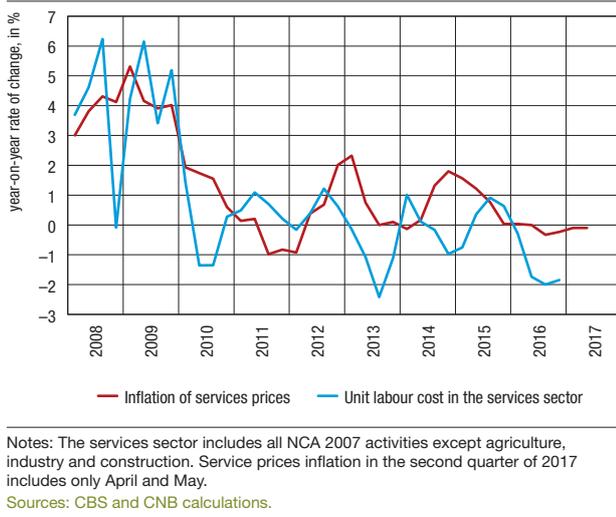
Figure 2 Contributions of components to the year-on-year rate of change in service prices



Sources: CBS and CNB calculations.

result of external factors, i.e. the fall in the prices of crude oil and other raw materials on the global market and their spillover to domestic prices. By contrast, imported inflationary pressures grew stronger in the second half of 2016 and in early 2017, as a result of a rise in the prices of crude oil and other raw materials on the global market. It is evident that in the first five months of 2017, overall inflation came close to its long-term average while core inflation was almost equal to its long-term average (as a result, this observation is not coloured). Unprocessed food is the only component whose annual rate of change in prices in the first four months of 2017 was noticeably above its long-term average (data coloured red). The last data for May 2017 show that the annual rates of change in the prices of unprocessed

Figure 3 Unit labour costs in the services sector and service prices



and processed food and non-food industrial goods do not depart considerably from the long-term average. The annual rate of change in the price of energy is still relatively slightly below the long-term average, but much less so than in May 2016. By contrast, services are the only component whose annual inflation rate is still considerably below its long-term average.

The annual rate of change in service prices in the first five months of 2017 stood at an average -0.1% . A detailed analysis

shows that communication prices contributed the most to the negative inflation of service prices (Figure 2). This is mainly the result of a reduction in telecommunications prices¹², whose negative contribution to overall service price inflation (the share of telecommunications prices in the service price index stands at approximately 20%), averaged approximately -0.6 percentage points in the first five months of 2017. The detailed structure shows that the fall in the prices of wireless phone services made the biggest contribution to this. It should be noted that the prices of communications have been mainly falling in the last ten years, a trend attributable to advances in technology and increased competition as well as to European Commission regulations aimed at, among other things, improved quality and lower prices of communications. Also, the fall in the prices of services on an annual level in the first five months of 2017 was to a smaller extent also due to prices of housing (mainly due to a fall in the prices of refuse collection as a result of the reduction in the VAT rate from 25% to 13% on this service in January 2017) and prices of transport, which can partly be explained by a fall in the prices of refined petroleum products. The fall in the prices of services was counteracted by a rise in the prices of recreation and restaurants and hotels (mainly due to an increase in the prices of restaurant and hotel services as a result of an increase in VAT from 13% to 25% on those services). However, the fall in unit labour costs in the services sector had a subduing effect on the rise in services (Figure 3). This was due to a fall in compensation per employee more pronounced than in labour productivity, with employment growth being more prominent than employee compensation growth and the growth in gross value added in the services sector.

6 Current and capital account

The current and capital account deficit fell slightly in the first quarter of 2017 from the same period in 2016. Unfavourable foreign trade trends in goods and services were largely offset by the improved primary income account balance (thanks to income from direct equity investments) and stronger net inflows from EU funds. If cumulative values over the past year are observed, the surplus in the current and capital account in the first quarter of 2017 remained at last year's level of 3.8% of GDP.

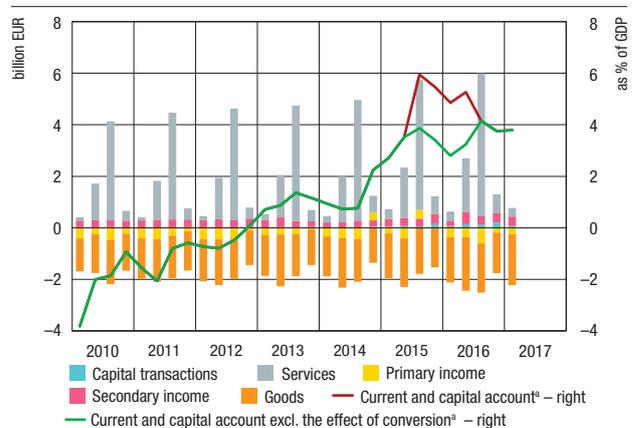
Foreign trade and competitiveness

The balance of payments data show a significant pick-up in the dynamics of trade in goods early in 2017. The annual growth rates of goods exports and goods imports stood at 18.6% and 15.8% respectively in the first three months of 2017. However, imports grew faster than exports in absolute terms, causing the goods account deficit to deteriorate by 12.2%. The growth rates of imports and exports are somewhat lower than those published by the CBS, while the deficit growth is more pronounced. This is attributable to the adjustment of the CBS data on goods trade to the compilation requirements of the balance of payments (for more details see Box 3 Foreign trade developments according to the balance of payments data).

According to the CBS data, which also provide for a breakdown by products, the foreign trade deficit widened by 3.6% in the first three months of 2017 from the same period in 2016. The major contributor to this was the increase of the deficit

in trade of energy products (notably oil and refined petroleum products) and capital goods. In addition to the annual rise in prices by one third, the deficit in trade of energy products resulted from a much stronger growth of imported than exported

Figure 6.1 Current and capital account balance and its structure

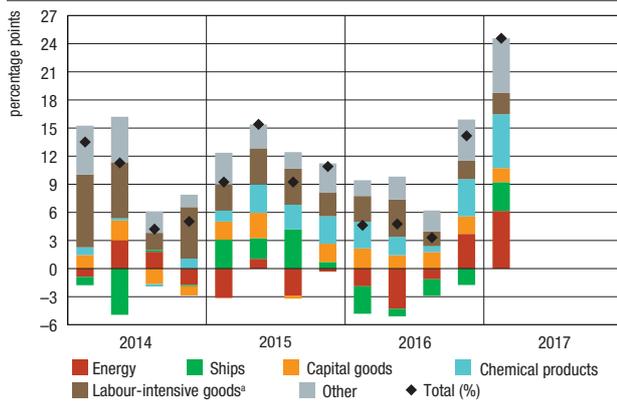


^a Sum of the last four quarters; in the period from the third quarter of 2015 to the second quarter of 2016 excludes the effect of conversion of loans in Swiss francs into euros.

Source: CNB.

12 The prices of telecommunications mainly comprise services (95%), and to a lesser extent telephone and telefax equipment.

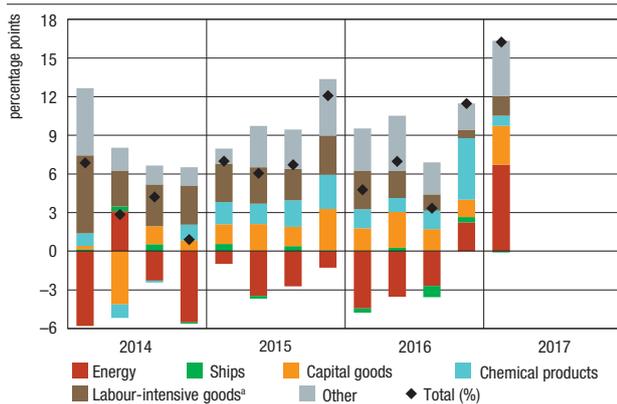
Figure 6.2 Goods exports (f.o.b.)
year-on-year rate of change and contributions



^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.

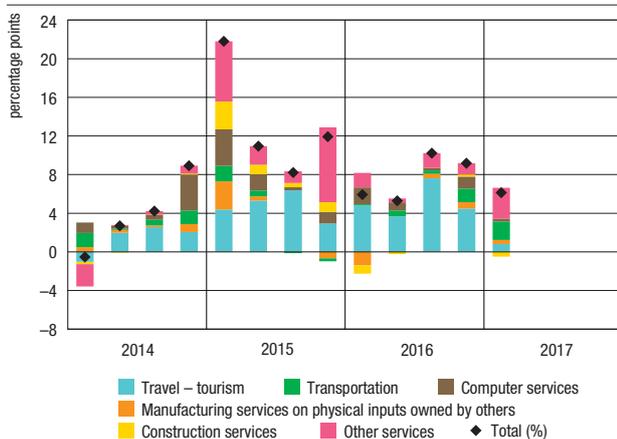
Figure 6.3 Goods imports (c.i.f.)
year-on-year rate of change and contributions



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



Source: CNB.

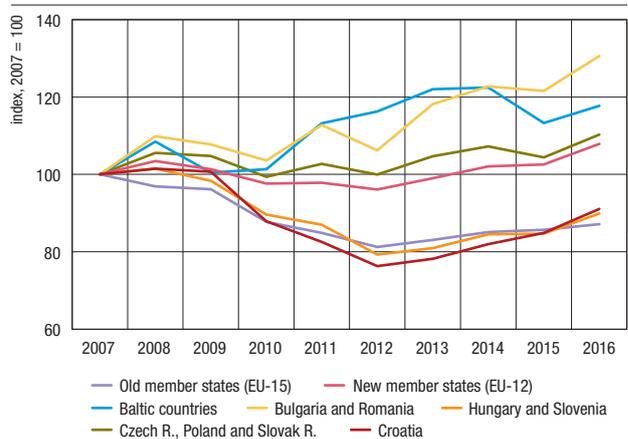
amounts. Unfavourable developments also marked the trade of road vehicles. By contrast, the balance of trade in medical and pharmaceutical products and other transportation equipment (mostly ships) improved.

The strong annual growth rate of goods exports of 24.6% resulted from increased exports of ships and oil and refined petroleum products. However, even if these two categories are excluded, the growth of exports was exceptionally strong (18.0%) and included a wide range of products. Particularly evident was the continuation of strong growth in exports of medical and pharmaceutical products, notably to the USA, in part related to non-resident transactions (quasi transit and manufacturing services on physical inputs owned by others) that are not shown in the balance sheet data. The growth of exports was largely due to the exports of electricity to Bosnia and Herzegovina, non-ferrous metals to Germany and Slovenia and capital goods (notably machinery specialised for particular industries and electrical machinery, apparatus and appliances) to Austria and Germany.

Total imports of goods grew by 16.3% on account of strong growth in imports of oil and refined petroleum products, with the narrow aggregate imports (excluding oil and ships) increasing by a noticeable 12.8%. Particularly noticeable were imports of capital goods (notably machinery specialised for particular industries and electrical machinery, apparatus and appliances) from Italy and Germany and other energy products (mostly electricity from Bosnia and Herzegovina and Hungary as well as natural and manufactured gas from Austria and Hungary), metal industry products and road vehicles from Germany.

In the first three months of 2017, net exports of services dropped by 11.0% from the same period in 2016 owing to faster growth in imports than exports. The major contributor to the deterioration in the foreign trade balance of services was the decrease in net revenues from travel services (tourism) due to larger tourism consumption of residents abroad. Concurrently, revenues from consumption of foreign guests and tourists in Croatia trended up marginally because last year's Easter holidays fell in March in 2016, and this year's were in April. The available data on volume indicators for tourism in the first four months of 2017 show a sizeable increase in arrivals and nights stayed by foreign guests, by almost one third from the same period in 2016. In the first quarter, the balance of trade in other services improved, particularly in personal, cultural and recreational services and in research and development and repair services.

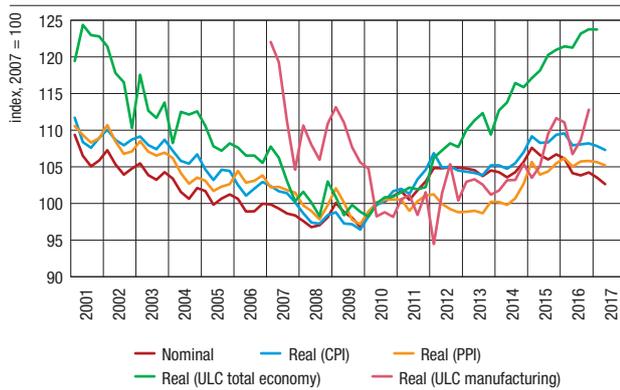
Figure 6.5 World market share of exports of goods and services



Note: The Baltic countries include Estonia, Latvia and Lithuania.

Sources: Eurostat, IMF and CNB.

Figure 6.6 Nominal and real effective exchange rates of the kuna



Note: A fall in the index indicates an effective appreciation of the kuna. In the second quarter of 2017, data on the real exchange rate deflated by consumer prices refer to April and May and data on the real exchange rate deflated by producer prices refer to April.

Source: CNB.

Favourable trends in exports of goods and services are corroborated by trends in the world market share, which trended up for the fourth consecutive year in 2016. Specifically, the world market share improved in both imports and exports in 2016, in contrast to the previous three years when only the market share of goods exports trended up. These favourable developments notwithstanding, sizeable losses seen in the 2009-2012 period were not compensated for, with the overall market share of Croatian exports of goods and services remaining lower than in the pre-crisis years.

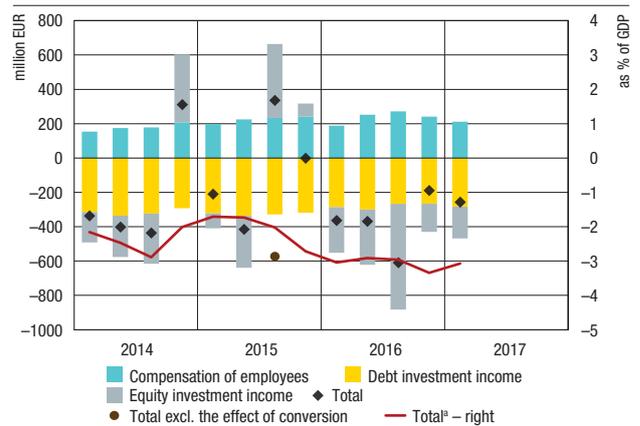
Strong growth of goods exports in the first quarter of 2017 was not accompanied by any improvement in the price competitiveness of exports. The real effective exchange rates of the kuna deflated by consumer and producer prices appreciated mildly in the first quarter, this trend continuing in the second quarter. The nominal effective appreciation of the kuna offset the effects of more favourable developments in domestic prices relative to the main trading partners. Data on developments in the real effective kuna exchange rates deflated by unit labour costs indicate that the cost competitiveness of Croatian exports held steady in the first quarter of 2017.

Incomes and transactions with the EU

The deficit in the primary income account fell by EUR 0.1bn in the first quarter of 2017 from the same period in 2016 due mostly to direct investment revenues. Resident revenues from foreign investment trended up, while profit-related expenditures of domestic business entities in non-resident ownership trended down. The decrease in profit was above all recorded in financial activity, reflecting bank provisions for loans to the Agrokor Group, while the growth in profit was observed mainly in other activities, notably in the manufacture of pharmaceutical products and oil and refined petroleum products and in trade. The favourable effect on the primary income balance also came from the rise in revenues from compensations to residents working abroad and the decrease in interest expenses on external debt.

Total net revenues in the secondary income account and in the account of capital transactions grew by EUR 0.2bn in the first three months of 2017, due mostly to increased use of EU funds which to a large extent were current and to a smaller extent capital funds. In addition, payments to the EU budget were smaller than in the same period in 2016. In line with this, the positive balance in transactions with the EU budget, i.e. the

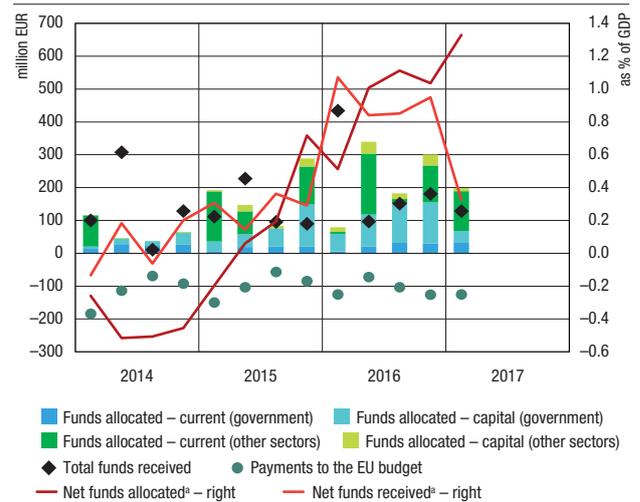
Figure 6.7 Primary income account balance and its structure



^a Sum of the last four quarters; in the period from the third quarter of 2015 to the second quarter of 2016 excludes the effect of conversion of loans in Swiss francs into euros.

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.

surplus of funds used from EU funds over the payments to the EU budget, reported as the sum of the last four quarters, grew further, from 1.0% of GDP at the end of 2016 to 1.3% of GDP in March 2017.

Projected developments

The current and capital account balance is expected to improve further in the remaining part of the current year, largely owing to the decrease of the deficit in the primary income account which reflects the effect of the crisis in the Agrokor Group on bank profits. Overall, other transactions might also witness a slight increase in the balance because the growth in net exports of services and transfers from the EU budget might be stronger than the rise in the goods deficit. As a result, the current and capital account surplus might reach 4.9% of GDP in 2017, more

than a percentage point higher than in 2016. By contrast, the surplus might fall to 3.8% of GDP in 2018 due to a significantly lower impact of the Agrokor Group and the rise in the foreign trade deficit.

Notwithstanding faster growth in exports than in imports, the deficit in foreign trade in goods is expected to trend up in 2017, notably in the trade segment of the narrow aggregate, which excludes ships and oil. The strengthening of foreign demand in the main trading partners and the continuation of the positive impact from joining the EU and easier access to the single market should remain favourable contributors to the growth of exports. The price competitiveness of Croatian exports, measured in terms of the index of the real effective exchange rate of the kuna deflated by consumer prices, is not expected to undergo significant changes, while there is room for further improvement of non-price competitiveness factors. By contrast, the estimated growth of imports is based on further improvement of domestic demand and labour market conditions, import dependency of domestic economy and on increased use of EU funds. In addition, higher crude oil prices in the world market and increased import demand for oil and refined petroleum products should result in the widening of their trade deficit. It is estimated that further deterioration in the foreign trade balance (notably with respect to the narrow aggregate which excludes oil and ships) will be the main generator of the decrease in the current and capital account surplus in 2018.

In 2017, tourism should make a significant positive contribution to the increase in the current and capital account balance, which is also suggested by developments in the earlier part of the year. This is due, inter alia, to economic growth in the main outbound markets, substantial investment in accommodation capacities and ancillary activities and the perception of the country as relatively safe tourist destination. However, it is assumed that the annual growth of tourism revenues will be somewhat lower than in the previous two years which recorded extremely

favourable results, increasing by an average of 8%. The growth of tourism revenues could slow down further in 2018 but it is expected to remain a significant factor behind the improvement in the current account balance. In addition to tourism, a further increase is expected in net exports of other services.

The expected decrease in the primary income account deficit in 2017 is mostly the result of lower estimated bank profits. After very good business results of domestic banks in 2016, they should trend down in 2017 due to value adjustment of banks' claims against the Agrokor Group. Favourable effect on the primary income account balance should also come from the profit of foreign enterprises owned by residents, following the losses recorded in the last five years, a slight decrease in interest expenses on foreign financing due to the deleveraging of domestic sectors and the growth in revenues from compensations to residents working abroad. The recovery of bank profits and further growth in profits of foreign-owned enterprises might result in the new rise of the deficit in the primary income account in 2018.

The forecast growth of net revenues in the accounts of secondary income and capital transactions in 2017 and 2018 is based on the assumption of the continued stronger utilisation of EU funds. The positive net effect of transactions with the EU budget might increase to 1.6% of GDP by the end of 2018.

Downside risks to the projection of the current and capital account balance include a relatively slower recovery of the main trading partners and a tighter regime of controls at internal EU borders, in particular during the tourist season, and intensification of the refugee crisis. Additional risks include a lower than expected intensity of withdrawal of funds from structural and cohesion funds of the EU, and more pronounced growth of interest rates and volatility in the world financial market. By contrast, there are also some upside risks which are in particular related to a possible stronger growth of tourism revenues, outperforming trends of the previous two years.

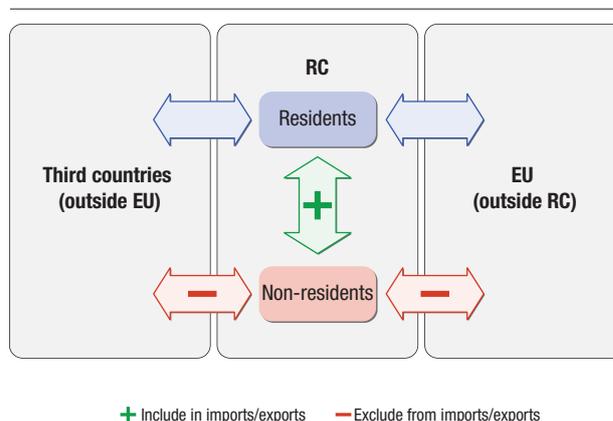
Box 3 Foreign trade developments according to the balance of payments data

Easier access to the EU market and the recovery of the trading partners and domestic demand contributed to a perceptible increase in the foreign trade of goods after Croatia joined the EU. Concurrently, an increase was also observed in re-exporting and manufacturing services on physical inputs owned by others and in trade of non-resident enterprises in Croatia. Due to the compilation requirements of the balance of payments, the value of manufacturing services on physical inputs owned by others and non-resident transactions is estimated and excluded from data published by the CBS, which in several previous years, together with other adjustments, resulted in lower absolute values and slower dynamics of foreign trade indicators according to the balance of payments data than according to the data published by the CBS.

Strong growth rates of exports and imports of goods, additionally accelerated at the beginning of 2017, have been recorded since Croatia's accession to the EU. In order to give at least a partial explanation of developments underlying these trends, it is useful to compare data on the foreign trade in goods published by the Croatian Bureau of Statistics (CBS) with the data on the goods account in the balance of payments current account that is compiled by the CNB. These two sources of data contain some methodological differences that arise from international statistical standards underlying the respective methodologies. The values of revenues and expenditures in the balance

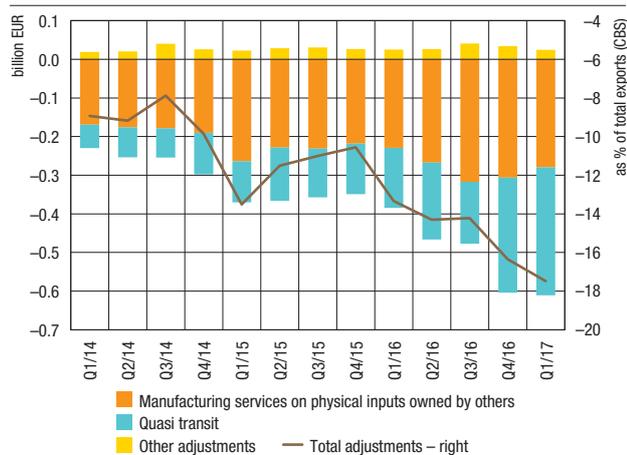
of payments goods account are based on data on the trade in goods published by the CBS. However, a change in goods ownership between residents and non-residents which does not

Figure 1 Adjustments of the balance of payments data on trade in goods for quasi transit



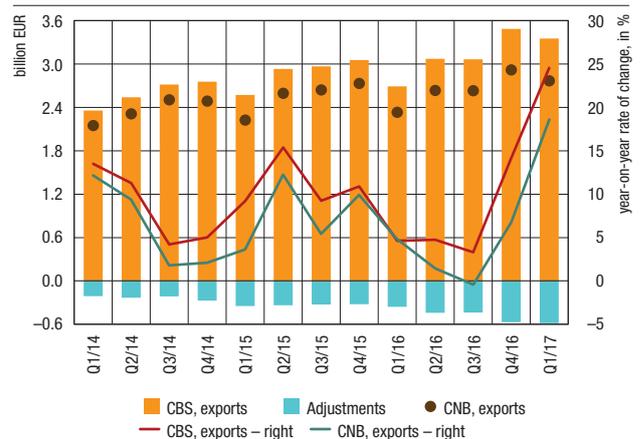
Source: CNB.

Figure 2 Adjustments of goods exports in the balance of payments statistics



Sources: CBS and CNB.

Figure 3 Goods exports according to foreign trade (CBS) and balance of payments (CNB) statistics data



Note: The annual growth rates for 2014 are influenced by methodological changes related to EU accession.

Sources: CBS and CNB.

always coincide with the criterion of the movement of goods across the state border applied by the CBS is essential in the compilation of the balance of payments¹³.

The CNB excludes the gross value of goods imported and exported for the purpose of finishing, treatment or processing¹⁴ as well as of goods traded by non-resident enterprises¹⁵ in Croatia (quasi transit). These transactions are excluded for two reasons: 1) they do not involve a change in ownership and 2) they are not a real indicator of economic activity in a country. Goods that are processed may cross the border several times before final export or import which in turn contributes to a significant increase in statistical data; earlier, this was particularly pronounced in the shipbuilding sector¹⁶. In these cases, the value added generated in a country is not significant. Similarly, in quasi transit (Figure 1) the value added belongs to a foreign business entity as it involves transactions of non-resident enterprises, which do not have employees, business premises, production capacities etc. in the domestic territory and only conduct trading activities. Their operations became more relevant after Croatia joined the EU. By contrast, the estimate of net merchanting exports where goods do not cross the customs border of a trader but are instead bought and then sold abroad is included in the balance of payments.

In addition, the CNB excludes from the value of imports at c.i.f. parity published by the CBS the estimate of transportation and insurance costs because the value of trade in goods in the balance of payments is reported at f.o.b. parity that excludes these costs. Other adjustments involve the estimate of purchases on the exports side (goods sold to foreign tourists and taken out from Croatia) and on the imports side (costs of residents for purchases made abroad) and acquisitions of domestic

transporters abroad (e.g. fuel and other supplies). Re-exports carried out by residents (e.g. in trade with road vehicles) include both data sources. By contrast, real transit, i.e. transit through Croatia, is not captured by the CBS data or by the balance of payments data.

Moreover, it should be noted that the value of foreign trade in goods and services according to the balance of payments data is used in the compilation of the national accounts (GDP by expenditure method) in the CBS.

The largest adjustment of goods exports in the balance of payments (Figure 2) refers to the decrease on the basis of manufacturing services on physical inputs owned by others, which stood at EUR 1.1bn in 2016 and was much higher than in 2014 (EUR 0.7bn). Manufacturing services on physical inputs owned by others predominate in enterprises involved in the activities¹⁷ of manufacture of wearing apparel, leather and related products, fabricated metal products, computers, electronic and optical products, and machinery and equipment. In addition, from 2016 onwards exceptionally high values of goods under manufacturing services on physical inputs owned by others were also recorded in the trade of non-resident enterprises with pharmaceutical products. In terms of value, significant also was the adjustment made with respect to non-resident trade (quasi transit), which reduced exports by EUR 0.3bn 2014. However, it grew to EUR 0.8bn in 2016 and stood at EUR 0.3bn only in the first three months of 2017. While the decrease in exports based on these items was significant, the increase in exports based on purchases made in the previous three years averaged only about EUR 0.1bn. The effect of the rise in net exports resulting from merchanting is still insignificant.

The previous three years were marked by an increase of

13 According to the Balance of Payments and International Investment Position Manual, 6th edition (BPM6), which has been applied by the CNB from the end of 2014, when all balance of payments data series from 2000 onwards were revised.

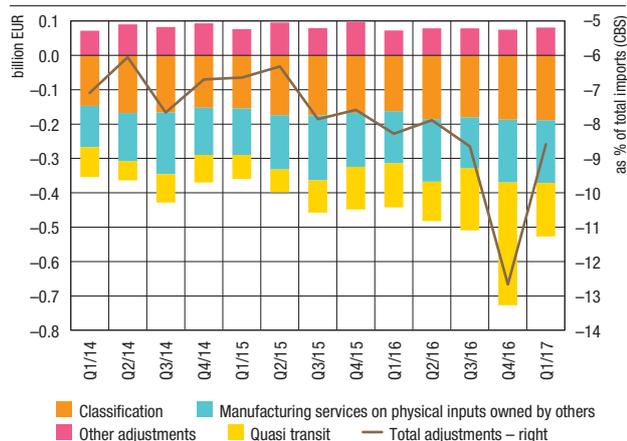
14 Net value of completed operation (fees for the finishing of goods in someone else's ownership) is an integral part of the services account in the balance of payments.

15 These are enterprises from other EU countries, which do not have their headquarters in Croatia or branches but trade with EU countries through a non-resident tax number and with third countries through an EORI number. Transactions between residents and non-residents in the territory of the Republic of Croatia, which do not involve cross-border transfer of goods, are included in the balance of payments. For more details see the CNB's website: <http://www.hnb.hr/en/-/nastavlja-se-uskla-ivanje-statistike-platne-bilance-sa-standardima-eu-a> where it is inter alia explained that the adjustment of data on the trade in goods in the balance of payments for quasi transit has been carried out for the period from the beginning of 2014 onwards due to the lack of reliable data needed for the estimate of the earlier period.

16 Privatisation and restructuring of shipyards with the framework of the alignment with the EU acquis adversely influenced their export performance. Other transport equipment (mostly ships) accounted for only 2.1% of total goods exports in 2016 according to the CBS data compared to an average of 11.4% in the 2005-2011 period.

17 In line with the results of the research launched following the implementation of the BPM6.

Figure 4 Adjustments of goods imports in the balance of payments statistics

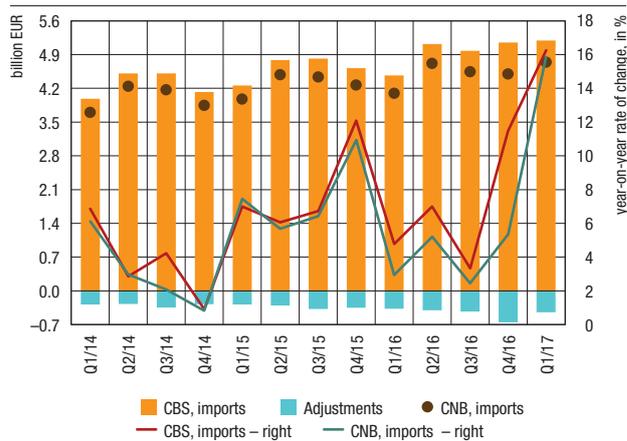


Sources: CBS and CNB.

total adjustments on the exports side. In 2016, according to the CBS data, revenues in the balance of payments goods account were lower than exports by EUR 1.8bn or 15%. This is noticeably steeper than in 2014 due to the rise in the value of non-resident transactions and manufacturing services on physical inputs owned by others. In addition, adjustments were larger in the first quarter 2017 than in 2016, accounting for almost 18% of the value of the foreign trade statistics. As a result, the growth of goods exports is lower according to the balance of payments data than according to the foreign trade statistics data (Figure 3). In 2015 and 2016, the annual growth of exports was more than 3 percentage points lower according to the balance of payments data than according to the CBS data (7.9% and 3.1% vs 11.2% and 6.8%), this difference standing at as much as 6 percentage points (18.6% vs 24.6%) in the first quarter of 2017.

Adjustments on the exports side on the basis of manufacturing services on physical inputs owned by others and quasi transit are related to adjustments on the imports side as they include the trade in goods that are similar or the same. The largest volume of adjustments of goods imports in the balance of payments (Figure 4) in 2016 was accounted for by quasi transit (EUR 0.8bn) which grew considerably from the previous two years (about EUR 0.3bn). Very high values of imports by non-residents were recorded at the end of 2016, which was mostly due to the trade in pharmaceutical products not subject to manufacturing services on physical inputs owned by others. The decrease in imports of goods under manufacturing services on physical inputs owned by others stood at EUR 0.7bn in 2016 or slightly more than in the previous two years (EUR 0.6bn). The structure of imports of goods under manufacturing services on physical inputs owned by others by activities matches that on the side of exports. Due to the adjustment for the classification (c.i.f./f.o.b.), imports trended down by about EUR 0.7bn in the balance of payments in the previous three years. By contrast, the increase in imports in the balance of payments owing to the estimated costs of purchases stood at about EUR 0.3bn in the previous three years. The effect of the increase in imports by the value of fuel and other supplies acquired by domestic transporters abroad is negligible.

Figure 5 Goods imports according to foreign trade (CBS) and balance of payments (CNB) statistics data



Note: The annual growth rates for 2014 are influenced by methodological changes related to EU accession.

Sources: CBS and CNB.

As a result of the described adjustments, total differences between goods imports according to the foreign trade statistics and goods imports according to the balance of payments statistics also increased in the previous three years, although at a weaker intensity than in exports. Imports of goods in the balance of payments were lower than imports measured by foreign trade statistics by EUR 1.2bn or 7% in 2014, with the difference increasing to EUR 1.9bn or 9% in 2016, a similar ratio being observed at the beginning of 2017. As regards the dynamics of goods imports (Figure 5), its annual growth rate according to the balance of payments data and the CBS data was almost the same in 2015 (7.5% vs 7.9%). In 2016, the growth of imports according to the balance of payments data was almost 3 percentage points lower (4.0% vs 6.6%), due mostly to high imports by non-residents at the end of the year. At the beginning of 2017, the annual growth rates measured by these two data sources were less divergent (16.3% vs 15.9%).

The deficit in the goods account of the balance of payments may be larger or smaller than the foreign trade deficit reported by the CBS depending on whether the described adjustments contribute more to the fall in exports or the fall in imports (Table 1). Hence, the decrease in imports exceeded the fall in exports in 2016, resulting in a smaller deficit in the goods account of the balance of payments than in the deficit calculated from the CBS data. By contrast, the CNB reported a larger deficit in the first three months of 2017 because the fall in exports exceeded the decrease in imports. Specifically, high values of quasi transit imports continued to be recorded on the exports side (after appreciable imports observed in the previous period) but not on the imports side.¹⁸

In addition, it should be taken into account that these adjustments also in part affect the services account in the balance of payments. The gross value of goods under manufacturing services on physical inputs owned by others is not included in the goods account, while at the same time the net value of rendered or received manufacturing services on physical inputs owned by others is included in the trade in services. Net exports of these services stood at about EUR 0.2bn in the previous three years, marked by a slight upward trend. The adjustment for

¹⁸ The value of adjustment for quasi transit does not have to be the same on the exports side and on the imports side, which may be explained by a time mismatch due to the storing of imported goods and differences in export and import prices (e.g. due to transportation costs, storage and insurance of goods in circulation, the system of transfer prices used by multinational companies etc.).

Table 1 Effect of adjustments in the balance of payments on the foreign trade balance

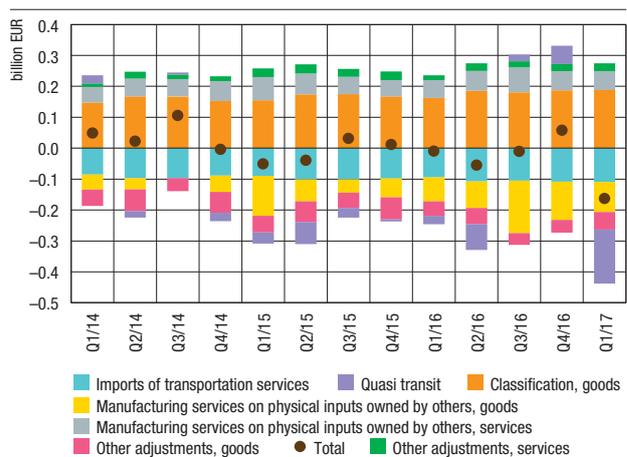
	2014	2015	2016	Q1/2016	Q1/2017
In million EUR					
CBS, balance (1)	-6,761	-6,955	-7,395	-1,774	-1,838
CNB, balance (2)	-6,513	-6,975	-7,344	-1,763	-1,978
Difference (3=2-1)	247	-20	51	11	-140
As % of GDP					
CBS, balance (4)	-15.7	-15.9	-16.2	-15.9	-16.1
CNB, balance (5)	-15.1	-15.9	-16.1	-15.8	-16.2
Difference (6=5-4)	0.6	0.0	0.1	0.1	-0.1
Year-on-year rate of change (% and percentage points)					
CBS, balance (7)	-2.6	2.9	6.3	5.0	2.2
CNB, balance (8)	-1.1	7.1	5.3	0.3	10.2
Difference (9=8-7)	1.4	4.2	-1.0	-4.7	8.0

Notes: Relative indicators for the first quarter of 2017 are shown as the sum of the last four quarters. The annual growth rates for 2014 are influenced by methodological changes related to EU accession.

Sources: CBS and CNB.

the classification (c.i.f./f.o.b.) reduces goods imports. However, more than a half of its volume (about EUR 0.4bn annually), as the estimated portion of costs of transportation and insurance that belongs to non-residents, is returned through imports of freight transportation services. Moreover, with the implementation of the BPM6, goods repair and maintenance services have become a part of the services account, earlier reported in the goods account, and amount to about EUR 0.1bn annually. These adjustments had a slight adverse effect on total net exports of services in the previous three years.

In summary, adjustments of trade in goods for the purpose of the compilation of the balance of payments decrease the value of goods exports and goods imports published by the CBS, with a portion of the adjustments also being reflected in the services

Figure 6 Effect of adjustments on the balance of total foreign trade in goods and services

Source: CNB.

account of the balance of payments. The effect of all these adjustments on the balance of total foreign trade in goods and services (Figure 6) may be positive or negative. In the previous three years, it moved in the range of the favourable effect of EUR 0.2bn annually to a slightly adverse effect that accelerated at the beginning of 2017. Observed by types of adjustments, only the adjustments for classification had a continuously favourable effect on the current account balance, while quasi transit and other adjustments worked in the opposite direction. In contrast to 2014 in which manufacturing services on physical inputs owned by others had a favourable effect, in the previous two years these adjustments had an unfavourable effect on the current account balance.

7 Private sector financing

Financing conditions continued to improve in the first half of 2017. The interest rate on one-year kuna T-bills fell from 0.65% in December 2016 to a record low of 0.45% in March 2017, holding steady in the following months. As regards longer-term borrowing costs, yields on five-year kuna bonds increased due to being atypically low at the end of the previous year, whereas yields on ten-year kuna bonds did not change significantly (Figure 7.1a). However, the yield on the February five-year kuna bond issue was the lowest since the government started to borrow in the domestic capital market (2.29%). The yield curve for bonds with a euro currency clause did not shift much in the period from the end of 2016 until the end of May 2017 (Figure 7.1b).

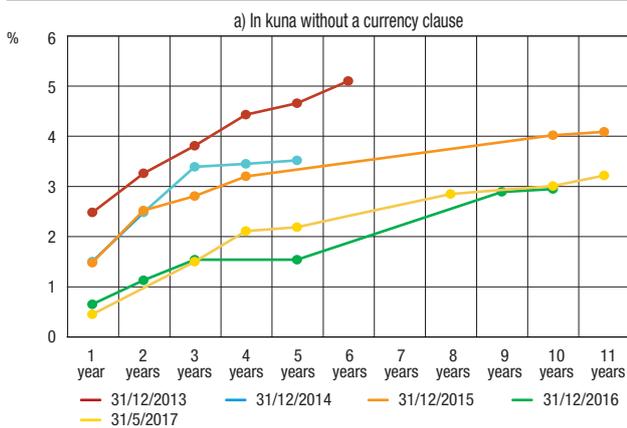
The price of government foreign financing, estimated by the sum of the EMBI index for Croatia and the German government bond yield, continued to decline, down to 2.9% in May and to 2.6% in June 2017 (Figure 7.3). Croatia's credit default swaps also decreased significantly (about 70 basis points) in the first half of 2017, standing at 145 basis points at the end of June. The government launched a ten-year EUR 1.25bn bond with a 3.2% yield in the international market in March 2017.

In the first five months of 2017, short-term and long-term

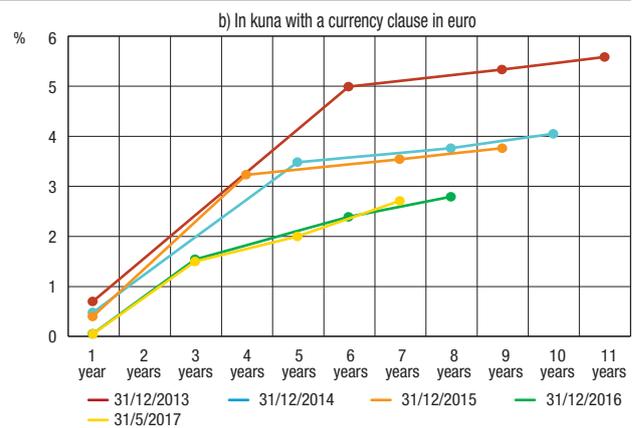
corporate financing costs were on average close to the levels reached at the end of the previous year (Figures 7.2 and 7.3). Interest rates on loans exceeding HRK 7.5m, used mostly to finance large enterprises, continued to be more volatile and lower than interest rates on smaller-value loans, which are primarily targeted at small and medium-sized enterprises (Figure 7.4). However, the spread between interest rates on loans of up to HRK 7.5m and loans exceeding that amount narrowed on average in the first five months of 2017 relative to 2016.

Regarding the household sector, interest rates on short-term kuna loans and long-term kuna loans with a currency clause continued to drop in the first five months of 2017 at a pace similar to that in the previous year (Figures 7.2 and 7.3). The same trend was observed in interest rates on housing loans and interest rates on consumer and other loans. In addition to high liquidity in the monetary system, other causes of the fall in domestic interest rates included a continued decline in the costs of banks' sources of funds as reflected in a further downward trend in the NRR¹⁹ and sustained record-low EURIBOR levels. Real interest rates also exhibited a slower pace of decrease in the short-term costs of corporate kuna borrowing and a continued decline in these costs for the household and government

Figure 7.1 Yield-to-maturity on RC bonds

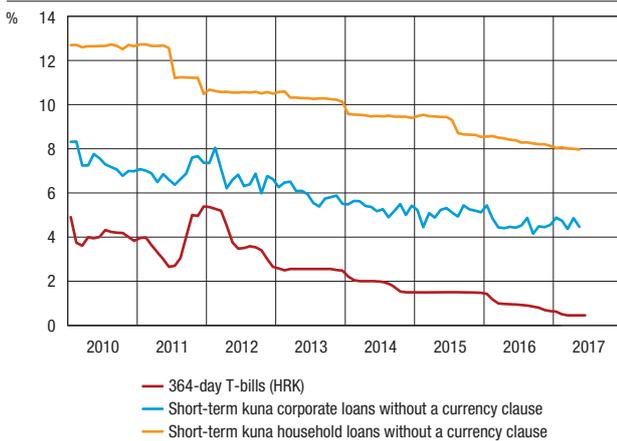


Notes: The dots show the achieved yields, while other values have been interpolated. Data for one-year yield refer to the achieved interest rate on one-year kuna T-bills without a currency clause.
Source: CNB.



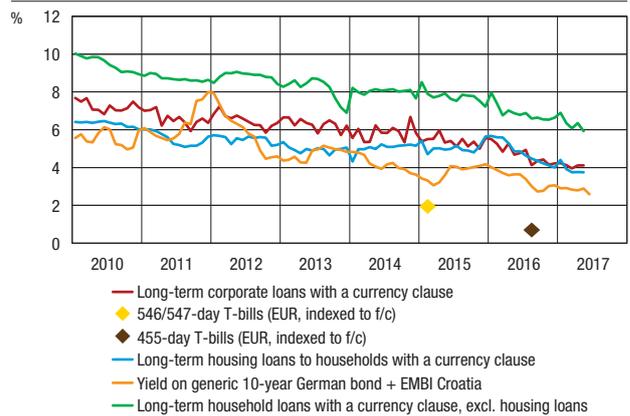
Notes: The dots show the achieved yields, while other values have been interpolated. Data for one-year yield refer to the achieved interest rate on one-year kuna T-bills with a currency clause in euro, while data for the end of 2016 refers to November.
Source: CNB.

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



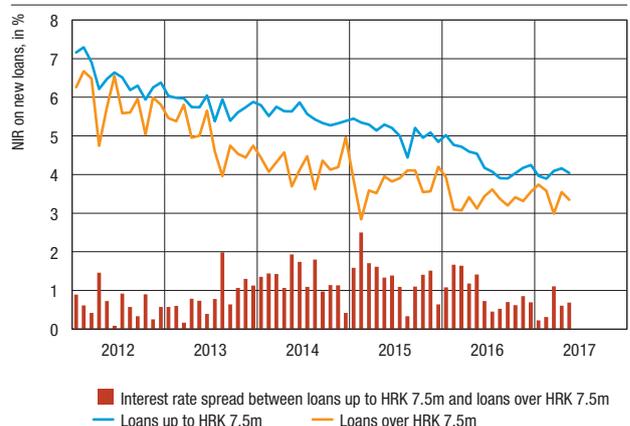
Note: EMBI, or the Emerging Market Bond Index, shows the spread between yields on government securities of emerging market economies, Croatia included, and risk-free securities issued by developed countries.
Sources: MoF, Bloomberg and CNB.

sectors, although these trends were slightly slower than comparable nominal interest rate trends (Figure 7.5).

After having eased for six successive quarters, credit standards for enterprises tightened mildly in the second quarter of 2017 (Figure 7.6). According to banks' responses to the bank lending survey, the easing of credit standards for enterprises in the first half of 2017 was primarily supported by strengthened interbank competition and favourable liquidity conditions, whereas their tightening in the second quarter was for the most part due to risk perception. Demand for all types of corporate loans continued to grow with especially favourable developments recorded in the second quarter, driven largely by corporate needs for financing inventories and working capital as well as gross fixed capital formation.

The household sector saw credit standards ease considerably in the first half of 2017, both for housing loans and for

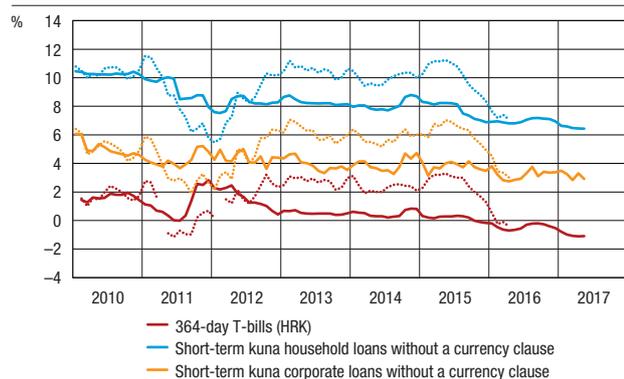
Figure 7.4 Bank interest rates on loans to non-financial corporations by volume



Source: CNB.

19 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).

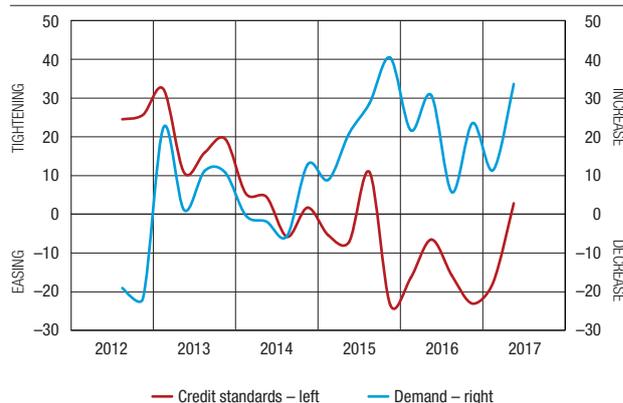
Figure 7.5 Achieved and expected real interest rates



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.

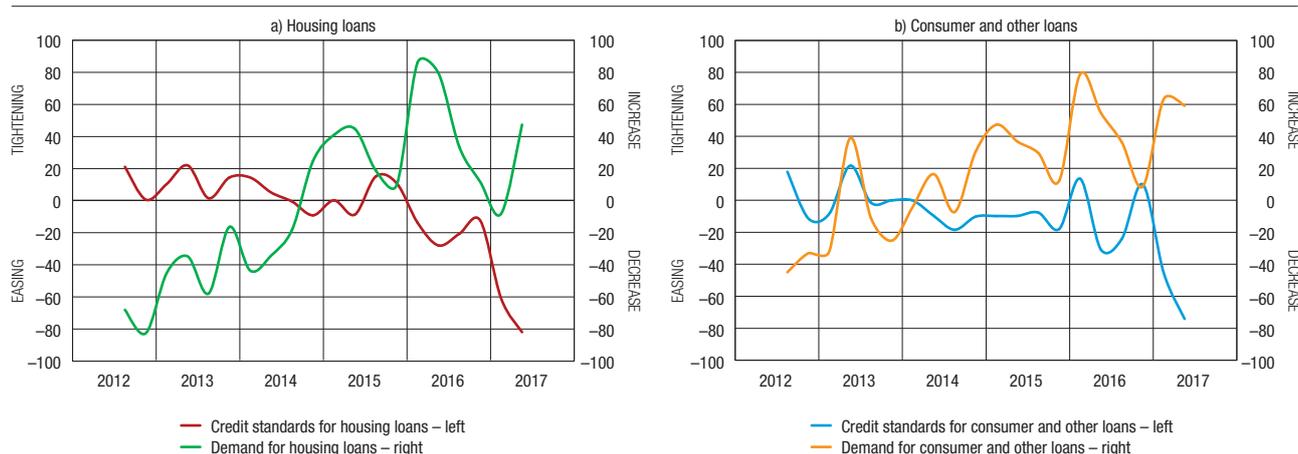
Figure 7.6 Credit standards and corporate demand for loans



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.

consumer and other loans (Figure 7.7). In the second quarter, credit standards for both types of loans eased the most since the introduction of the bank lending survey. While also primarily due to interbank competition and lower costs of the sources of funds, the easing of credit standards in the first half of 2017 was in the case of housing loans further stimulated by positive expectations regarding real estate market conditions and in the case of consumer and other loans by general economic expectations. Demand for consumer and other loans continued rising markedly in the first half of the year, while demand for housing loans recovered strongly in the second quarter following a slight decrease in the first quarter. Consumer confidence had the strongest impact on the growth of demand for both types of loans in the first half of the year. Housing loan demand was additionally spurred by a favourable real estate market outlook and demand for consumer and other loans by an increased consumption of durable consumer goods.

The total debt of non-financial corporations²⁰ continued to

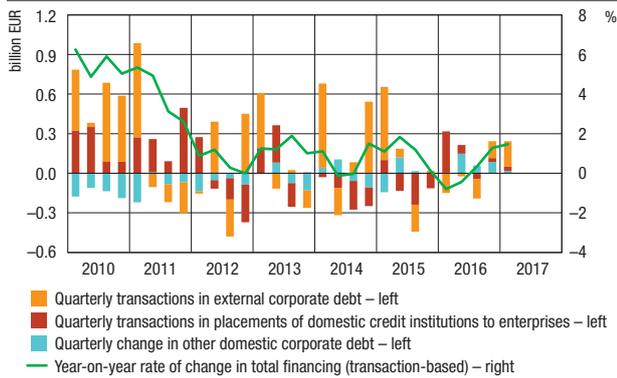
rise modestly in the first quarter of 2017. Both domestic and foreign corporate borrowing increased. Total debt grew at a slightly accelerated annual rate of 1.5% at the end of March 2017 (transaction-based, Figure 7.8), due primarily to an increase in private enterprises' domestic financing and to a smaller extent to their foreign borrowing. In contrast, public enterprises deleveraged both against domestic and against foreign creditors.

Credit institutions' corporate domestic placements increased by HRK 1.9bn (2.1%) in the first five months of 2017 (transaction-based, Figure 7.9), with their annual growth rate decelerating slightly to 1.1% at the end of May (transaction-based). The nominal stock of corporate placements continued to trend downwards, decreasing annually by 3.9% at the end of May, primarily due to the sales of non-performing bank placements.

The largest positive contribution to the growth of corporate domestic placements continued to be made by lending to the accommodation and food service activities (Figure 7.10). Due to stepped up tourist sector investments, the growth of placements

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

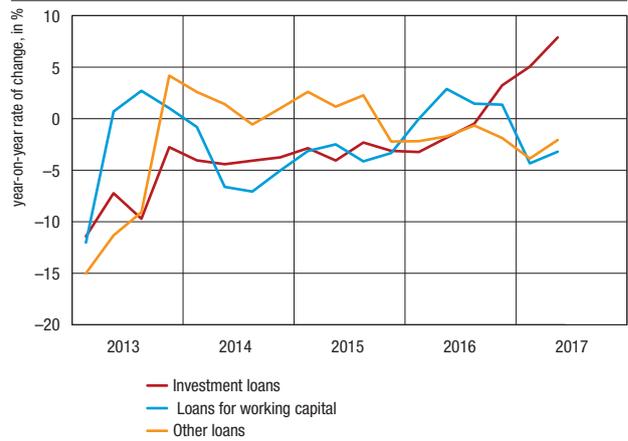
Figure 7.8 Corporate financing



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.

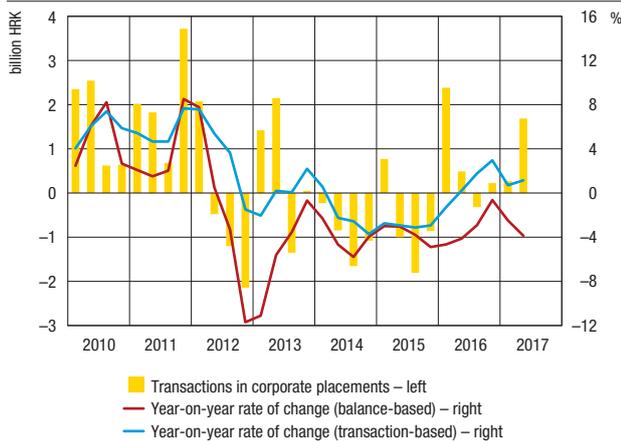
Figure 7.11 Growth in corporate loans by purpose transaction-based



Note: Data are up to May.

Source: CNB.

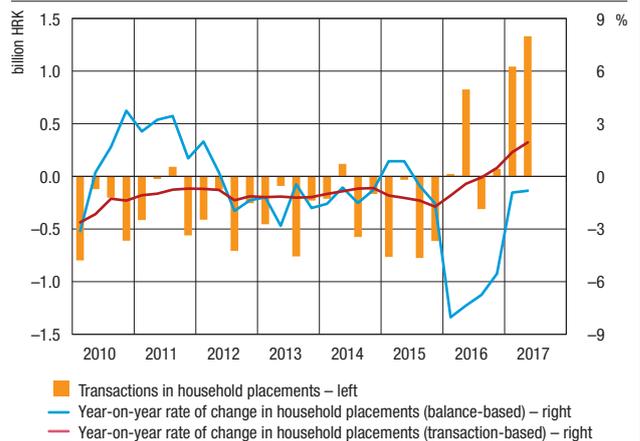
Figure 7.9 Corporate domestic placements of credit institutions



Note: Data for the second quarter of 2017 are up to May.

Source: CNB.

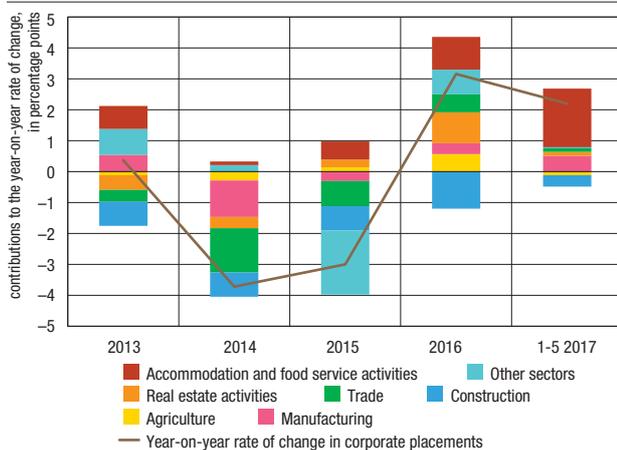
Figure 7.12 Household placements



Note: Data for the second quarter of 2017 are up to May.

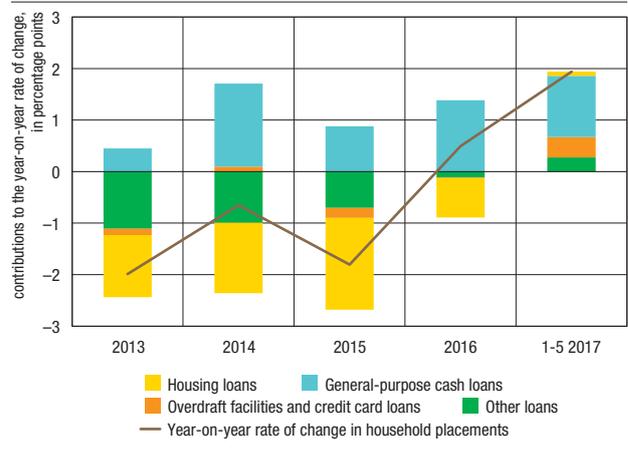
Source: CNB.

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.

to this activity in the first five months of 2017 was almost twice as high as their total previous year's growth. Lending to manufacturing was also on the increase in the first five months of 2017, while construction saw further deleveraging, albeit occurring at a weaker pace than in 2016. When looking at corporate lending by purpose, it can be observed that lending activity was boosted by the growth of investment loans (Figure 7.11).

Having accelerated since October 2016, the annual growth of household placements reached 1.9% at the end of May (transaction-based, Figure 7.12), amounting to 2.0% in the first five months of 2017. The continued fall in interest rates, easing of credit standards and economic recovery were the determining factors speeding up the recovery of household lending. All major types of loans increased in the first five months of the year (Figure 7.13), with general-purpose cash loans going up at the highest rate. In addition, kuna lending continued to grow, with the result that kuna loans accounted for 45% of total household placements at the end of May 2017. In contrast, the nominal stock of household placements decreased annually by 0.8% at the end of May, primarily as a result of the sales of non-performing bank placements and the strengthening of the kuna, while the effect of the partial write-off of Swiss franc-indexed loans connected with the conversion process diminished.

Projected developments

Domestic lending activity is expected to continue its gradual recovery towards the end of the current year. It is estimated that the annual growth rate of bank placements will reach

3.9% (transaction-based) in 2017 and continue a similar trend in 2018. Both corporate and household placements are expected to continue growth amid rising business and consumer confidence and consequential increases in investments and personal consumption. Furthermore, household placements will also be supported by a housing loan subsidy programme announced by Croatia's government, whose launch is expected in the second half of 2017, while the additional borrowing of the Agrokor Group, to be partially realised from domestic sources, will also have an effect on corporate placements. On the other hand, the nominal growth of placements in 2017 will be considerably lower than the transaction-based growth due to the sales and write-off of non-performing bank placements.

Risks to the realisation of the projected credit growth dynamics are balanced. The main downside risk is related to uncertainties surrounding the course of restructuring of the Agrokor Group and a potentially fairly strong spillover of its negative effects on the operations of Agrokor's suppliers and creditors. In addition, potential disturbances in foreign currency markets, political risks and uncertainties regarding the Fed's and the ECB's future monetary policy actions can lead to an increase in the price of financial market borrowing. However, steady significant improvements in domestic financing conditions and loan demand, coupled with the sustained recovery of the domestic economy, are likely to contribute positively towards intensifying lending activity, while the continued cleaning up of balance sheets of banks from non-performing placements can make a good basis for accelerating credit growth in the medium term.

8 Foreign capital flows

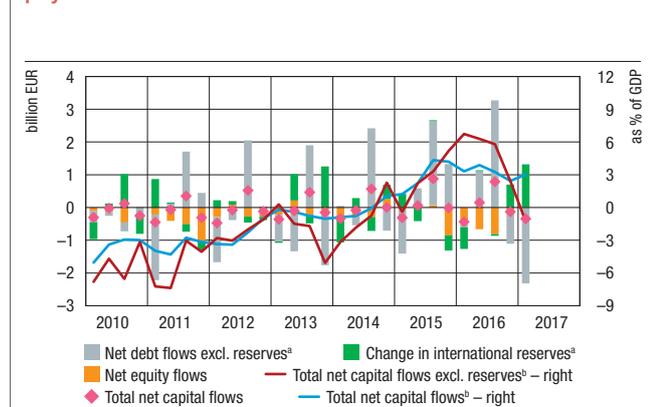
Capital inflow was relatively strong in the first quarter of 2017. Net foreign liabilities of domestic sectors, excluding the change in gross international reserves and CNB liabilities²¹, increased by EUR 2.3bn. The increase was almost completely accounted for by a growth in net debt liabilities of domestic

sectors, primarily of banks and the central government, which issued a EUR 1.25bn bond in the foreign market in March. As this issue was aimed at the refinancing of a government foreign bond maturing in April, the funds raised were deposited temporarily with the CNB, boosting international reserves. Total net inflow to the financial account was therefore lower, standing at EUR 1.0bn.

As for equity investments in the first quarter of 2017, domestic sectors' assets and liabilities increased by the same amount (EUR 0.3bn). The increase in assets came from domestic business entities' foreign direct equity investments, made mostly in telecommunications, and from portfolio investments in foreign shares and equity holdings. The rise in liabilities was due to new direct equity investments, the bulk of which was in the real estate and trade sectors, and to reinvested earnings. Reinvested earnings were lower in the first quarter of 2017 than in the same period in 2016 as a result of increased dividend payments and a decrease in the profit of foreign-owned domestic business entities (for more details, see Chapter 6 Current and capital account).

Strong net inflows of debt capital in the first quarter of 2017 was the result of both a decline in domestic sectors' foreign assets and an increase in their foreign liabilities. The net external debt position of credit institutions deteriorated the most due to a decrease of EUR 0.9bn in foreign assets. These foreign currency funds were partly earmarked for the investment by domestic

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



^a Changes in gross international reserves net of CNB liabilities.

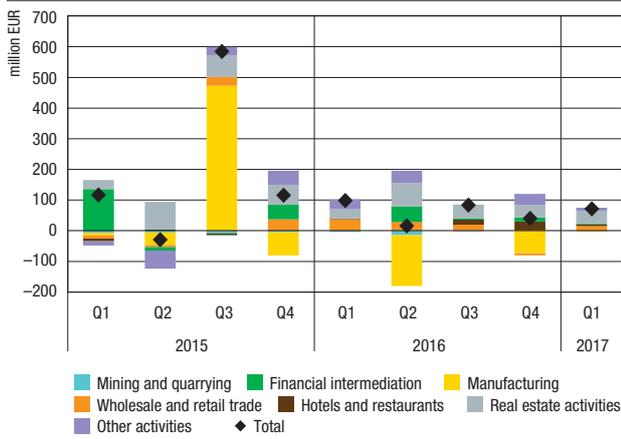
^b Sum of the previous four quarters.

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 comprised by debt equity flows. Positive value means net capital outflow abroad.

Source: CNB.

21 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.

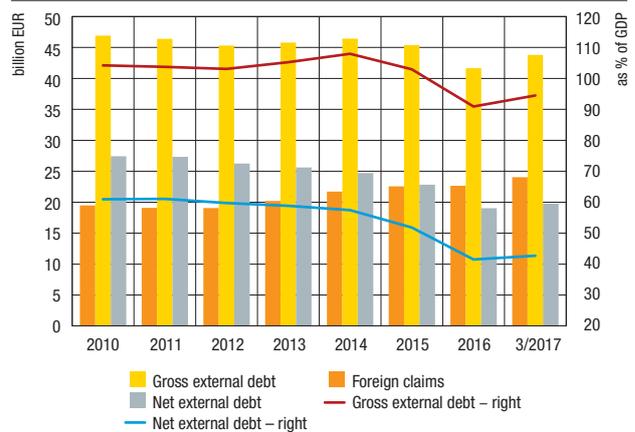
Figure 8.2 Foreign direct equity investment in Croatia by activities



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

Source: CNB.

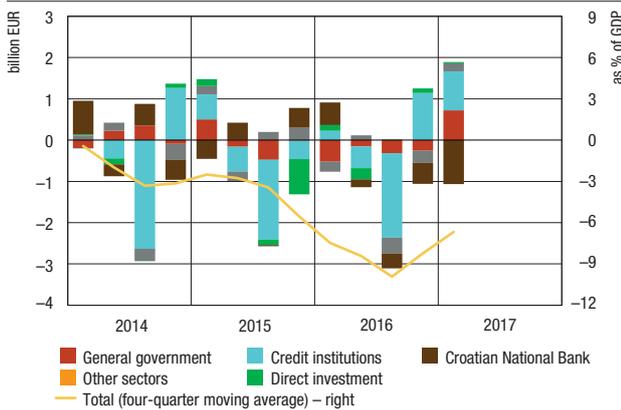
Figure 8.4 Stock of gross and net external debt



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

Source: CNB.

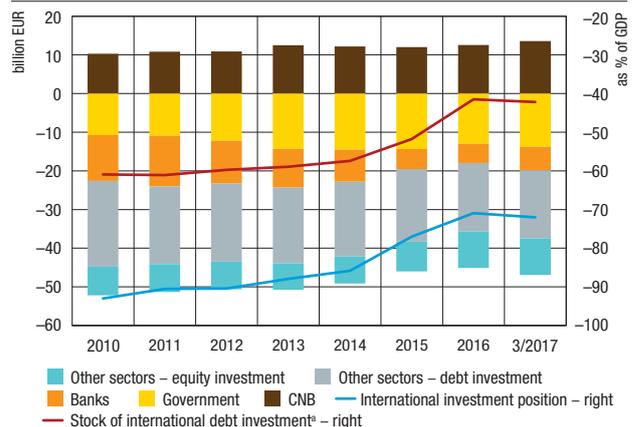
Figure 8.3 Net external debt transactions by sectors



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

Source: CNB.

Figure 8.5 International investment position (net) by sectors



* Stock of international debt investments (net) equals the negative value of the net external debt.

Source: CNB.

institutional investors in a foreign issue of a government bond. Non-resident investors purchased approximately two thirds of the government bond issue, with the result that central government's net foreign liabilities grew by EUR 0.7bn. The last government bond issue had a neutral effect on the financial account balance because the government deposited the collected funds, including the portion purchased by domestic institutional investors, with the central bank, thus contributing to a temporary increase in international reserves and the improvement of the central bank's net external position. Total net debt liabilities were also increased by EUR 0.4bn of other domestic sectors' new net liabilities, with a small part of this amount including borrowing from affiliated enterprises.

The relative indicators of external debt ceased to improve in the first quarter of 2017 due to an increase in net debt liabilities. Net external debt grew to EUR 19.8bn (42.7% of GDP) by the end of March, up by 1.2 percentage points from the end of the previous year. Gross external debt reached EUR 43.8bn (94.5% of GDP), increasing by 3.6 percentage points from the end of 2016. However, the external debt stock decreased again already in April, following the central government's repayment

of a maturing bond, and other sectors partially deleveraged.

Regarding relative indicators, Croatia's international investment position also slightly deteriorated, down from -71.0% of GDP at the end of 2016 to -72.0% of GDP at the end of the first quarter of 2017. Observed by domestic sectors, the deterioration was the most noticeable in the banking sector, while the deterioration in the government sector was compensated for by the improvement for the central bank.

Projected developments

The balance of payments financial account is expected to have a net capital outflow in 2017 for the fourth consecutive year. The envisaged EUR 1.7bn decrease in net liabilities could be one-half higher than in 2016, with a considerably lower growth in net equity liabilities and a slowed down pace of domestic sector deleveraging. These trends could be accompanied by a stronger growth in international reserves.

The net inflow of equity investments could amount to only 0.6% of GDP in 2017. Domestic business entities' foreign investments are certain to surpass last year's performance, which was already partially realised in the first quarter. The inflow

of foreign direct investments in Croatia is expected to subside markedly and amount to about one-third of its value in the previous year, primarily due to an anticipated decrease in the reinvested earnings of domestic business entities owned by non-residents. Specifically, based on the first quarter results, the remaining part of 2017 is expected to see lower current operating profit, in particular of banks, due to additional provisions for losses related to the Agrokor Group, and increased dividend payments resulting from high profits realised in the previous year. Reinvested earnings could recover in 2018 amid the gradual disappearance of effects from provisions on banks' profits. Their recovery, coupled with an inflow of new foreign investments in production activities and tourism, could result in foreign investments in Croatia returning to their average level of previous years (approximately 3% of GDP).

Net foreign debt liabilities of domestic sectors are expected to decrease sharply in the remaining part of 2017 following a sizeable temporary increase in debt in the first quarter of the year. However, deleveraging could be weaker in 2017 than in

2016. A significant fall is anticipated in the debt of central government, whose foreign bond was repaid already in April. The remaining part of the year is also expected to witness net deleveraging by banks, which will offset the first quarter rise in net liabilities. Other domestic sectors will also deleverage mildly. Net debt liabilities of domestic sectors should continue to decrease in 2018, with further deleveraging by banks and enterprises playing a decisive role in the process. The relative indicators of external debt are forecast to improve markedly under such conditions. For instance, the gross external debt-to-GDP ratio could fall below 80% by the end of 2018, down from 91% of GDP at the end of 2016.

Risks to the projection of capital flows mostly involve the dynamics of foreign deleveraging, especially with regard to uncertainties surrounding financing conditions in the international market. In addition, a potential worsening of the global investment climate could influence the already low equity inflows, given the fact that there are still no indications of any strong foreign investor attraction.

9 Monetary policy

In the first half of 2017, the CNB continued to pursue an expansionary monetary policy. The kuna liquidity of the banking system was further strengthened by foreign exchange interventions that alleviated appreciation pressures on the domestic currency. In particular, following a substantial purchase of foreign exchange in late 2016, the CNB purchased from banks a total of EUR 424.0m in June. In the first half of 2017, the central bank purchased EUR 15.9m from the Ministry of Finance, while there were no transactions with the European Commission. All foreign exchange transactions resulted in a net purchase of foreign exchange of EUR 539.9m, which created HRK 4.0bn (Figure 9.1)²² in the first six months of 2017.

As regards kuna operations, the average balance of funds placed via the regular weekly reverse repo operations was HRK

0.1bn in the first two months of 2017, with the fixed repo rate holding steady at 0.3%. However, from early March to mid-2017, the CNB placed only few funds via weekly operations due to the lack of interest on the part of the banks in conditions of abundant kuna liquidity. In the first half of 2017, no additional funds were created by structural repo operations, so that their balance held steady from the end of 2016 (HRK 1.0bn).

The average surplus kuna liquidity doubled in the first six months of 2017, growing from HRK 7.6bn in 2016 to HRK 15.7bn (Figure 9.2), which was mostly the result of reserve money creation by means of foreign exchange interventions. Against this background, the average weighted overnight interbank interest rate dipped from 0.41% in 2016 to 0.06% in the first half of 2017. It leaped to 0.39% in June, but this was a

Figure 9.1 Flows of reserve money (M0) creation

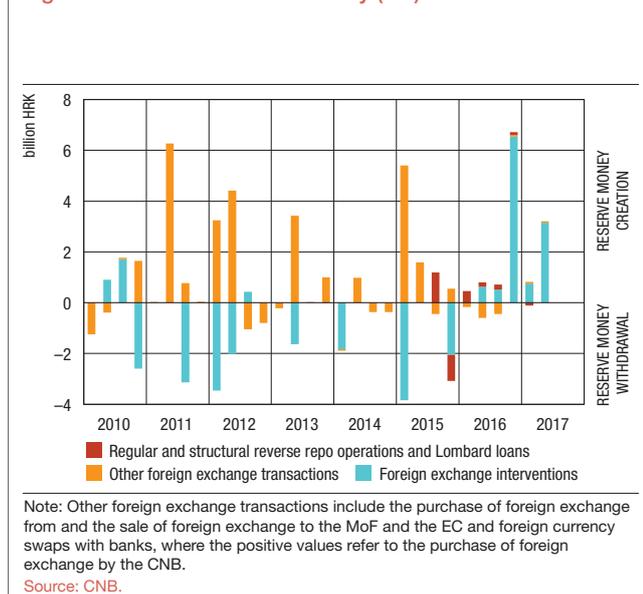
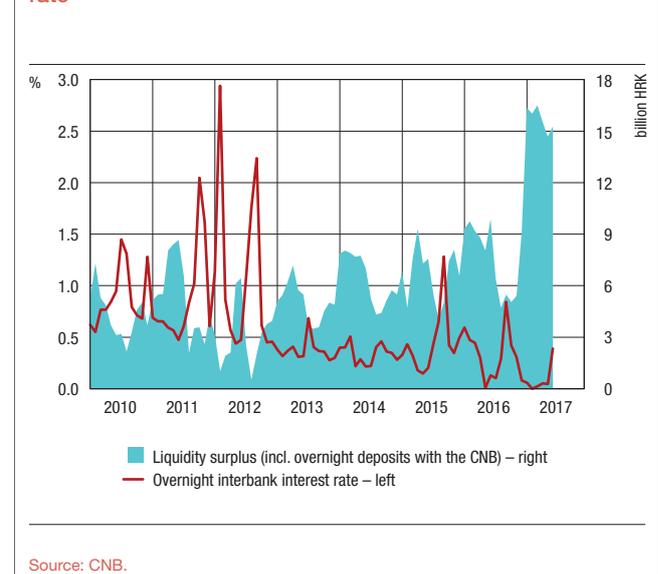
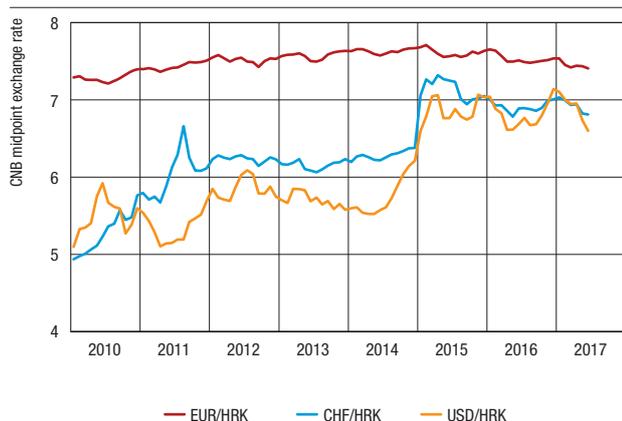


Figure 9.2 Bank liquidity and overnight interbank interest rate



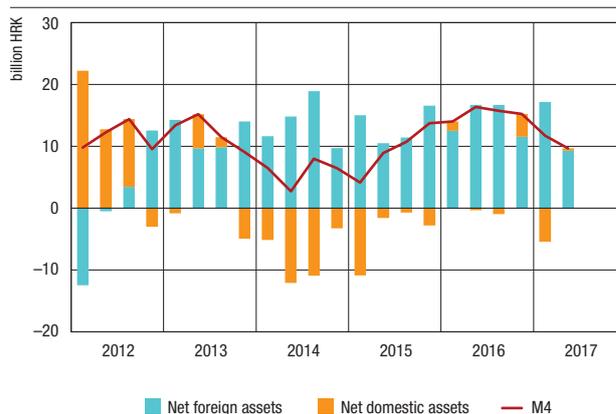
22 Data for the first half of 2017 include a direct purchase of foreign exchange from banks outside auctions of EUR 100.0m on 29 December 2016 as the value date of that transaction was 2 January 2017.

Figure 9.3 Nominal exchange rates of the kuna against selected currencies



Source: CNB.

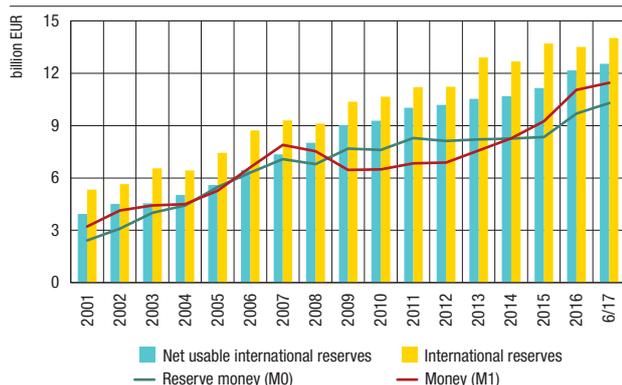
Figure 9.5 Net foreign assets, net domestic assets and total liquid assets (M4)



Notes: Absolute changes in the last twelve months excluding the exchange rate effect. Data for the second quarter of 2017 are up to May.

Source: CNB.

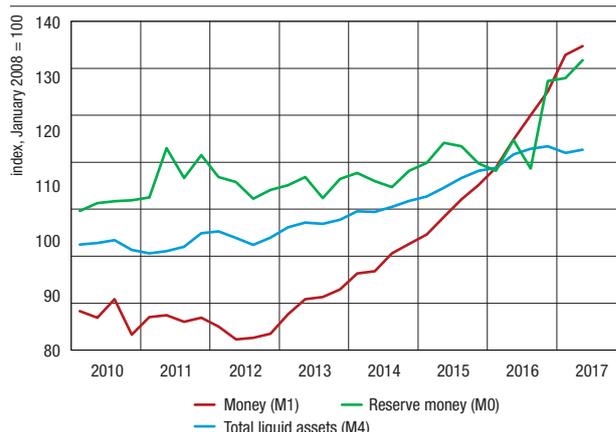
Figure 9.4 International reserves of the CNB and monetary aggregates



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 May 2017.

Source: CNB.

Figure 9.6 Real monetary aggregates index of developments in seasonally adjusted values, deflated by the consumer price index



Note: Data for the second quarter of 2017 refer to the end of May, except data for M0, which refer to the end of June.

Source: CNB.

reflection of only one transaction made in that month.

The nominal exchange rate of the kuna against the euro appreciated by 2.0% in the first six months of 2017, going from EUR/HRK 7.56 at end-2016 to EUR/HRK 7.41 at end-June (Figure 9.3). The average exchange rate was 1.5% lower in that period than in the first half of 2016. The exchange rate appreciation was associated with the ongoing positive results of tourism, greater inflows from EU funds, as well as the general economic recovery and reduced fiscal risks. The kuna also strengthened against the euro on an annual level, so that the exchange rate was 1.4% lower in late June than in mid-2016. In the first six months, the kuna also appreciated against the US dollar and the Swiss franc, reflecting the appreciation of the euro against these two currencies on global financial markets.

Gross international reserves stood at EUR 14.0bn at the end of June 2017 (Figure 9.4), growing by EUR 0.5bn (3.8%) from the end of 2016. The increase was due to the net purchase of foreign exchange and the higher level of agreed repo transactions than at the end of 2016. Net usable reserves grew by EUR 0.4bn (3.2%) in the same period. Gross and net international reserves remained at higher levels than money (M1) and reserve money (M0).

The annual increase in total liquid assets (M4) continued to lose steam (Figure 9.5). Along with the lack of growth in net domestic assets, this was the result of the slower growth in net foreign assets of credit institutions, which was, in turn, due to the fall in their foreign assets, as well as the slower deleveraging abroad on an annual level. Nevertheless, foreign assets of credit institutions continued to exceed their foreign liabilities at the end of May.

The first five months of 2017 saw the continuance of the several-year strong upward trend in real money (M1), driven by preferences of domestic sectors to hold more liquid financial assets in conditions of falling interest rates on deposits and the economic recovery (Figure 9.6). On the other hand, real total liquid assets (M4) edged down in the first five months, due also to higher inflation. As regards the structure of monetary aggregate M4, a noticeable downward trend was seen in the foreign currency deposits of households. The real value of reserve money (M0), which grew perceptibly in late 2016 as a result of foreign exchange purchases from banks, increased further by the end of June, also owing to the purchase of foreign exchange from banks in that month.

In the conditions of subdued inflation and the still mild recovery of lending, monetary policy will keep its expansionary character and work towards the maintenance of the stable kuna/euro exchange rate, which implies support to high monetary

system liquidity through structural and regular repo operations and the implementation of foreign exchange interventions when needed.

10 Public finance

The strong fiscal adjustment that characterised 2015 continued into last year so that the general government deficit was only HRK 2.7bn or 0.8% of GDP in 2016. The budget outcome was driven by a noticeable increase in revenues, partly due to favourable cyclical trends, as well as a moderate rise on the expenditure side. As a result of the low general government deficit and the ongoing recovery in economic activity, the general government debt-to-GDP ratio shrank considerably in 2016, for the first time since 2007, to 83.7% of GDP at the year-end.

Thanks to the 2016 drop in the deficit to below the threshold under the Stability and Growth Pact rules and the expected steady reduction in general government debt at a required pace, based on a proposal by the European Commission, the EU Council adopted a decision in June 2017 on Croatia's exit from the excessive deficit procedure (for more details see Box 4).

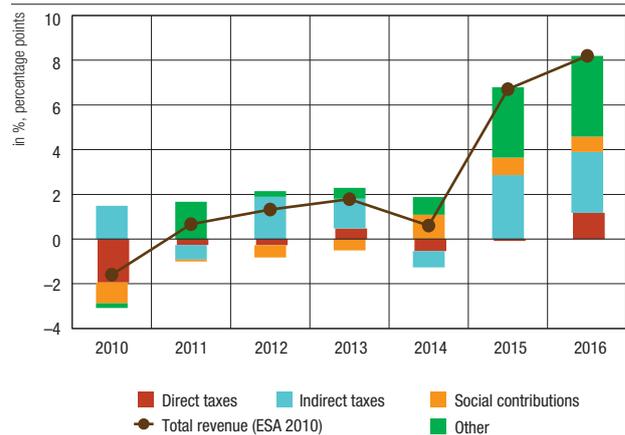
Under this year's Convergence Programme for Croatia, the deficit is expected to edge up in 2017 from 2016, while the general government debt should continue to decrease. The deficit is expected to grow as a result of a reduction in general government revenues (as % of GDP), triggered by amendments to tax regulations that cut the tax burden, in particular through changes in income taxes.

Regarding the performance data available for 2017, MoF cash-basis data for the first quarter suggest that the deficit was noticeably wider in early 2017 than in the same period last year, with movements in general government debt yielding a similar conclusion. Such trends were in part associated with the payment of subsidies to farmers earlier than in 2016.

According to the MoF data (on a cash basis, GFS 2001), general government revenues continued to trend up on an annual level in the first three months of 2017. The growth was mostly due to social contributions, because of the increase in the

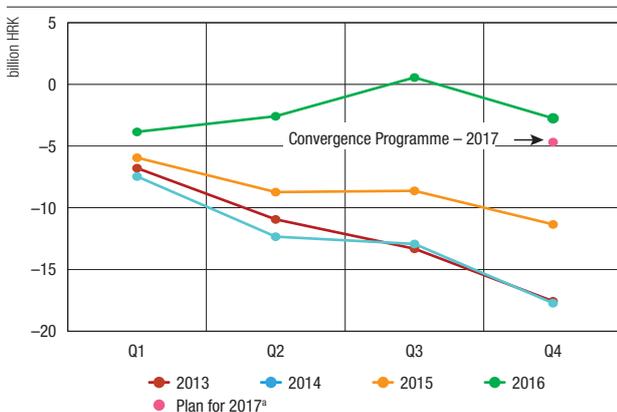
gross wage bill, and to grants, which is probably associated with larger transfers from the EU budget. Tax revenues also grew, mostly on account of greater VAT revenues. The latter may be largely attributed to personal consumption growth, with the opposite effect being made by the cut in the VAT rate on a group of products, effective as of January 2017. Although tax amendments in the VAT system included the increase in the rate on hotel and restaurant services, a more significant positive impact on revenues will likely be evident only in the remainder of the year, i.e. with the beginning of the tourist season. On the other

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



Source: Eurostat (CNB calculations).

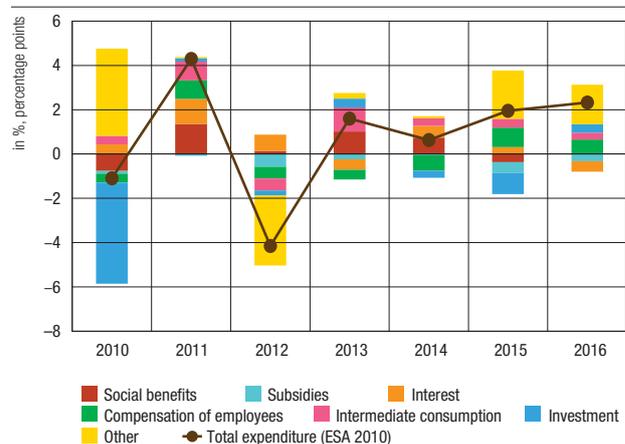
Figure 10.1 General government cumulative balance by quarters
(ESA 2010)



^a The plan of the general government balance for 2017 is shown on the basis of information from the Convergence Programme of the Republic of Croatia for the period 2017-2020.

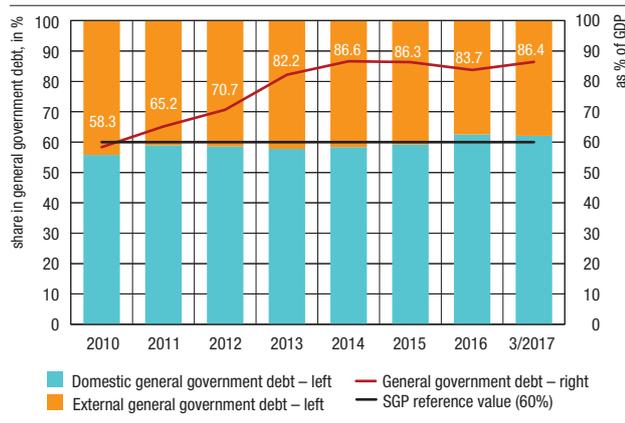
Sources: Eurostat and MoF (CNB calculations).

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



Source: Eurostat (CNB calculations).

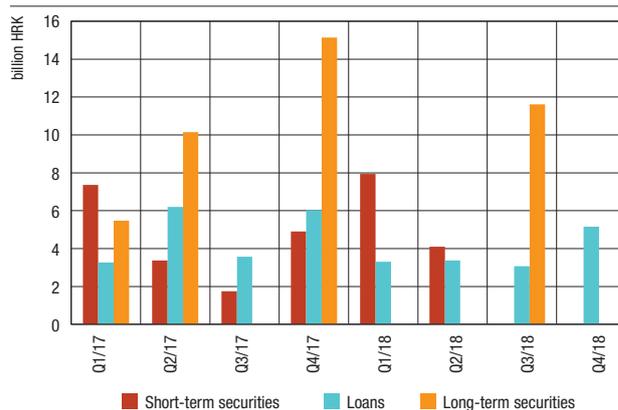
Figure 10.4 General government debt end-period stock



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

Source: CNB.

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 30 June 2017 and projection of the repayment of loans on the balance as at 31 March 2017.

Sources: MoF and CNB.

hand, revenues from income taxes shrank noticeably as a result of tax changes, while excise revenues also dropped, largely due to lower revenues from excises on tobacco products.

At the same time, the annual growth in consolidated general government expenditure (GFS 2001) exceeded the rise in revenue. As subsidies were paid earlier this year, they were much larger in the first quarter of 2017 than in the same period last year. Expenditures on employees also increased, largely due to the 2% increase in wages in public and government services as of January 2017 (paid in February), expenditures for the use of goods and services, and what are called other expenditures. The latter growth may be associated mostly with a transfer of funds from the EU budget to beneficiaries outside the general budget. On the other hand, thanks to favourable borrowing terms and reduced borrowing needs in 2016, expenditures for interest decreased steadily, with expenditures for social benefits also moving in the same direction.

General government debt stood at HRK 300.1bn in late March 2017, which is HRK 11.1bn more than at the end of

2016. However, the upsurge in debt was mostly due to the pre-financing of the debt falling due in the second quarter. The funds raised by EUR 1.25bn worth of foreign bonds issued in March were largely used to refinance around EUR 1.1bn worth of foreign bonds that fell due in late April. In addition to foreign bonds, the government issued HRK 8.5bn worth of domestic bonds in the first quarter, used partly to refinance bonds falling due at that time and partly for budget deficit financing. It is noteworthy that the yield on newly-issued bonds is much lower than that paid on earlier issues. For example, foreign bonds issued in this March have a yield to maturity of 3.2%, whereas the bonds that fell due in April had a yield almost twice as high (6.375%). More favourable financing conditions will therefore trigger a further decline in interest expenses of the general government in the forthcoming period.

In the second half of 2017, the general government will have approximately 9% of GDP worth of liabilities falling due, most of which relate to liabilities based on T-bills (noteworthy is EUR 1.5bn worth of T-bills falling due in November) and loans.

Box 4 Croatia's exit from the excessive deficit procedure

The general government deficit shrank to only 0.8% of GDP in 2016, much below the Stability and Growth Pact threshold of 3% of GDP. General government debt is expected to decrease at an adequate pace in the forthcoming medium-term period, so that the European Commission proposed in May 2017, and the EU Council confirmed in June, Croatia's exit from the excessive deficit procedure to which it had been subject since 2014. The data suggest that the achieved adjustment of the general government deficit was mostly due to the structural deficit reduction, triggered by measures on both the revenue and expenditure side, and to a lesser extent, favourable cyclical movements.

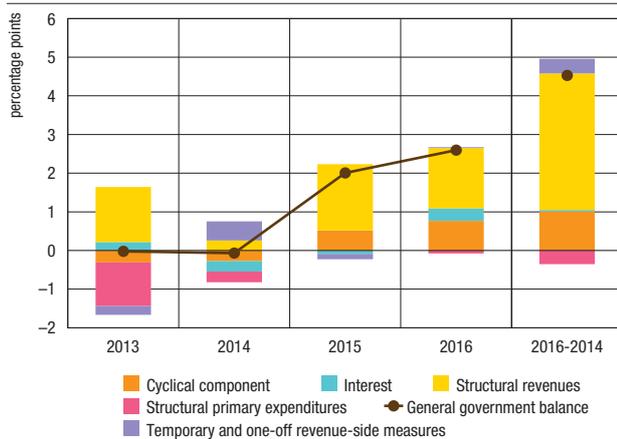
With its full EU membership as of mid-2013, Croatia has been subject to the provisions of the Stability and Growth Pact (SGP). As it failed to meet the SGP criteria associated with budget deficit and general government debt, the excessive deficit procedure was launched against Croatia in early 2014²³. On the proposal of the European Commission, the EU Council adopted

recommendations for the lowering of the excessive deficit, setting 2016 as the deadline for correction and outlining the adequate path for the nominal and structural deficit.

During the excessive deficit procedure, the EC analysed and assessed fiscal developments in Croatia on a regular basis. While individual fiscal indicators were not always within the framework set by EU Council recommendations, the European Commission regularly adopted decisions to ensure the adequacy of the fiscal efforts taken by the Croatian authorities. For example, the nominal general government deficit stood at 5.4% of GDP in 2014, while it was to be reduced to 4.6% of GDP in that year under the EU Council's recommendation. Nevertheless, the EC assessed that the size of the adopted consolidation measures was in line with recommendations, while the departure of the nominal deficit from the projected path was in part attributable to much lower than expected inflation. In the following two years, the nominal deficit was noticeably reduced, standing at 0.8% of GDP in 2016, i.e. much below both the threshold of 3% of GDP and the 2.7% of GDP recommended by the

23 For more details see Box 4 in the CNB Bulletin No. 198.

Figure 1 Key fiscal indicators for Croatia as % of GDP



Source: AMECO.

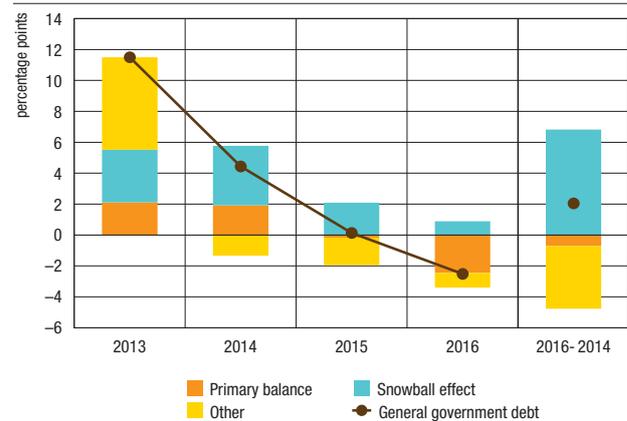
Commission (Figure 1). Furthermore, although general government debt stood at 84.2% of GDP at the end of 2016, i.e. much above the 60% of GDP threshold, as the Commission expected its adequate reduction in the forthcoming medium term, it was assessed that the debt criterion was also fulfilled. Therefore, on 22 May 2017, following the publication of the official Excessive Deficit Procedure Report for Croatia in 2016, the European Commission published a recommendation as a result of which the EU Council decided that Croatia had achieved the agreed reduction of the excessive deficit and met the criteria to exit the EDP.

As regards the consolidation process itself and fiscal efforts made by Croatia, an analysis of the data available for the period from 2014 to 2016 suggests that the 4.5 percentage points-of-GDP adjustment in the nominal general government deficit was mostly structural (Figure 2). Aggregate data show that the structural reduction in the budget deficit was achieved exclusively due to the increase on the revenue side of the budget, while primary structural expenditures slightly added to the deficit during the period under review. At the same time, the contribution of interest was almost neutral thanks to favourable trends in financing costs towards the end of the observed period. Data also indicate that the cyclical component itself started to exert a favourable effect on budget deficit reduction thanks to the exit from recession in 2015 and more dynamic economic growth in 2016.

A more precise analysis of structural revenues and expenditures is hindered by the fact that the EC publishes neither which measures it considers discretionary nor an estimate of their effects, as well as by the generally relatively high degree of fiscal data aggregation. Nevertheless, available data suggest that the increase in structural revenues (as % of GDP) was largely spurred by the rise in non-tax revenues and, to a lesser degree, the increase in tax revenues, including revenues from social contributions. The EC estimated that changes in tax regulations had a stronger positive impact on revenues only in 2014, which is largely attributable to the increase in the health insurance contribution rate. The relatively strong growth in non-tax revenues, i.e. other capital and current revenues and sales, may be partly associated with larger revenues based on withdrawals of profits from state-owned enterprises, income from legalisation of illegally built facilities and withdrawals from EU funds.

The upturn on the expenditure side of the budget (as % of GDP) is also mostly attributable to the increase in other current

Figure 2 Factors behind changes in nominal general government deficit-to-GDP ratio



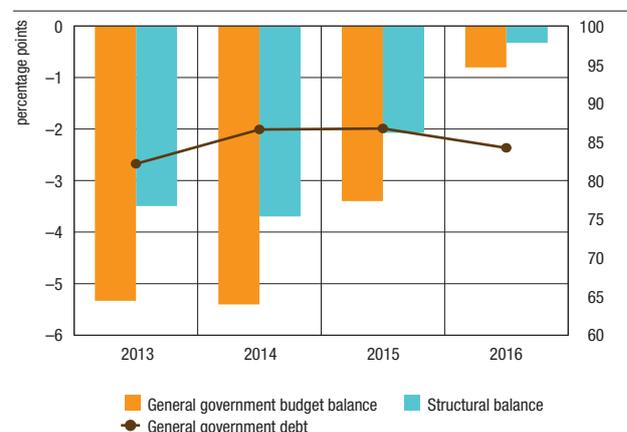
Note: A change in structural primary expenditures and interest with a negative sign indicates an increase.

Source: AMECO.

and capital expenditures. Such developments were probably somewhat due to annual payments to the EU budget as of 2014 and some one-off expenditures associated with the assumption of corporate debt and outlays for bank resolution. On the other hand, expenditures for subsidies and investments were cut perceptibly, while the majority of other main expenditure categories held steady at the level recorded in 2013.

It should be noted that the amount achieved by consolidation measures from 2014 to 2016 was much higher than the sum of changes in structural revenues and expenditures. Furthermore, while the cuts in the structural deficit were achieved mostly by revenue increases, MoF data show that expenditure-side structural measures taken to reduce the deficit outstripped those on the revenue side of the budget. In particular, an analysis of the size and structure of fiscal efforts is hindered by the fact that some expenditure categories, such as outlays for pensions and health care, grow automatically due to population ageing, and additional consolidation is required just to offset their growth. Furthermore, EU accession has created new types of revenues and expenditures, which also makes an estimate of fiscal efforts more difficult. For example, the increase in structural revenues

Figure 3 Factors behind changes in general government debt-to-GDP ratio



Source: AMECO.

was in part due to the larger use of EU funds, which have a neutral impact on budget deficit as they are simultaneously recorded on the expenditure side as well. Nevertheless, this underestimates the adjustment on the expenditure side and overestimates that on the revenue side.

As the excessive deficit procedure for Croatia was initiated because of the breach of the budget deficit criterion as well as the general government debt exceeding 60% of GDP, it was necessary to satisfy also the debt criterion to exit the EDP, or to bring the future public debt level close to the threshold²⁴. During the excessive deficit procedure, general government debt grew further compared with 2013 (Figure 3). In cumulative terms, general government debt increased by more than two percentage

points from 2014 to 2016, solely due to the difference between the nominal GDP growth rate and the implicit interest rate on government debt (known in literature as the “snowball effect”), while the opposite effect was produced by the primary budget balance and other adjustments. It should be noted that the debt stopped growing in 2015 and, for the first time since 2007, recorded a drop in 2016. As current projections show relatively high primary surpluses in the forthcoming period, as well as relatively high real growth rates accompanied by slightly faster growth in the general price level, the projected public debt level suggests that Croatia has been approaching the public debt threshold of 60% of GDP at an adequate pace, which is why the Commission assessed that this criterion was met as well.

11 Deviations from the previous projection

The projection of real global developments for 2017 is slightly more positive than expected in the December 2016 projection. Thanks to relatively favourable performance in early 2017, growth projections for the world’s largest economy, the US, were revised upwards, notwithstanding heightened uncertainty about the implementation of fiscal policy measures. Expected euro area growth was revised upwards even more thanks to the mitigation of political risks in some countries, and, to some extent, uncertainty surrounding Brexit. Expectations concerning major Croatian trading partners are also somewhat more positive than before, particularly those related to Italy. As regards inflation, due to higher rates early in the year, and notwithstanding lower oil prices, euro area inflation in 2017 could slightly exceed previous projections, but remain below the ECB’s target. Given the increasingly sharp tightening of the US monetary policy, global financing conditions could start to deteriorate sooner

than expected, but euro area monetary policy should remain extremely accommodative.

Economic growth expectations for 2017 have remained the same as in the previous projection. The expected growth rate of the overall economic activity has remained unchanged (3.0%), but some changes by components have been made in this projection. Expected growth in total exports has been revised sharply upwards, and could reach 6.6% in 2017. More favourable expectations partly reflect the higher expected growth in services exports, as indicated by the available indicators for tourism for the first half of the year. On the other hand, expectations for investment activity and personal consumption growth have been revised downwards, largely due to possible negative effects of the financial crisis in the Agrokor Group on economic activity. Therefore, personal consumption may grow by 3.1% in 2017, instead of the previously projected 3.3%, while investment activity growth could be some 0.7 percentage points lower and stand at 6.1%. The increase in imports of goods and services has been revised slightly upwards (7.5% vs 7.3%), but as the upward revision is larger on the exports side, the expected negative contribution of net foreign demand to economic growth is lower than expected (–0.2 percentage points vs –0.7 percentage points).

The average annual consumer price inflation rate for 2017 is estimated at 1.1%, which is 0.6 percentage points lower than projected in December 2016. This is largely due to electricity prices, mostly because the increase in renewable energy sources tariffs was not effected in January as expected, but was postponed for the second half of the year. In addition, the current projection assumes a lower increase in tariffs. In accordance with this, direct effects of tax changes on the average annual inflation rate have been reduced to –0.22 percentage points, from 0.35 percentage points envisaged in the previous projection. Furthermore, the current projection foresees a slightly less pronounced annual increase in the average global price of crude oil (13.5% vs 28.3% in the previous projection, in US dollar terms). The annual growth of prices, excluding food and energy, was revised slightly downwards in line with the results for the first five months.

The estimate of the current and capital account surplus in 2017 was increased from the previous projection by 1.8 percentage points, to 4.9% of GDP. The main factors of the deviation are the impact of the developments related to the Agrokor Group

Table 11.1 Basic assumptions, deviations from the previous projection

	2017		
	Previous projection (12/2016)	Current projection	Deviation
GDP (real rate of change, in %)			
Rest of the world	3.44	3.46	0.02
Euro area	1.51	1.68	0.17
USA	2.20	2.31	0.11
Developing countries and emerging market countries	4.60	4.49	–0.11
Main trading partners of the Republic of Croatia	1.94	2.05	0.11
Prices			
Euro area HICP ^a	1.3	1.5	0.2
Oil prices (USD/barrel) ^b	56.4	50.0	–6.4
Key interest rates			
EURIBOR 3M (end of year) ^c	–0.31	–0.30	0.01
ECB main refinancing rate ^c	0.00	0.00	0.00
US federal funds target rate ^c	1.30	1.50	0.20

^a ECB, June 2017. ^b Bloomberg, Brent crude oil futures. ^c Bloomberg.
Source: IMF (WEO, April 2017).

²⁴ It is necessary that the projected difference between public debt and the 60%-of-GDP limit decreases during three years at an average annual rate of 1/20th of the difference.

Table 11.2 Domestic indicators, deviations from the previous projection

	2016			2017		
	Previous projection (12/2016)	Current projection	Deviation	Previous projection (12/2016)	Current projection	Deviation
National accounts (real rate of change, in %)						
GDP	2.8	3.0	0.2	3.0	3.0	-0.1
Personal consumption	3.1	3.3	0.2	3.3	3.1	-0.2
Government consumption	1.4	1.3	-0.1	1.0	1.4	0.4
Gross fixed capital formation	4.1	5.1	1.1	6.8	6.1	-0.7
Exports of goods and services	6.1	5.7	-0.4	5.5	6.6	1.1
Imports of goods and services	6.5	5.8	-0.7	7.4	7.5	0.1
Labour market						
Number of employed persons (average rate of change, in %)	1.8	1.9	0.1	1.5	1.7	0.2
Registered unemployment rate	15.0	14.8	-0.2	14.4	12.7	-1.8
ILO unemployment rate	14.3	13.1	-1.2	13.9	11.6	-2.3
Prices						
Consumer price index (rate of change, in %)	-1.2	-1.1	0.1	1.6	1.1	-0.6
External sector						
Current account balance (as % of GDP)	2.8	2.6	-0.2	2.0	3.7	1.7
Current and capital account balance (as % of GDP)	3.8	3.8	0.0	3.1	4.9	1.8
Gross external debt (as % of GDP)	93.8	90.9	-2.9	87.5	81.5	-6.0
Monetary developments (rate of change, in %)						
Total liquid assets – M4	4.8	4.7	-0.1	4.1	3.1	-1.0
Total liquid assets – M4 ^a	5.2	5.3	0.1	4.0	3.3	-0.7
Credit institution placements	-4.0	-3.7	0.3	-1.3	0.6	1.9
Credit institution placements ^b	1.4	1.0	-0.4	2.6	3.9	1.3

^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).

Source: CNB.

on bank profitability and enhanced expectations regarding the tourist season. The deficit in the primary income account decreased as a result of lower expenditures, which are, in turn, due to smaller profits of banks because of the estimated impact of increased value adjustments of claims on the Agrokor Group and associated enterprises, as well as lower interest expenses on foreign liabilities due to faster deleveraging of domestic sectors. In addition, revenues based on primary income have been revised upwards, i.e., those based on business performance of foreign enterprises owned by residents. The service trade surplus has also been revised up, largely on account of the expected faster growth in revenues from tourism as well as the surplus in the trade in other services.

The projection of relative indicators of gross external debt for the end of 2017 has been reduced significantly downwards compared with the previous projection. This is mostly the outcome of the noticeably lower external debt stock at end-2016, largely due to a more substantial deleveraging of other domestic sectors and investment of domestic institutional investors in foreign government bonds, substituting external for domestic debt. In line with this and the movements in the first four months of the current year, the estimate of deleveraging in 2017 was further raised, also taking account of the more favourable assessment of the current and capital account surplus, which lowered the needs for external financing. Relative debt indicators were additionally reduced owing to the higher value of nominal GDP (for periods after 2015).

The projection for growth in credit institutions' placements

to the private sector in 2017 exceeds 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 could grow by 3.9% in 2017, compared with the previously projected 2.6%. The more rapid increase is largely due to stronger lending to enterprises and households in the preceding part of the year. In addition, household loans include the effect of the announced government programme to subsidise housing loans, which should begin in the second half of 2017, while corporate loans include new borrowings of the Agrokor Group within its restructuring programme. As regards the nominal change in placements, this projection shows a mild increase in 2017 (0.6%), compared with the previously expected drop of 1.3%. The assumption of the continued sale of non-performing placements has been retained, while the effect of the write-off of placements associated with the tax relief for 2017 is expected to be relatively small.

The projected growth of total liquid assets (M4) in 2017 is slightly lower than expected in the previous projection (3.3% relative to 4.0%, excluding the exchange rate effect) due to the poorer performance in the first half of the year. This mostly relates to the decline in household foreign currency deposits driven by the cuts in deposit interest rates. In addition, the first five months of 2017 witnessed a noticeable decrease in bonds and money market instruments held by credit institutions, as well as money market funds, which are also included in the broadest monetary aggregate M4.

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 (July 2017)	3.0	2.9	3.1	2.9	6.1	7.2	6.6	5.2	7.5	6.4	-	-	1.1	1.3
Eastern Europe Consensus Forecasts (June 2017)	2.9	2.6	3.0	2.5	5.1	5.3	-	-	-	-	3.3	3.4	1.4	1.7
World Bank (June 2017)	2.9	2.5	-	-	-	-	-	-	-	-	-	-	-	-
European Bank for Reconstruction and Development (May 2017)	2.9	2.6	-	-	-	-	-	-	-	-	-	-	-	-
European Commission (May 2017)	2.9	2.6	3.2	2.8	5.2	2.7	5.2	4.6	6.6	5.7	-	-	1.6	1.5
Addiko Bank Economic Researcha (April 2017)	3.5	2.9	3.4	2.8	6.2	6.8	6.8	4.7	7.0	6.1	4.5	4.1	1.4	1.8
International Monetary Fund (April 2017)	2.9	2.6	-	-	-	-	-	-	-	-	-	-	1.1	1.1
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
Raiffeisen Research ^a (April 2017)	3.3	2.8	-	-	-	-	6.6	5.0	5.6	5.6	4.2	3.8	1.9	1.6
The Institute of Economics, Zagreb (March 2017)	3.3	2.9	3.2	2.7	5.4	7.1	6.8	5.9	6.8	7.3	-	-	1.4	1.9

^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.

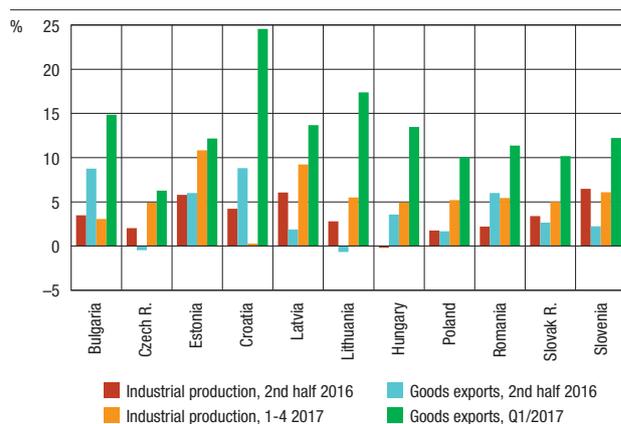
13 Annex B: Comparison of Croatia and selected countries

Table 13.1 Gross domestic product

	Year-on-year rate of change, original data				Quarter-on-quarter rate of change, seasonally adjusted data			
	2013	2014	2015	2016	Q2/2016	Q3/2016	Q4/2016	Q1/2017
Bulgaria	0.9	1.3	3.6	3.4	0.9	0.7	0.9	0.9
Czech R.	-0.5	2.7	4.5	2.4	0.9	0.2	0.4	1.3
Estonia	1.4	2.8	1.4	1.6	0.8	0.5	1.9	0.8
Croatia	-1.1	-0.5	2.2	3.0	0.8	1.4	0.6	0.6
Latvia	2.6	2.1	2.7	2.0	0.7	0.5	1.2	1.6
Lithuania	3.5	3.5	1.8	2.3	0.7	0.5	1.5	1.4
Hungary	2.1	4.0	3.1	2.0	1.2	0.5	0.7	1.3
Poland	1.4	3.3	3.8	2.7	1.0	0.4	1.7	1.1
Romania	3.5	3.1	3.9	4.8	1.6	0.7	1.5	1.7
Slovak R.	1.5	2.6	3.8	3.3	-	-	-	-
Slovenia	-1.1	3.1	2.3	2.5	0.8	1.2	1.3	1.5
Average ^a	1.3	2.6	3.0	2.7	0.9	0.7	1.2	1.2

^a Simple average.

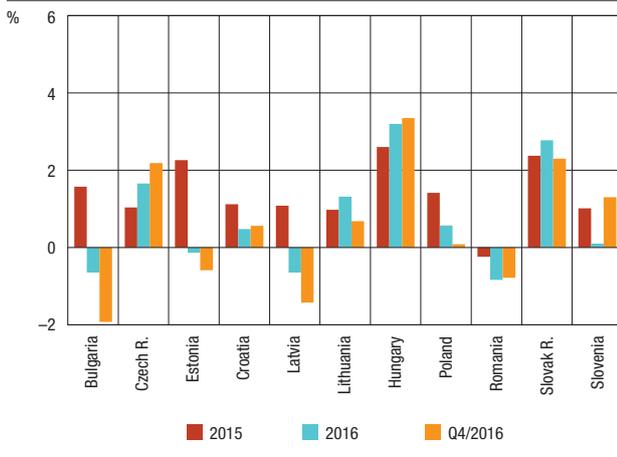
Sources: Eurostat, EC, CBS and CNB.

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


Note: Industrial production for 2017 is calculated as the percentage change of industrial production in the January-April period of 2017 relative to the same period in 2016.

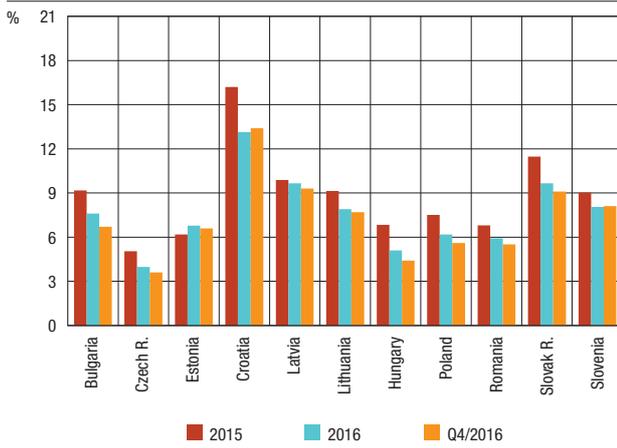
Sources: Eurostat and CBS.

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



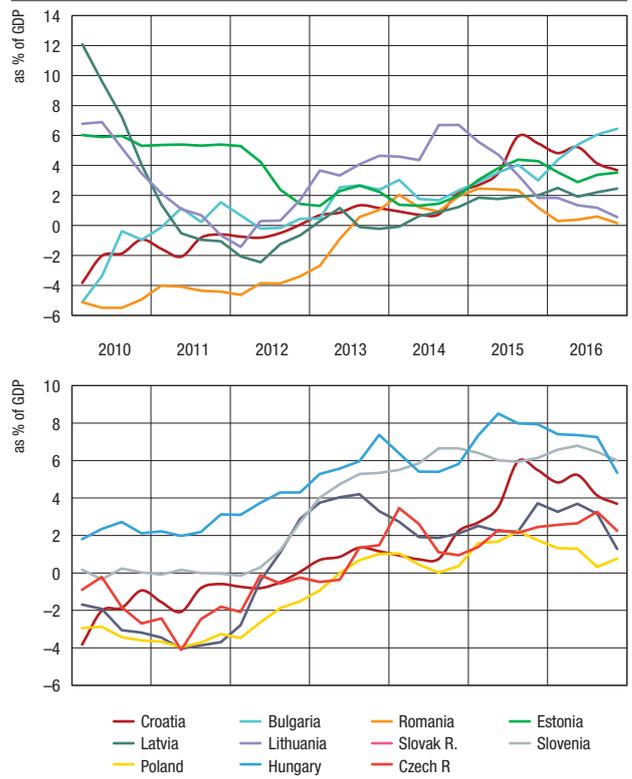
Source: Eurostat.

Figure 13.3 Labour Force Survey unemployment rate



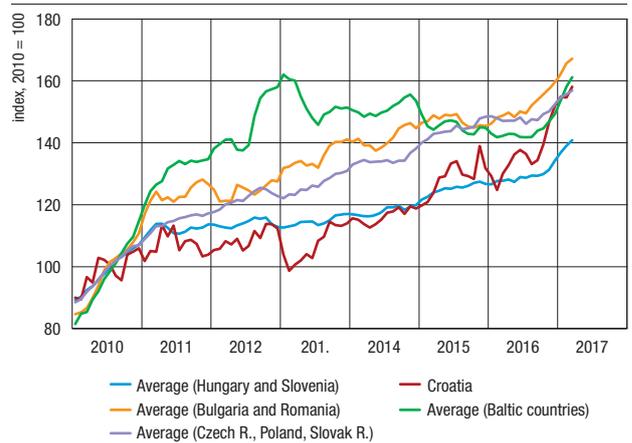
Source: Eurostat.

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



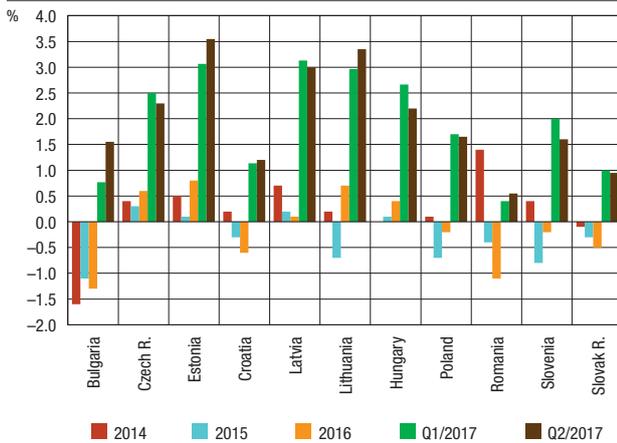
Sources: Eurostat and CNB.

Figure 13.5 Goods exports
quarterly moving average, seasonally adjusted data



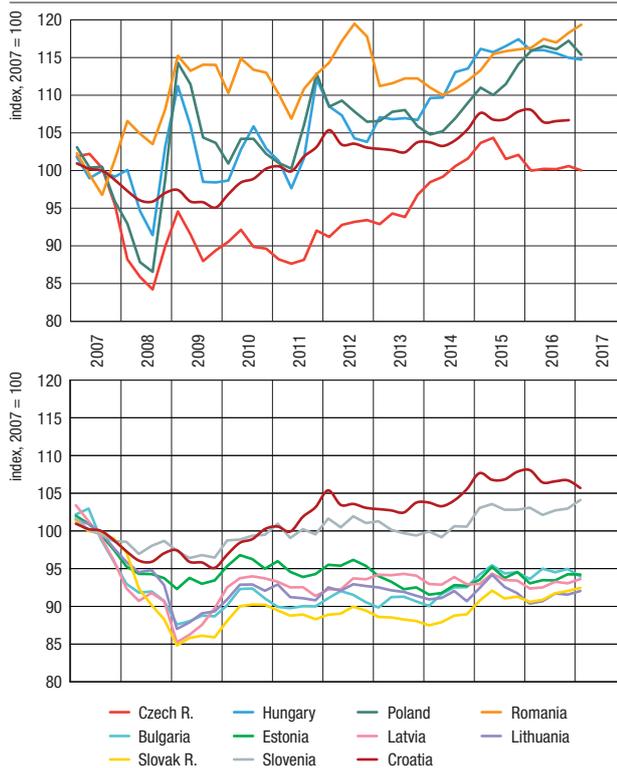
Sources: Eurostat and CNB.

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



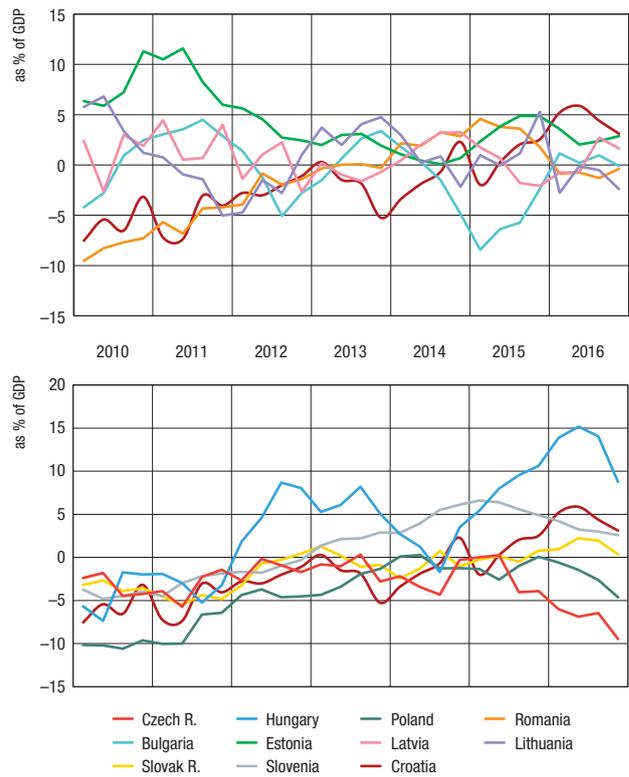
Note: Data for the second quarter of 2017 refer to April and May.
Source: Eurostat.

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



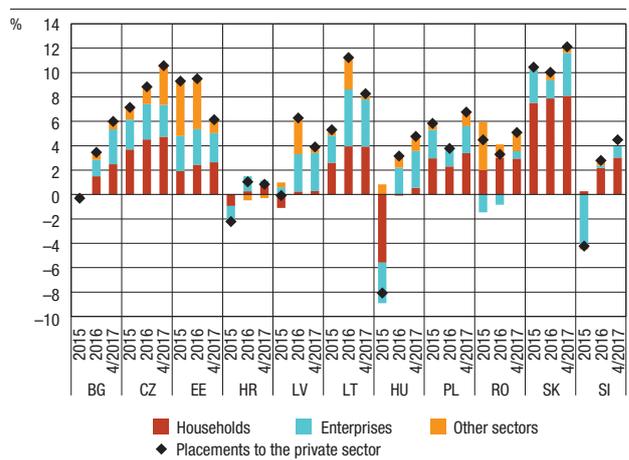
Notes: Data for 2017 refer to the first quarter. A fall in the index indicates a real effective appreciation.
Sources: BIS and CNB.

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



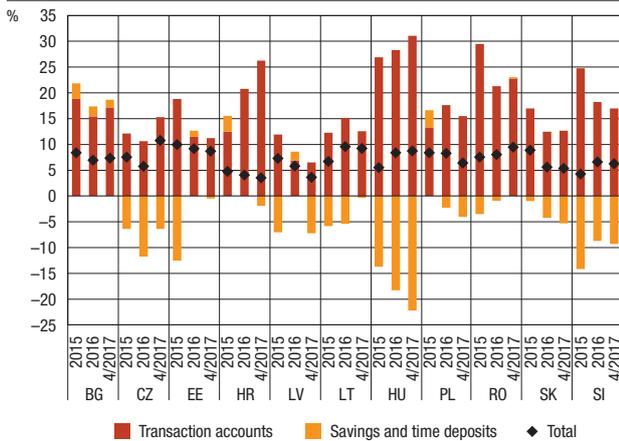
Sources: Eurostat and CNB.

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



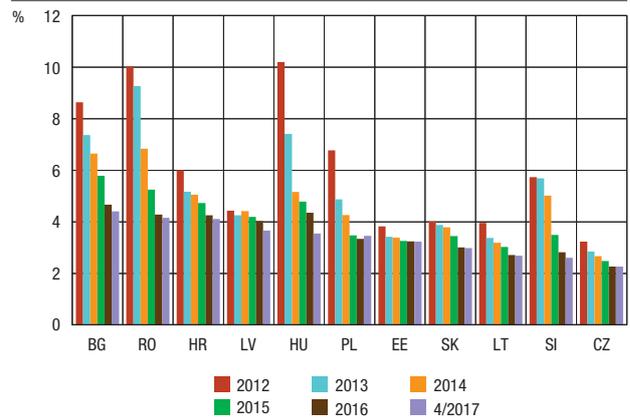
Sources: ECB and CNB.

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



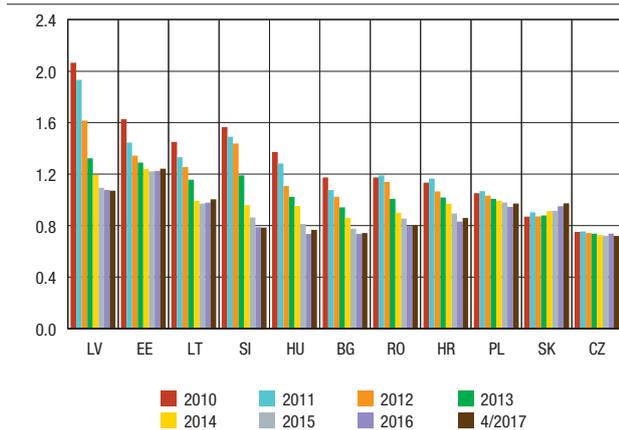
Sources: ECB and CNB.

Figure 13.13 Short-term interest rates on corporate loans



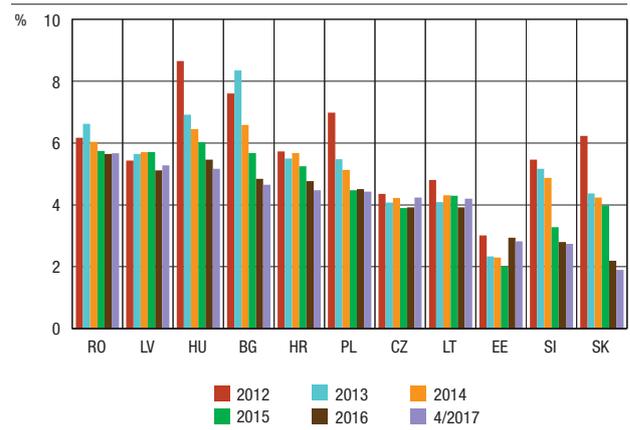
Note: Includes average interest rates on corporate loans up to EUR 1m and with a maturity of up to 1 year.
Source: ECB.

Figure 13.11 Placement to deposit ratio of the private sector



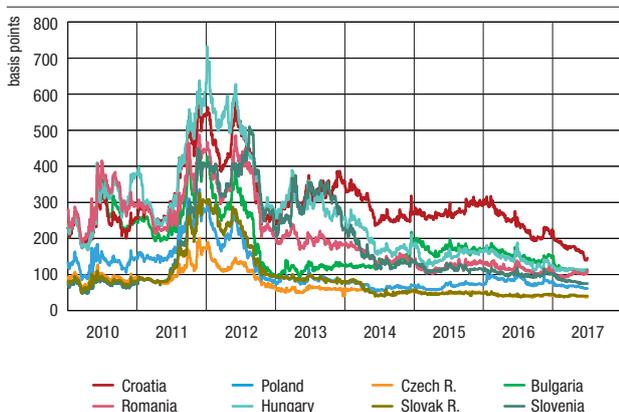
Sources: ECB and CNB.

Figure 13.14 Interest rates on housing loans



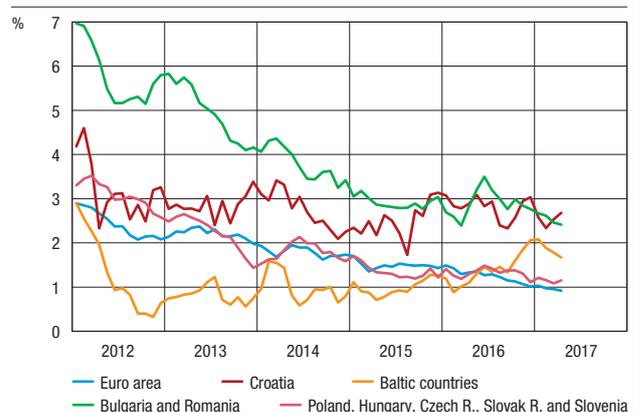
Sources: ECB and NCBS.

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



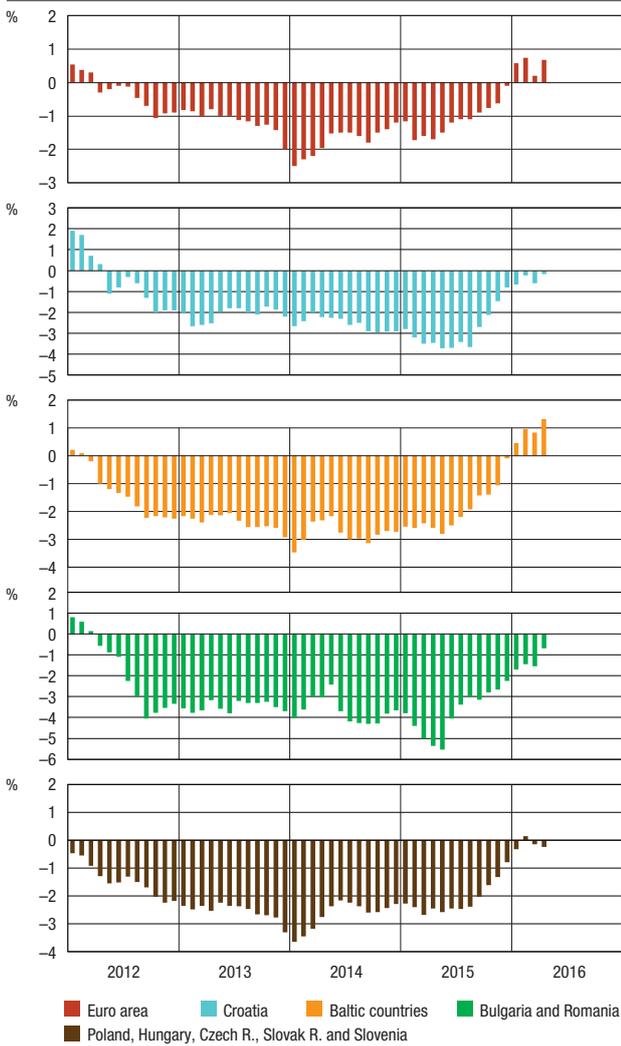
Note: Credit default swaps (CDS) spread is an annual premium that a CDS buyer pays for protection against credit risk associated with an issuer of an instrument.
Source: S&P Capital IQ.

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



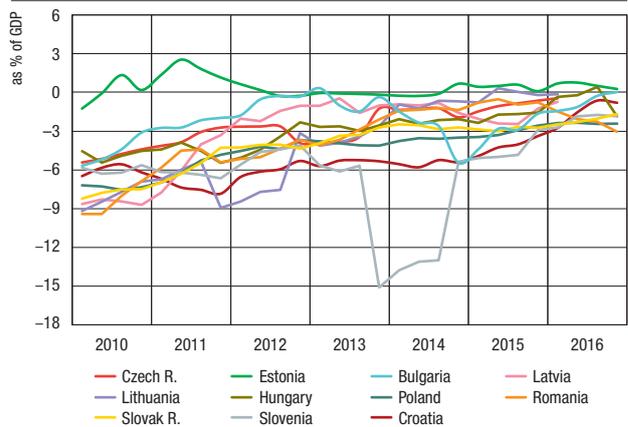
Notes: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts. Country group averages are not weighted.
Sources: ECB and Consensus Forecasts.

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



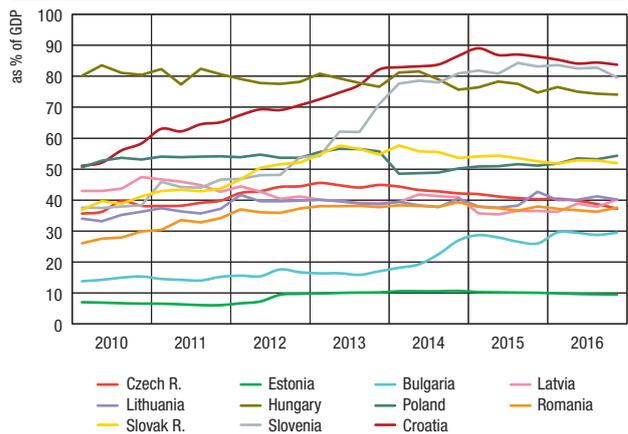
Notes: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts and the achieved real interest rate equals the nominal interest rate deflated by inflation achieved. Country group averages are not weighted.
Sources: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

