



Macroeconomic Developments and Outlook

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General information on Croatia

Economic indicators

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
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	4.312	4.310	4.303	4.290	4.280	4.268	4.256	4.238	4.204	4.174	4.125
GDP (million HRK, current prices) ^b	322,464	347,750	331,367	329,143	333,457	330,825	331,785	331,570	339,616	351,349	365,643
GDP (million EUR, current prices)	43,956	48,144	45,148	45,173	44,854	44,008	43,808	43,456	44,630	46,664	49,013
GDP per capita (in EUR)	10,194	11,171	10,493	10,530	10,480	10,311	10,293	10,254	10,616	11,180	11,882
GDP – real year-on-year rate of growth (in %)	5.3	2.0	-7.3	-1.5	-0.3	-2.3	-0.5	-0.1	2.4	3.5	2.9
Average year-on-year CPI inflation rate	2.9	6.1	2.4	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.1
Current account balance (million EUR) ^c	-3,138	-4,227	-2,299	-482	-313	-50	414	858	2,019	1,207	1,984
Current account balance (as % of GDP)	-7.1	-8.8	-5.1	-1.1	-0.7	-0.1	0.9	2.0	4.5	2.6	4.0
Exports of goods and services (as % of GDP)	39.0	38.5	34.5	37.6	40.4	41.6	42.8	45.3	48.1	48.8	51.3
Imports of goods and services (as % of GDP)	46.3	46.5	38.2	38.0	40.8	41.2	42.5	43.4	45.8	46.0	49.1
External debt (million EUR, end of year) ^c	33,721	40,590	45,600	46,908	46,397	45,297	45,803	46,416	45,384	41,668	40,069
External debt (as % of GDP)	76.7	84.3	101.0	103.8	103.4	102.9	104.6	106.8	101.7	89.3	81.8
External debt (as % of exports of goods and services)	196.6	219.1	292.7	275.8	255.9	247.3	244.1	235.9	211.4	182.9	159.5
External debt service (as % of exports of goods and services) ^d	40.1	33.8	52.9	49.5	40.9	43.3	41.0	44.1	42.5	34.9	32.0
Gross international reserves (million EUR, end of year)	9,307	9,121	10,376	10,660	11,195	11,236	12,908	12,688	13,707	13,514	15,706
Gross international reserves (in terms of months of imports of goods and services, end of year)	5.5	4.9	7.2	7.5	7.3	7.4	8.3	8.1	8.0	7.6	7.8
National currency: kuna (HRK)											
Exchange rate on 31 December (HRK : 1 EUR)	7.3251	7.3244	7.3062	7.3852	7.5304	7.5456	7.6376	7.6615	7.6350	7.5578	7.5136
Exchange rate on 31 December (HRK : 1 USD)	4.9855	5.1555	5.0893	5.5683	5.8199	5.7268	5.5490	6.3021	6.9918	7.1685	6.2697
Average exchange rate (HRK : 1 EUR)	7.3360	7.2232	7.3396	7.2862	7.4342	7.5173	7.5735	7.6300	7.6096	7.5294	7.4601
Average exchange rate (HRK : 1 USD)	5.3660	4.9344	5.2804	5.5000	5.3435	5.8509	5.7059	5.7493	6.8623	6.8037	6.6224
Consolidated general government net lending (+)/borrowing (-) (million HRK) ^e	-7,880.6	-9,604.6	-19,844	-20,655	-26,220	-17,420	-17,517	-17,033	-11,687	-3,275	3,158
Consolidated general government net lending (+)/borrowing (-) (as % of GDP) ^e	-2.4	-2.8	-6.0	-6.3	-7.9	-5.3	-5.3	-5.1	-3.4	-0.9	0.9
General government debt (as % of GDP) ^e	37.2	39.0	48.3	57.3	63.8	69.4	80.4	84.0	83.7	80.2	77.5
Unemployment rate (ILO, persons above 15 years of age)	9.9	8.5	9.2	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.2
Employment rate (ILO, persons above 15 years of age)	47.6	48.6	48.2	46.5	44.8	43.2	42.1	43.3	44.2	44.6	45.8

^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 2017 are preliminary.

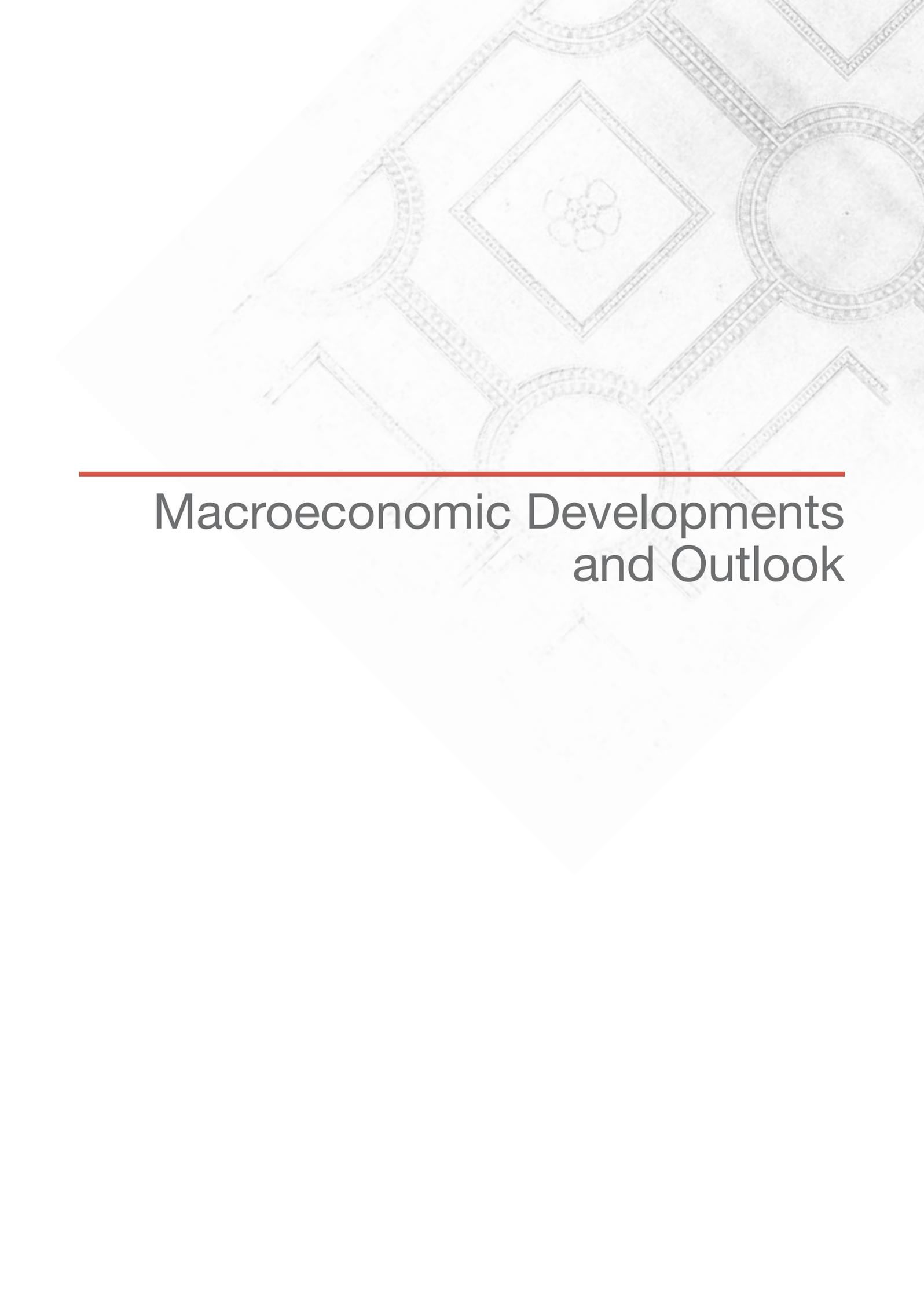
^b The GDP data are presented according to the ESA 2010 methodology. Data for 2017 are preliminary.

^c Balance of payments and external debt data are compiled in accordance with the methodology prescribed by the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) and the new sector classification of institutional units in line with ESA 2010. Balance of payments and external debt data are based on the most recent available balance of payments data up to the third quarter of 2018 and data on the gross external debt position as at the end of September 2018.

^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.

Sources: CBS, MoF and CNB.



Macroeconomic Developments and Outlook

1 Introduction

Real GDP growth picked up from the first to the second quarter of 2018, but it lost pace in the third quarter. Such trends largely reflected lower exports of goods and services and the parallel relatively sharp increase in total imports. Real GDP might grow by 2.7% taking 2018 as a whole, and the same growth rate is expected in 2019, to be coupled with stronger domestic and weaker foreign demand. The labour market is expected to see more dynamic growth in the number of employed persons and a fall in the unemployment rate in 2018, but favourable trends might slow down in 2019. There might be a relatively strong rise in wages again, due to the labour shortage in some parts of the economy and the rise in public sector wages. Inflation is expected to accelerate to 1.5% in 2018, predominantly as a result of the faster annual increase in energy prices. By contrast, inflation might slow down in 2019, largely due to the expected decrease in the contribution of energy prices and the effect of the cut in the VAT rate on some products. Further growth in net exports of services, in particular travel services, has contributed to favourable trends in the current and capital account in 2018, but the surplus is expected to shrink in 2019 due to the widening of the foreign trade deficit. Nevertheless, the improvement in the relative indicators of external debt might continue. The monetary policy of the CNB remained expansionary and continued to support the economic recovery while working towards the maintenance of the stable kuna/euro exchange rate. As regards fiscal developments, the general government balance might deteriorate in 2018 according to the Ministry of Finance's projection, and the deficit might be equivalent to –0.5% of GDP. A similar balance is expected in 2019, while this year's autumn forecast of the European Commission shows a surplus of 0.2% and 0.4% of GDP in 2018 and 2019, respectively.

Economic growth slowed down in the third quarter of 2018 at the quarterly level (from 1.0% in the second to 0.6% in the third quarter), largely on account of the marginal decrease in exports of goods and services following the second quarter pick-up, and the sharp increase in total imports. Personal consumption growth also slackened whereas current and investment consumption of the general government strengthened. Real GDP is

expected to grow by 2.7% in 2018 as a whole, or slightly less than in 2017. The slower growth is mostly due to the lower increase in exports of goods and services, with personal consumption also losing some steam. Gross fixed capital formation might grow at a rate similar to that of 2017, while government consumption growth might pick up pace. Economic growth is expected to remain at 2.7% in 2019. The rise in gross fixed

Table 1.1 Summary table of projected macroeconomic measures

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
National accounts (real rate of change, in %)											
GDP	-7.3	-1.5	-0.3	-2.3	-0.5	-0.1	2.4	3.5	2.9	2.7	2.7
Personal consumption	-7.5	-1.5	0.3	-3.0	-1.9	-1.6	1.0	3.4	3.6	3.2	3.5
Government consumption	2.1	-0.6	-0.4	-0.8	0.6	1.8	-1.0	0.7	2.7	3.3	2.6
Gross fixed capital formation	-14.4	-15.2	-2.7	-3.3	1.4	-2.8	3.8	6.5	3.8	3.7	6.0
Exports of goods and services	-14.1	6.2	2.2	-0.1	3.1	6.0	9.4	5.6	6.4	3.6	3.4
Imports of goods and services	-20.4	-2.5	2.5	-3.0	3.1	3.1	9.2	6.2	8.1	5.1	5.3
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	1.9	2.4	1.8
Registered unemployment rate	14.9	17.4	17.8	18.9	20.2	19.6	17.0	14.8	12.1	9.9	8.8
ILO unemployment rate	9.2	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.2	8.4	7.2
Prices											
Consumer price index (average rate of change, in %)	2.4	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.1	1.5	0.9
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	1.2	1.4	0.9
External sector											
Current account balance (as % of GDP)	-5.1	-1.1	-0.7	-0.1	0.9	2.0	4.5	2.6	4.0	2.9	2.0
Current and capital account balance (as % of GDP)	-5.0	-0.9	-0.6	0.0	1.1	2.4	5.2	4.0	4.7	4.1	3.4
Gross external debt (as % of GDP)	101.0	103.8	103.4	102.9	104.6	106.8	101.7	89.3	81.8	75.0	70.0
Monetary developments (rate of change, in %)											
Total liquid assets – M4	-1.0	1.9	5.6	3.6	4.0	3.2	5.2	4.7	2.1	5.2	5.4
Total liquid assets – M4 ^a	-0.8	0.7	4.6	3.9	3.6	2.4	5.0	5.3	3.1	5.4	5.5
Credit institution placements to the private sector	-0.6	4.7	4.8	-5.9	-0.5	-1.6	-3.0	-3.7	-1.2	2.7	3.9
Credit institution placements to the private sector ^b	-0.3	2.3	3.5	-1.2	1.0	-1.5	-2.2	1.1	2.9	4.7	4.8
Credit institution placements to corporates ^b	2.3	5.9	7.6	-1.5	2.2	-3.7	-2.9	3.2	2.5	3.6	4.4
Credit institution placements to households ^b	-2.6	-1.4	-0.7	-1.1	-1.2	-0.7	-1.7	0.5	4.0	6.0	5.6

^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).

Sources: CBS, MoF and CNB.

capital formation might intensify notably, particularly in view of the assumed stronger general government investment driven by stronger utilisation of EU funds. Personal consumption growth might also be accelerated by the steady rise in employment and wages and anticipated tax disburdening. Relatively favourable trends in the labour market will push the unemployment rate down further, so that it might drop to 7.2% of the labour force in 2019. Though sluggish economic activity in Croatia's main trading partners might lead to a slightly lower growth rate in exports of goods and services than in 2018, foreign demand has remained one of the main drivers of economic growth in Croatia. The growth in government consumption is also expected to decelerate, due to the slower increase in the number of civil servants and government employees.

It is estimated that the average annual consumer price inflation might pick up to 1.5% in 2018 (from 1.1% in 2017), largely owing to the strong increase in the average annual rate of growth in energy prices, which largely reflects the rise in the average prices of crude oil in the global market. In addition, pressures stemming from the rise in unit labour cost also increased in 2018. The average annual rate of inflation is expected to decelerate to 0.9% in 2019, primarily due to temporary factors, i.e. administrative decisions to cut the value added tax rate on some products at the beginning of the year and the expected drop in global crude oil prices. On the other hand, among imported inflationary pressures that should in 2019 provide a boost to the annual growth in the consumer price index excluding food and energy, the most prominent are stronger core inflation in the euro area and the pass-through of previous increases in the prices of refined petroleum products to final goods. Also, there are some domestic inflationary pressures, which are mostly associated with buoyant domestic demand and cost pressures arising from faster growth in wages than in labour productivity.

Developments in the current and capital account are also expected to have been more favourable in 2018 than in the preceding year (excluding of the impact last year of provisions for loans to the Agrokor Group on bank profits), largely owing to the ongoing increase in revenues from tourism and increased use of EU funds. By contrast, the surplus in the capital and current account is expected to dwindle in 2019, mostly due to the widening of the foreign trade deficit. As regards foreign capital flows, net outflows are expected mostly on the basis of the decrease in the net debt liabilities of domestic sectors, which is forecast gradually to lose steam. The developments described should be

reflected in a further improvement in the relative indicators of external imbalance.

The CNB continued its expansionary monetary policy, supporting the high liquidity in the monetary system while maintaining the stability of the nominal kuna/euro exchange rate. The increase in liquidity was spurred predominantly by the purchase of foreign exchange from banks, which alleviated appreciation pressures on the domestic currency and added to gross international reserves. In the conditions of high liquidity, there was no interest on the part of banks in short-term kuna funds offered at regular weekly reverse repo auctions. In such a setting, the several-year improving trend in domestic financing conditions continued, while the easing of credit standards and the growth in demand for loans were accompanied by the steady recovery in placements to domestic sectors.

As regards fiscal policy, the amendments to the 2018 budget and the budget proposal for 2019 suggest that the general government might run a deficit of about -0.5% of GDP in 2018 and 2019, following a surplus recorded in 2017. The European Commission projections from this November suggest that the general government balance might be more favourable than expected by the Ministry of Finance. The structural budget balance should not exceed the mid-term budget objective in the projection period, while general government debt might continue to fall in line with the prescribed fiscal rules.

Risks to the downside prevail in the GDP projection over the projection horizon and arise primarily from the external environment. Potential further strengthening of trade protectionism at a global level and the slower growth in Croatia's main trading partners coupled with the tightening of financial conditions might significantly affect emerging market countries. In addition, the growing fiscal risks and the deterioration of the economic outlook for Italy might have a direct adverse impact on the Croatian economy. Negative risks in the domestic environment are related to labour market developments. The projection assumes a continued rise in the participation rate, the absence of which would limit employment growth and create stronger pressures on wage growth. The risks associated with financial problems in the Agrokor Group abated noticeably after most of its creditors agreed to settlement. On the other hand, tax changes and the generally favourable trends in the labour market might provide an additional boost to consumer confidence, so that personal consumption growth might exceed expectations. Bigger withdrawals of EU funds might also have a favourable impact.

2 Global developments

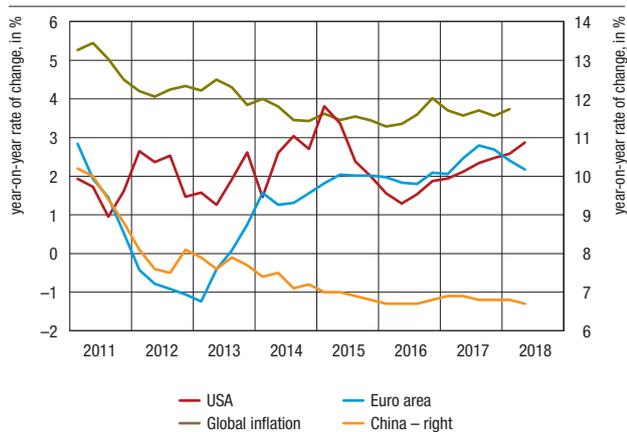
After the dynamic growth recorded in the second half of 2017, global economic growth started to decelerate in 2018. The growth slowdown was increasingly pronounced during the current year as uncertainty at a global level grew due to rising trade tensions and political risks. This was particularly seen in the euro area, which in the third quarter of 2018 recorded the slowest growth in the past several years. The slowdown in economic activity and the absence of any very significant increase in the prices of raw materials kept global inflation at a relatively low level. Due to accommodative monetary policies, still prevailing in the majority of large economies, financing conditions remained relatively favourable, with the exception of several very unstable emerging markets.

In contrast to the global trend, economic activity in the USA

increased additionally in 2018. American economic growth reached 3.0% in the third quarter as personal and government consumption and capital investments provided a boost to its acceleration. On the other hand, the negative contribution of foreign trade increased. The robust labour market continued to support personal consumption. A contribution to the growth of domestic demand came from the tax reform and the transfer of gains from the previous periods from the rest of the world to the USA, which were driven by tax changes. Inflation, which stood at 2.4% in October 2018, did not threaten the foreseen dynamics of further monetary policy tightening.

Following a slight deceleration in the second quarter, the growth of the euro area economy slowed down additionally in the third quarter and stood at 1.7%, the lowest rate since 2014.

Figure 2.1 Economic growth in selected markets and global inflation



Sources: Eurostat, BEA, NBS and IMF.

Slower growth was broadly based among member states, including Germany, Italy and the Netherlands, while growth accelerated in a small number of countries. In the case of Germany, the slowdown can partially be attributed to temporary factors related to the adjustment of the automobile industry to new environmental rules, while the other sectors of the leading European economy, e.g. construction, also decelerated. In Italy, however, political uncertainty started to have a negative impact on business and consumer sentiment and caused concern with regard to the sustainability of public finance and overall macroeconomic stability in the country.

Increased global uncertainty and volatility in financial markets do not benefit either the developing or emerging market economies. Thus the economic crisis in Latin American countries was further exacerbated during the third quarter, while in Turkey a currency crisis broke out in August, after which the economy entered a recession. Large Asian emerging market economies saw the continuation of relatively favourable developments, despite the tightened trade relations with the USA. Russia also continued to recover, and higher crude oil prices than in the previous year were also favourable to other oil-exporting countries.

Croatia's main trading partners

Most of Croatia's major trading partners saw a further slowdown of economic activity during the third quarter of 2018, which was recorded from the beginning of the year. This particularly held true for trading partners from the euro area, primarily Germany and Italy, which recorded the lowest growth rates over the past several years. A similar trend was recorded in Austria and Slovenia, although, in their case, growth was still relatively dynamic. The temporary slowdown in the German export sector was to a certain extent also reflected in the slowdown in growth of the countries of Central and Eastern Europe. By contrast, trading partners in the SE region recorded stable growth, among them Serbia even witnessed a notable acceleration of growth, which now exceeds 4%.

Prices, exchange rates and financing conditions

The price of a barrel of Brent crude oil in the world market fell from USD 79 at the end of June to about USD 70 in mid-August, after heightened concerns over the global economic outlook and the intensification of protectionist trade measures

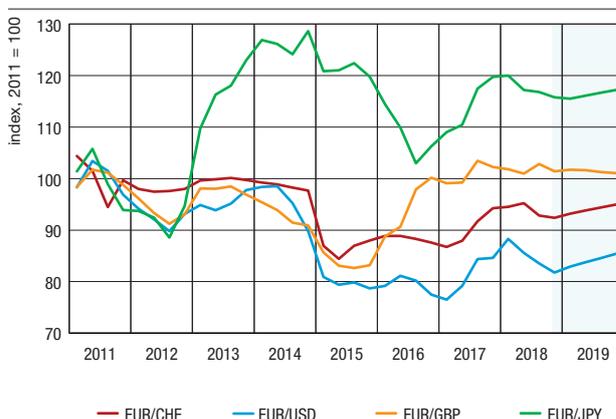
prevailed in the market. The price of oil continued to rise again in the second half of August, mostly driven by the expectations of a possible weaker oil supply in the world market due to the forthcoming US sanctions imposed against Iran's oil exports, the decline in oil production in Venezuela and unstable crude oil supplies from Libya. After the price of crude oil reached USD 86 in early October, the trend of its increase was reversed. In the next month and a half, the price of oil decreased by more than a fifth and stood at USD 66 in mid-November. The drop in the price of oil was driven by the increase in production and stockpiles in the USA and higher production by the other largest oil producers. In addition, the drop in Iranian exports following the imposition of US sanctions was smaller than expected. At the same time, expectations of a deceleration of the growth of demand due to intensified trade tensions and indications of global growth slowdown prevailed on the demand side.

Prices of raw materials excluding energy also declined in the second half of 2018. The decrease in the prices of food products (oil, oil seeds, cereals, beverages and sugar) was broadly based. In addition, the prices of agricultural raw materials declined, including the prices of wool due to growth in the volume of exports of individual significant exporters, as did the prices of wood. After a sizeable recovery in the previous year, metal prices decreased again in 2018 under the effect of weaker demand from China due to the changes in environmental regulations and the tightening of lending conditions.

The divergent trends in the monetary policies of the USA and the euro area continued. The Fed raised its benchmark interest rate by a total of 75 basis points in March, June and September, while the ECB's benchmark interest rate remained unchanged, although the ECB adopted the decision to wind down its bond purchase programme by the end of 2018. Until then, the purchase volume is reduced to EUR 15bn a month.

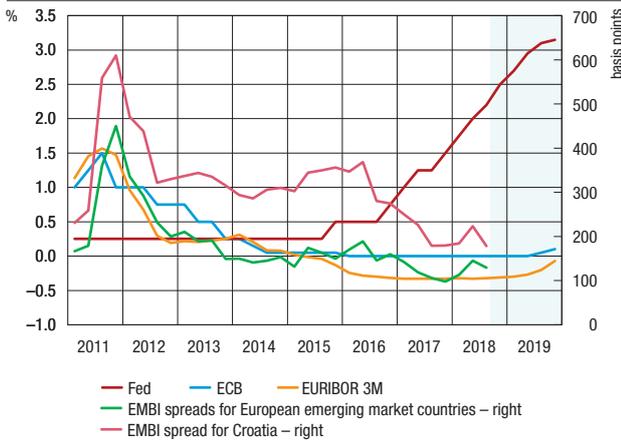
In the global foreign exchange market, the US dollar continued to strengthen against the euro. The exchange rate stood at EUR/USD 1.14 at the end of November, which is a decrease of about 3% from the end of June and about 5% from the end of 2017. The US dollar was supported by optimism driven by favourable developments in the US economy and higher demand for the relatively safer US assets, since investors are showing lower risk-appetite due to the political and economic situation in Turkey and Argentina. The weakening of the euro was additionally triggered by political turmoil with regard to the adoption of

Figure 2.2 Exchange rates of individual currencies against the euro



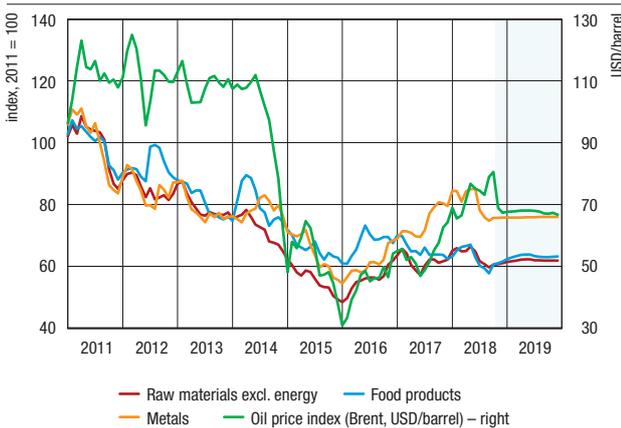
Note: A growth in the index indicates a depreciation of a currency against the euro.
Sources: Eurostat and Foreign Exchange Consensus Forecasts (November 2018).

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



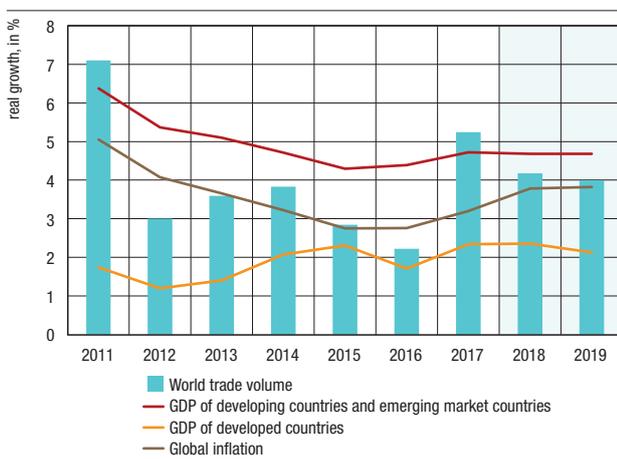
Source: Bloomberg (forecast), 14 November 2018.

Figure 2.4 Prices of raw materials on the international market



Sources: HWWI, IMF (November 2018), prices of oil: Bloomberg (Brent crude oil futures, 16 November 2018) and CNB estimates.

Figure 2.5 Global economic developments



Source: IMF (WEO, October 2018).

the state budget in Italy. At the same time, a drop in the risk appetite also resulted in the appreciation of the Swiss franc against the euro, predominantly during the summer months. The exchange rate of the Swiss franc against the euro was down by 2.0% at the end of November relative to the end of June and stood at EUR/CHF 1.13.

Financing conditions for European emerging markets, Croatia included, remained relatively favourable in the past several months, albeit with increased volatility. The EMBI index was at slightly higher levels during the summer months, when uncertainty in financial markets, in addition to trade and geopolitical tensions, was also attributed to the destabilisation of the political and economic situation in Turkey.

Projected developments

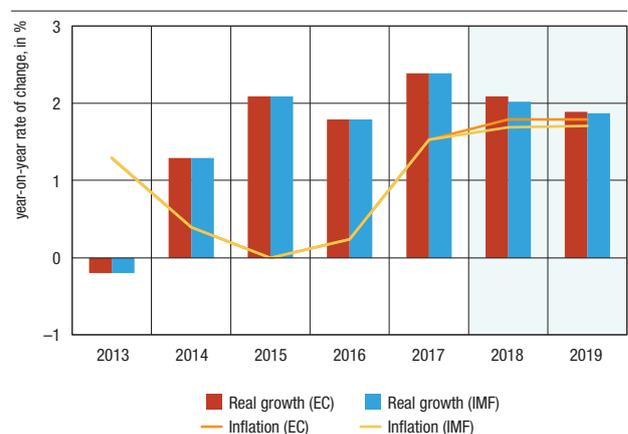
The projection is based on the assumptions of a moderate slowdown of global trade resulting from the slowdown of growth of developed countries, a moderate strengthening of the euro against major global currencies, and the continued divergent trends in the monetary policies of the USA and the euro area. Furthermore, the prices of raw materials, especially crude oil that might stagnate at current levels, are not expected to increase.

The euro is expected to recover moderately in the global foreign exchange market in the projection period, as forecast by the Foreign Exchange Consensus Forecast in November 2018. The average exchange rate in 2019 might stand at EUR/USD 1.17, slightly lower than the estimated EUR/USD 1.18 in 2018. As regards the Swiss franc, the average exchange rate in 2019 might stand at EUR/CHF 1.16, similar to that in 2018.

It is expected that in December the Fed will raise the benchmark interest rates for the fourth time by an additional 25 basis points. This is supported by recent favourable economic developments and rising inflation in the USA. As regards 2019, the Fed's September forecast suggests three likely benchmark interest rate hikes, while the recent market expectations are more restrained with regard to the dynamics of monetary policy tightening in the USA on the back of increased global uncertainty and the expected growth slowdown. The first increase of ECB benchmark rates is not expected before the summer of 2019, and could be slightly less sharp than projected.

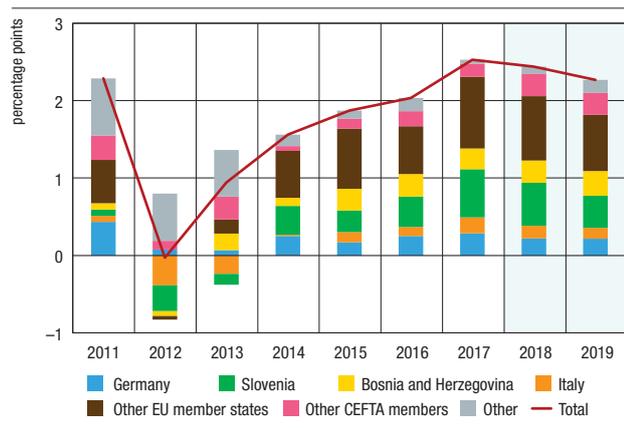
As for the prices of raw materials in the global market, recent market expectations point to a likely stagnation in the prices of

Figure 2.6 Economic growth and inflation in the euro area



Sources: IMF (WEO, October 2018) and EC (November 2018).

Figure 2.7 Foreign demand
contributions of Croatia's trading partners



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

Source: IMF (WEO, October 2018).

crude oil by the end of the current year. In 2019, the price of oil is also not expected to change significantly, and might stand around USD 68, or 6.5% lower than the average of the whole of 2018. Such forecasts are mostly linked to the expected deceleration in the growth of global demand due to the slowdown of global economic growth and the growth of production in Canada and the USA. The increase in the prices of other raw materials should be notably milder in the whole of 2018 than in the previous year, which is particularly pronounced in the price of metals. Moreover, under the effect of the slowdown in the Chinese economy, the price of metals might even decline in 2019. By contrast, food product prices might grow slightly, both in the current and next year, among other things, under the effect of unfavourable weather conditions on the prices of wheat.

As regards global economic activity, IMF projections (WEO, October 2018) suggest that global economic growth could stand at 3.7% in 2018 and 2019, the same as in 2017. However, global growth is becoming less balanced and more exposed to uncertainty and negative risks. Global economic growth is increasingly generated by emerging market countries, which will continue to grow twice as fast as the developed countries in the projection period. By contrast, developed countries are heading towards a further slight deceleration of growth. As demand from developed countries is weakening and the growth of the prices of raw materials is limited, no significant acceleration of inflation is expected in the forthcoming period. Although monetary policy is projected to tighten further in the USA, financing conditions should remain relatively favourable in the majority of the countries.

As regards the euro area, the IMF estimates that economic growth could slow down to 2.0% and 1.9% in 2018 and 2019 respectively from 2.4% in 2017. Economic growth will slow down gradually due to weaker foreign demand under the negative impact of the heightened trade tension and the anticipated appreciation of the euro. Growth will continue to be driven mostly by personal consumption and investments. The recent projections of the European Commission from November 2018 are in line with the IMF projections (expected growth standing at 2.1% and

1.9% in 2018 and 2019 respectively) and take into consideration slightly weaker performance in the third quarter and an increase in political uncertainty. Thanks to the recent price movements, the inflation estimate in the euro area is slightly increased for the current year, but due to low inflationary expectations it might remain below the ECB target during the projection period (according to the European Commission projections, inflation of 1.8% is expected in 2018 and 2019).

Economic growth in the USA could reach 2.9% by the end of the current year, the highest growth rate in the past few years. According to IMF projections, the growth might slow down subsequently to 2.5% in 2019. Growth slowdown is mainly expected due to the gradual wearing off of the positive impact of the 2017 tax reform since some of the measures are temporary, as well as due to a further monetary-policy tightening. In addition, the negative effects of higher import duty might spill over to corporate sector earnings and reduce the room for investments. In addition to the negative contribution of foreign demand to US economic growth and pressures on the real appreciation of the exchange rate of the dollar, the foreign trade deficit is expected to deepen, which could continue to heat up trade tensions.

As during the projection period it is expected that global trade will be less dynamic due to heightened uncertainty, the growth in demand for Croatian export products might also weaken (Figure 2.7). Among Croatia's major trading partners, demand is mostly expected to weaken from euro area members, in particular Italy and Germany. The growth of the German and Italian economies is expected to fall to below 2% and to about 1%, respectively. A notable slowdown is also likely in Slovenia and Austria. By contrast, growth is expected to accelerate in some of the SE region countries (particularly Serbia and Bosnia and Herzegovina), after a temporary slowdown in the previous period.

The outlook on global economic growth is exposed to increasing negative risks, which have begun to materialise in part. At the same time, the likelihood of positive surprises, for instance from a stronger cyclical recovery in the USA, has decreased. Trade protectionism and political uncertainty still represent the most significant negative differences. Although in the domain of foreign trade policy there are certain positive improvements, such as the new agreement reached between the former NAFTA members and the progress made in the negotiations between the USA and China, there is still significant risk from the potential acceleration of the normalisation of monetary policy in the USA, which would lead to a stronger outflow of capital from emerging market countries and the consequential deterioration in financing conditions.

Apart from global risks, EU countries are additionally exposed to negative domestic risks, primarily regarding Brexit and political instability in Italy, and a general rise in populism. As regards Brexit, a technical agreement on a transition period was reached between the UK and the EU in November 2018, but its ratification in the British parliament, which is highly divided on this matter, is yet to be ensured. Italy is witnessing increasing political uncertainty following the elections held in March and, since recently, tensions in the relationship with the EU. Since Italy is individually the largest Croatian trading partner and one of the most significant foreign investors, any significant decrease in economic outlook in the country could be a significant source of risk for the Croatian economy.

3 Aggregate supply and demand

Economic growth slowed down in the third quarter of 2018, with real GDP up by 0.6% from the previous quarter. This mainly reflects a surge in the imports of goods, which outweighed the moderate decline in total exports primarily consequent on the slight decrease in the exports of services. In addition, the increase in personal consumption also slowed down at the quarterly level, while investments and government consumption intensified.

The slowdown in economic growth in the third quarter resulted in a somewhat lower annual rate of economic growth, with GDP increasing by 2.8% from the same period the year before (2.9% in the second quarter). The production side of the GDP calculation shows that gross value added rose by 2.2%, with an increase recorded in all activities except in industry, particularly in manufacturing.

Aggregate demand

Real exports of goods and services decreased slightly in the

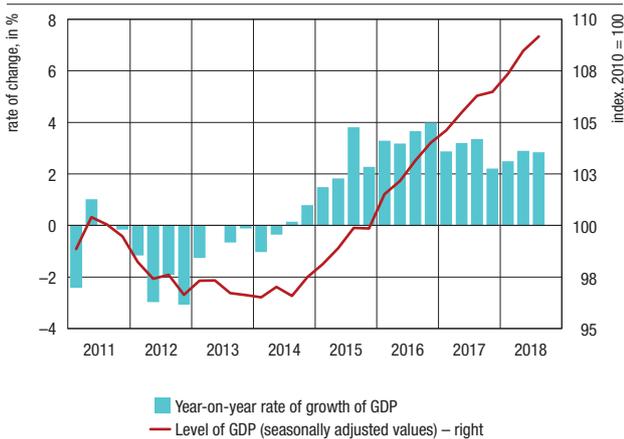
third quarter of 2018 from the previous three months. Such developments are primarily a result of a slight drop in the exports of services, while at the same time, the growth in the exports of goods decelerated as well.

At the annual level, the growth in the exports of goods and services slowed down from 5.6% in the second quarter of the current year to 3.7% in the third quarter. Nominal data on the trade in goods show that in the third quarter, exports of energy and non-durable consumer goods were lower than in the preceding three months.

The growth in personal consumption slowed down to only 0.3% in the third quarter of 2018. The slowdown could partly be associated with the slower increase in the wage bill, while consumer confidence remained high. Household consumption rose by 2.7% on an annual basis.

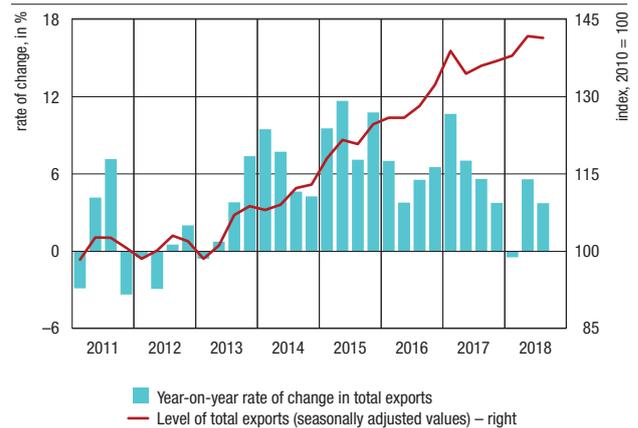
In the third quarter of 2018, gross fixed capital formation increased by 0.9% from the preceding three months, picking up

Figure 3.1 Gross domestic product
real values



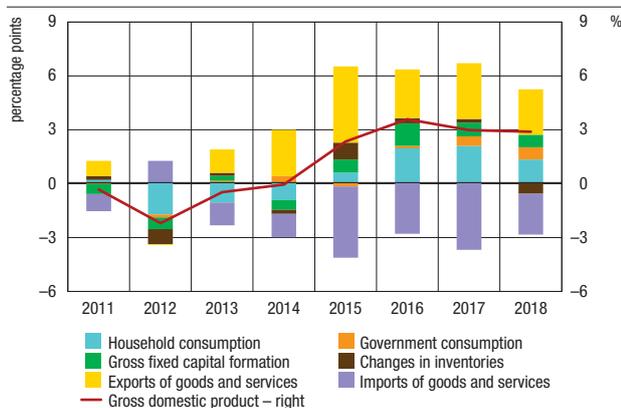
Source: CBS (seasonally adjusted by the CNB).

Figure 3.3 Exports of goods and services
real values



Source: CBS (seasonally adjusted by the CNB).

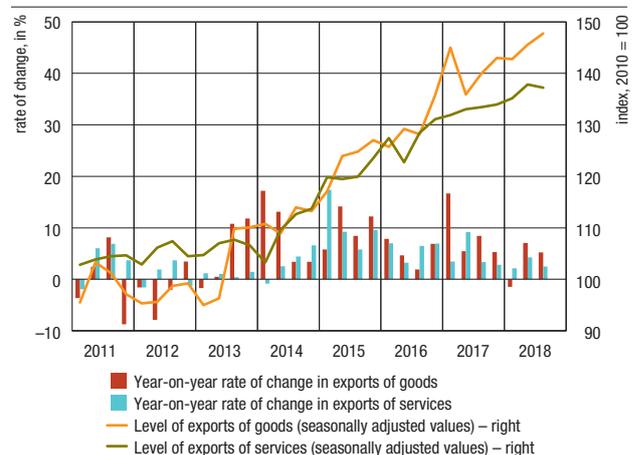
Figure 3.2 GDP rate of change
contributions by components



Notes: Data for 2018 refer to the third quarter of 2018. In that quarter, real GDP growth shown as the sum of contributions of individual components significantly deviates from the real GDP growth rate.

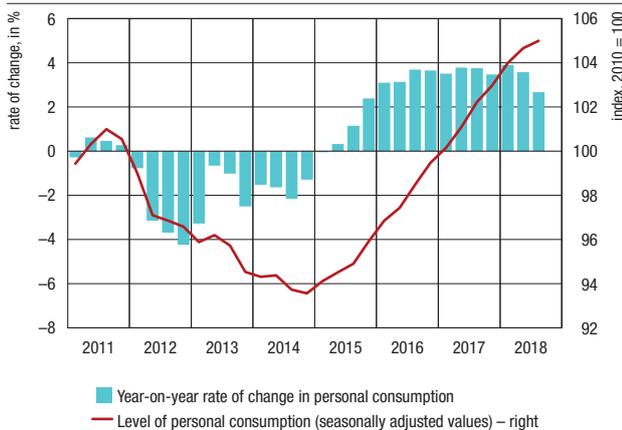
Source: CBS.

Figure 3.4 Real exports of goods and services



Source: CBS (seasonally adjusted by the CNB).

Figure 3.5 Personal consumption
real values



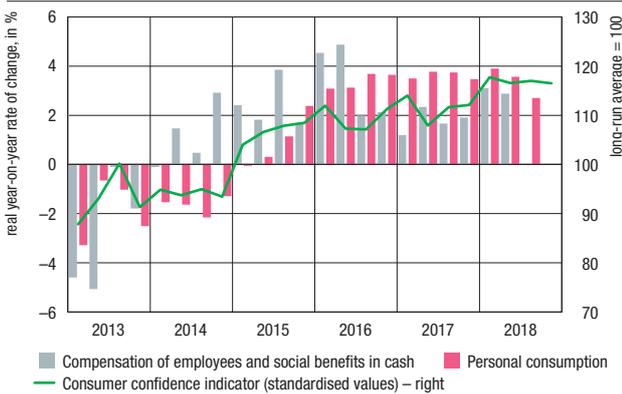
Source: CBS (seasonally adjusted by the CNB).

from the previous quarter, when the increase was 0.3%. Rising capital investments probably reflect the stronger investment activity of the general government, as suggested by the data on civil engineering works. Monthly indicators of construction works on buildings point to the continuation of the dynamics in private sector construction activity as well. On the other hand, imports of capital goods declined, which could indicate lower investments in machinery and equipment. Capital investments in the third quarter of 2018 increased by 3.7% from the same period in 2017.

The upward trend in government consumption that started early in 2016 continued throughout the third quarter of 2018. The growth intensified noticeably at the quarterly level (1.7% versus 0.9% in the second quarter), resulting in a high annual growth rate of 3.7%. Nominal data on government expenditures suggest that the accelerated growth is a consequence of an increase in most government consumption components.

Imports of goods and services increased by as much as 2.1% in the third quarter from the previous three months, which had seen a decrease. Such developments are a result of an accelerated increase in the imports of goods following the stagnation

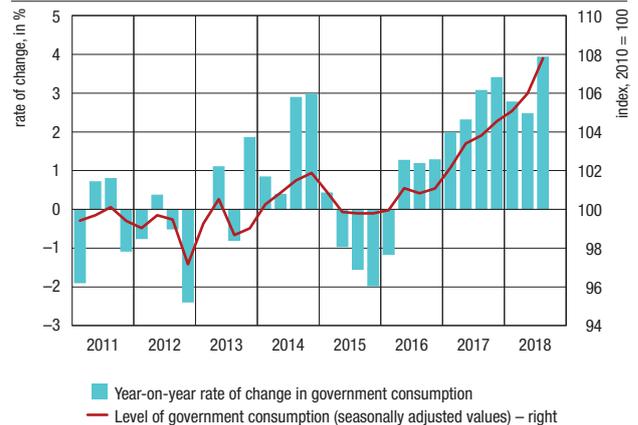
Figure 3.6 Determinants of personal consumption
real values and index



Notes: Real values of compensation of employees and social benefits in cash were calculated by deflating nominal values using the personal consumption deflator. Consumer confidence indicator values were calculated as three-member averages of monthly data, where the most recent data refers to November 2018.

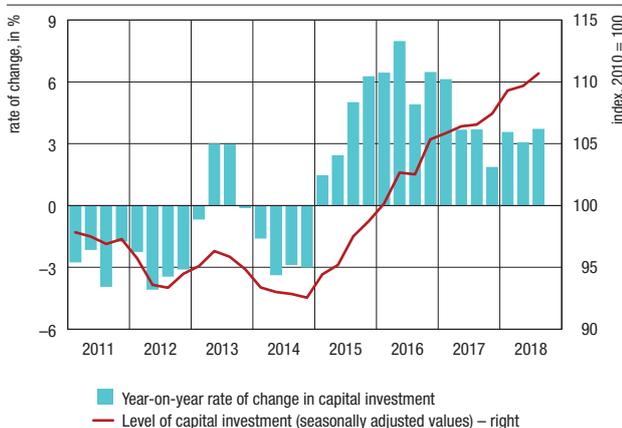
Sources: CBS, Ipsos and CNB.

Figure 3.8 Government consumption
real values



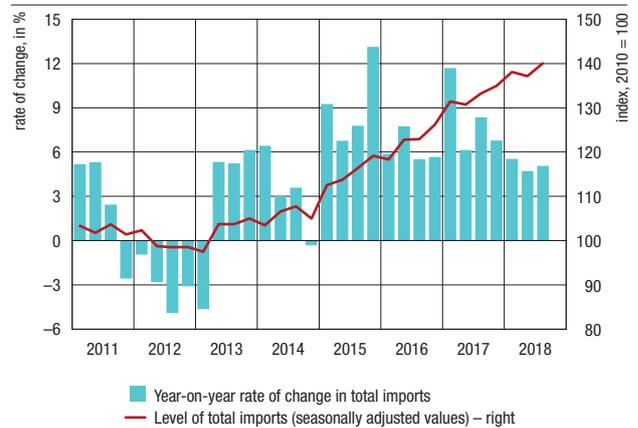
Source: CBS (seasonally adjusted by the CNB).

Figure 3.7 Gross fixed capital formation
real values



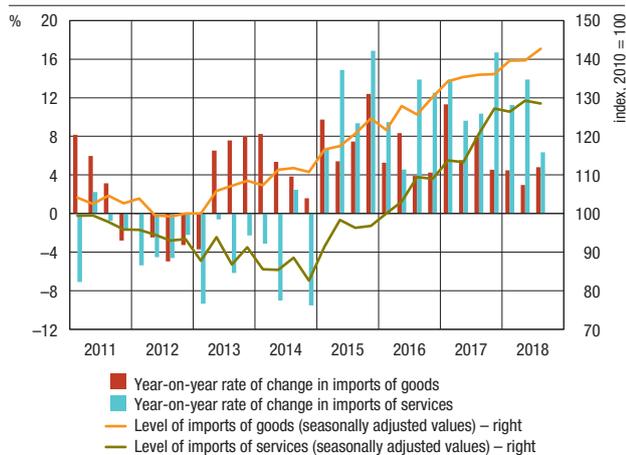
Source: CBS (seasonally adjusted by the CNB).

Figure 3.9 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).

in the second quarter, with nominal data on the trade in goods pointing to an increase in the imports of energy, intermediate goods and durable consumer goods in the third quarter relative to the second quarter. At the same time, imports of services dropped slightly. At the annual level, total imports increased by 5.1%.

Aggregate supply

In the third quarter of 2018, gross value added increased by 0.5% from the previous quarter. The increase in GVA was recorded in all activities except in industry, with a fall recorded in manufacturing for the second consecutive quarter. GVA rose at the annual level as well, increasing by 2.2% from the same period in 2017. Although annual growth slowed down in retail trade, transportation and storage, accommodation and food service activities, these GVA components still contributed the most to real GVA growth.

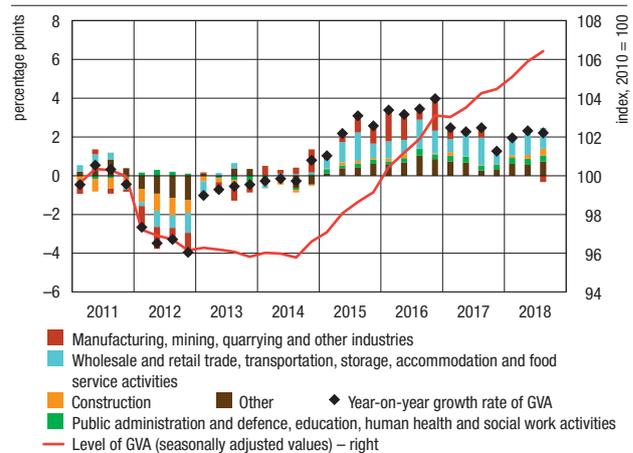
In October 2018, industrial production was up by 0.4% from the preceding three months. Broken down by main industrial groupings, it is evident that the absence of any stronger quarterly increase reflects a sharp drop in the production of capital goods, while other MIG components recorded an increase.

The Consumer Confidence Survey shows that in October and November of the current year the consumer confidence index remained at the level recorded in the preceding three months. As regards business confidence, expectations of business entities in construction and industry improved, while expectations in services remained at the level seen in the previous three months. On the other hand, expectations in trade continued to deteriorate considerably at the quarterly level.

Projected developments

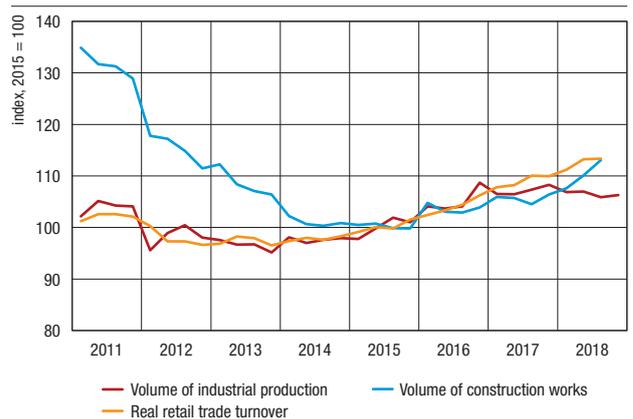
In 2018, the economy is expected to grow further, although at a slower pace than in 2017. Real GDP growth could stand at 2.7%, down from 2.9% in 2017. The slowdown in economic growth reflects a slower than expected increase in the exports of goods and services, which will, nevertheless, still contribute significantly to overall economic growth. Furthermore, personal consumption is expected to lose momentum as well, as a result of somewhat weaker results seen in the third quarter of the current year, although it will continue to provide a significant positive contribution to the total increase in economic activity. Government consumption is expected to grow at a significantly

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



Source: CBS (seasonally adjusted by the CNB).

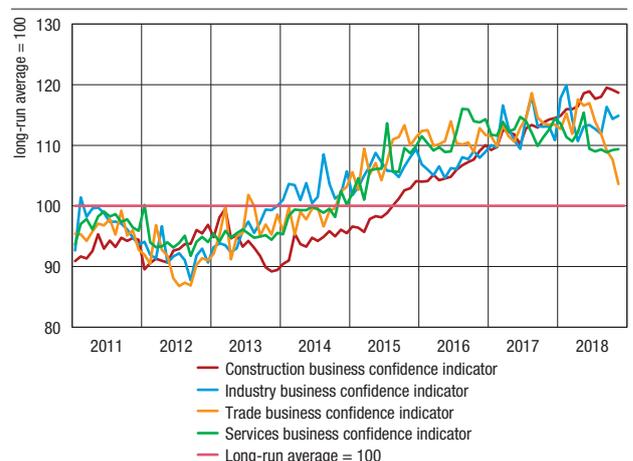
Figure 3.12 Short-term economic indicators seasonally adjusted values



Notes: Quarterly data are calculated as an average of monthly data. Data on industry in the fourth quarter of 2018 refer to October.

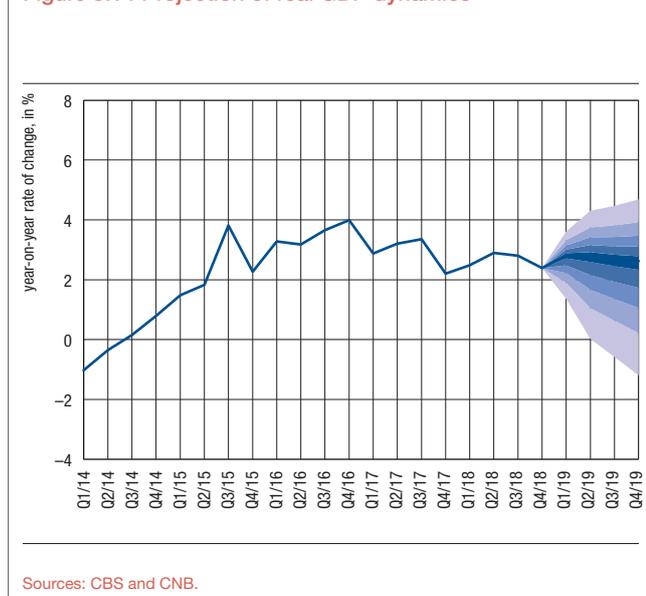
Source: CBS (seasonally adjusted by the CNB).

Figure 3.13 Business confidence indicators standardised seasonally adjusted values



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

Figure 3.14 Projection of real GDP dynamics



faster pace at the entire 2018 level, while the dynamics of gross fixed capital formation could be similar to that of 2017.

The rise in total exports in 2018 could decelerate to 3.6% (compared with 6.4% in 2017), reflecting a slowdown in the economic growth of Croatia's main trading partners and the gradual disappearance of the initial positive effects of joining the EU. What is more, it would appear that the stabilisation and strengthening of competitor tourist destinations and accommodation limitations during peak tourist season affected the developments in the exports of services, the growth of which could slow down further. Among domestic demand components, the most significant positive contribution to real GDP growth in 2018 could again come from personal consumption, although the rate of its growth could be lower in 2018 than in 2017 (3.2% versus 3.6%). The expected further increase is a result of continued favourable developments in the labour market and the consequential rise in real household disposable income. In addition, household borrowing is expected to continue, having an additional positive effect on household consumption. The rate of growth in capital investments in 2018 could be similar to that recorded in the preceding year (3.7%), while the positive contribution of government consumption is likely to increase thanks to its intensified growth from 2.7% in 2017 to 3.3% in the current year. The expected slower increase in total exports than that seen in 2017 could contribute to a slowdown in the rise in imports of goods and services (5.1% as against 8.1% in 2017). The current year is likely to see a slightly higher negative contribution of net foreign demand to real growth (-0.7 percentage

points relative to -0.6 percentage points in 2017).

In 2019, the dynamics of economic activity is likely to remain the same as in 2018, with the real GDP growth rate steady at 2.7%. Investment activity is expected to intensify, which primarily reflects expectations of increased investments in the public sector based on a more vigorous use of EU funds. Tax cuts for employers entering into force at the beginning of 2019 could also have a moderately positive effect on investments. The increase in personal consumption is expected to intensify slightly as a result of continued increases in employment and wages as well as due to planned tax changes, which are mainly linked to the VAT system and could have a favourable effect on the developments in the real disposable income of households. Therefore, personal consumption could be the GDP component providing the most significant positive contribution to overall economic growth. On the other hand, government consumption may slow down as a result of an expectedly slower increase in the number of civil servants and government employees. The rise in the exports of goods and services could be somewhat lower than in 2018, assuming a further slowdown in the economic growth of Croatia's main trading partners. Nevertheless, foreign demand will remain an important generator of economic growth. Although the growth in the exports of goods and services is expected to decelerate, the expected intensified growth in personal consumption and investment activity might affect the imports of goods and services, which could grow at a somewhat higher rate than in the previous year (5.3%). As a result, the negative contribution of net foreign demand to GDP growth is likely to increase further in 2019 (by -0.9 percentage points).

Negative risks are estimated to prevail in the GDP projection over the projected period, arising primarily from the external environment. The potential further strengthening of trade protectionism at a global scale and a slowdown in the growth of Croatia's main trading partners coupled with tightened financial conditions could have significant effects on emerging market economies. In addition, growing fiscal risks and Italy's deteriorating economic outlook could also have an indirect negative effect on the Croatian economy. Negative risks in the domestic environment are linked with labour market developments. The projection assumes a further increase in the participation rate, which, if absent, could limit employment growth and put stronger pressure on wage growth. Risks associated with financial problems in the Agrokor Group have been significantly reduced owing to the approval of the settlement deal by most of the Group's creditors. On the other hand, tax changes and generally favourable labour market developments could additionally boost consumer confidence, leading to a stronger-than-anticipated increase in personal consumption. A more vigorous use of EU funds could also have a positive effect.

4 Labour market

Employment and unemployment

In the third quarter, favourable developments continued in the labour market, although at a slower pace than in the first half of the year. The number of employed persons grew by 0.3% in the third quarter, with the most significant contribution to the rise coming from construction and other service activities. In October, the number of employed persons grew by 0.5% from the previous quarter average. The rise in employment was

recorded in all NCA activities except in finance and insurance activities, which witnessed a slight decline in the number of employed persons. On the other hand, the most significant contribution to the growth in the number of employed persons came from the public sector (Figure 4.1).

The number of unemployed persons continued to fall sharply during the third quarter of 2018. The drop in the number of unemployed persons resulted equally from new employment from

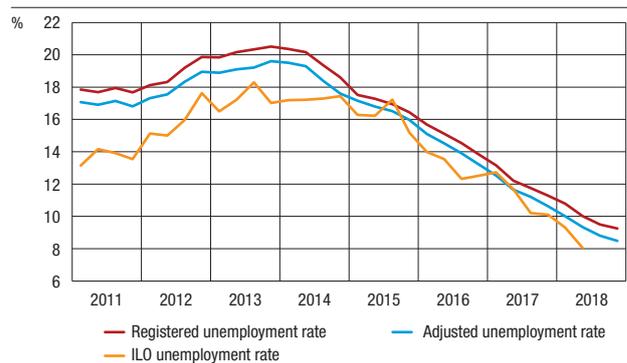
the CES register and from removal from the register for other reasons, associated with non-compliance with legal provisions, registration cancellation and failure to report regularly (Figure 4.2). At the beginning of the fourth quarter, the fall in the number of unemployed persons started to decelerate, mainly due to a slowdown in the removal from the register for other reasons. The number of unemployed persons thus dropped to around 140,000 in October.

The registered unemployment rate continued to decline, reaching 9.5% in the third quarter. The unemployment rate continued to decrease at the beginning of the fourth quarter as well, standing at 9.2% in October.

The Labour Force Survey data are only available for the first six months of 2018 and confirm the favourable labour market developments recorded in that period. The ILO unemployment rate went down from 9.3% in the first quarter to 8.0% in the second quarter of 2018 (Figure 4.3).

According to Survey data, the employment rate stagnated in the first and second quarters of 2018 (at 47%), while the participation rate dropped from 51.6% in the first to 51.2% in the second quarter. The decrease in the participation rate suggests

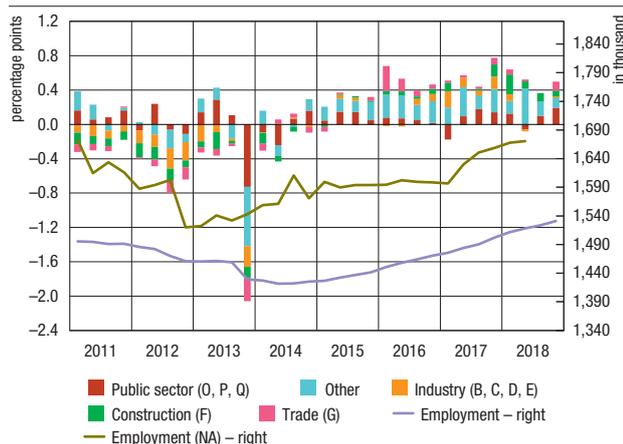
Figure 4.3 Unemployment rates
seasonally adjusted data



Notes: The adjusted unemployment rate is the CNB estimate and is calculated as the share of the number of registered unemployed persons in the working age population estimated as the sum of unemployed persons and persons insured with the CPII. Since January 2015, the calculation of the registered unemployment rate published by the CBS has been made using the data on employed persons from the JOPPD form. Data for the fourth quarter of 2018 refer to October.

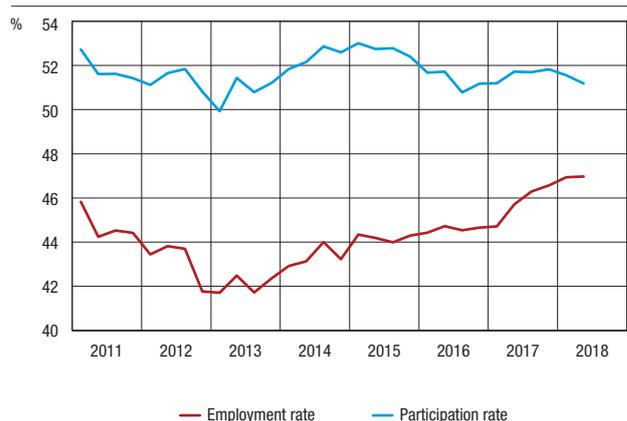
Sources: CBS, CES and CNB calculations (seasonally adjusted by the CNB).

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



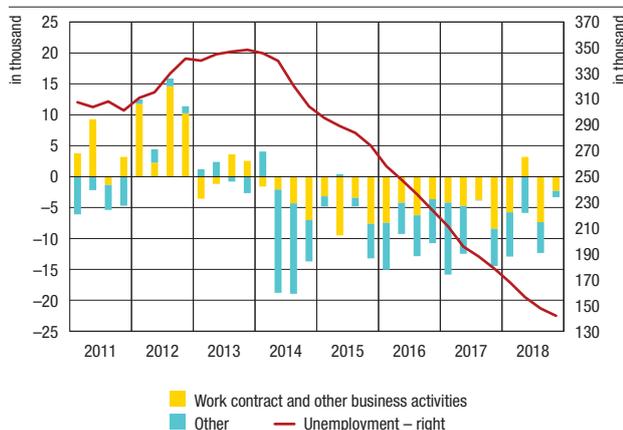
Note: Data for the fourth quarter of 2018 refer to October.
Sources: Eurostat and CPII (seasonally adjusted by the CNB).

Figure 4.4 Labour Force Survey
seasonally adjusted series



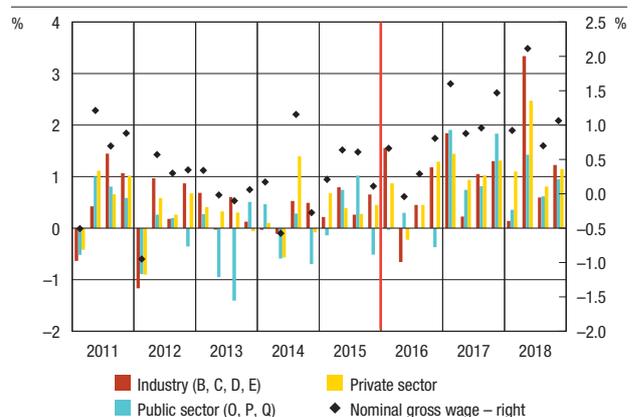
Source: CBS (seasonally adjusted by the CNB).

Figure 4.2 Total unemployment and net unemployment inflows
seasonally adjusted data



Note: Data for the fourth quarter of 2018 refer to October.
Source: CES (seasonally adjusted by the CNB).

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



Notes: Data on the average nominal gross wage by activity refer to data from the RAD-1 form, and from January 2016 to data from the JOPPD form. Data for the fourth quarter of 2018 refer to October.

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

that the growth in the number of employed persons in the first half of 2018 was lower than the drop in the number of unemployed persons in the same period, resulting in a decrease in the labour force (Figure 4.4). Box 1 analyses in detail how changes in labour force supply were reflected in the developments seen in employment in the period from 2008 to 2017.

Wages and unit labour cost

Available data show that the growth in nominal gross wages considerably lost momentum from the first two quarters of 2018 to the third quarter of the year (0.7%), while data for October show that wage growth again picked up steam at the beginning of the fourth quarter (1.1%, Figure 4.5). In the third quarter and at the beginning of the fourth quarter, wages grew equally in both the public and the private sector. The rise in real gross and net wages was less pronounced in October due to the simultaneous increase in consumer prices.

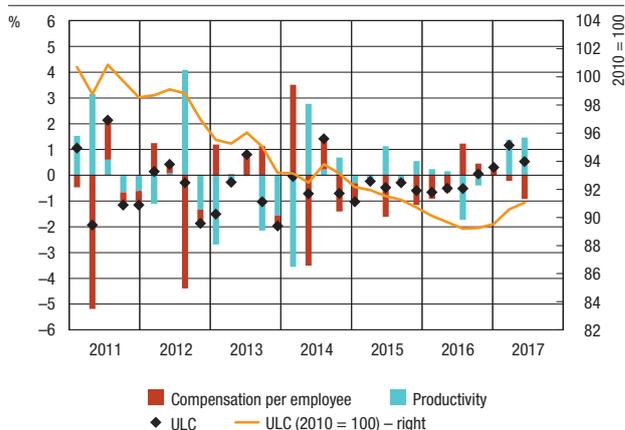
National accounts data indicate that employee compensation rose in the first and second quarter of 2018¹, while at the same time, labour productivity dropped slightly as the rise in the number of employed persons was somewhat stronger than GDP growth. Such developments led to an increase in the unit labour cost of 1.2% in the first quarter and 0.5% in the second quarter of 2018 (relative to the preceding quarter, according to seasonally adjusted data).

Projected developments

In view of employment developments in the first ten months of the current year, employment is expected to be 2.4% higher on an annual basis in 2018 as a whole. Favourable trends in the number of employed persons could continue by the end of 2018, as suggested by the latest available data from the Business Confidence Survey. The number of employed persons is expected to continue to grow in construction and industry (Figure 4.7). The ILO unemployment rate could drop to 8.4% in 2018, which is a decrease of 2.8% percentage points from 2017. As regards labour costs, the average nominal gross wage is expected to increase strongly in 2018 (5.3%), mainly due to the considerable rise in private sector wages caused by the labour shortage.

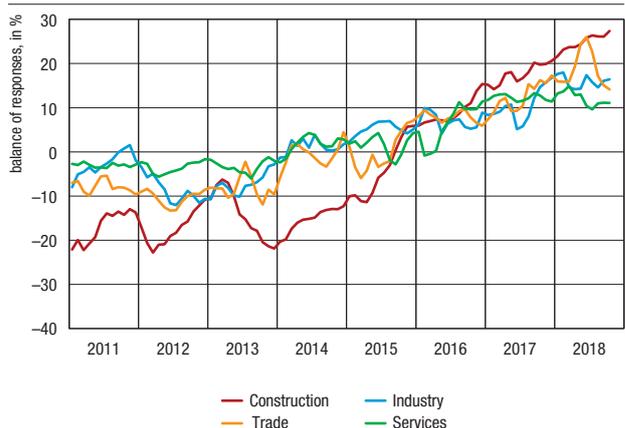
Favourable labour market developments are expected to continue into 2019, although at a slightly slower pace. Employment growth could slow down slightly (1.8%), while the participation rate could increase somewhat. The unemployment rate might fall to 7.2% in 2019. The relatively strong growth seen in nominal gross wages could continue (4.9%) and net wages may grow further thanks to income tax changes entering into force in January 2019.

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



Note: Productivity growth carries a negative sign.
Sources: CBS, CPII and Eurostat (seasonally adjusted by the CNB).

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).

Table 4.1 Projection of labour market indicators for 2018 and 2019
year-on-year rate of change

	2012	2013	2014	2015	2016	2017	2018	2019
Number of employed persons – CPII	-1.2	-1.5	-2.0	0.7	1.9	1.9	2.4	1.8
Number of employed persons – national accounts	-3.6	-2.6	2.7	1.2	0.3	2.2	3.0	1.8
Unemployment rate (ILO)	15.9	17.3	17.3	16.2	13.1	11.2	8.4	7.2
Average nominal gross wage	1.0	0.8	0.2	1.3	1.9	3.9	5.3	4.9
ULC	-1.0	-3.1	-2.6	-0.8	-3.3	-1.8	5.5	3.3
Productivity	1.4	2.2	-2.7	1.1	3.2	0.7	-0.2	0.9

Note: The year-on-year rates of change in the average gross wage until 2015 refer to data from the RAD-1 monthly survey, and from 2016 to data from the JOPPD form.
Sources: CBS, Eurostat, CPII and the CNB projection.

¹ In the first and second quarter of 2018, employee compensation grew at the same rate as gross wages, in contrast to 2017, when employee compensation and average wages exhibited divergent trends. In 2017, employee compensation decreased, while the growth in the average gross wage picked up considerably.

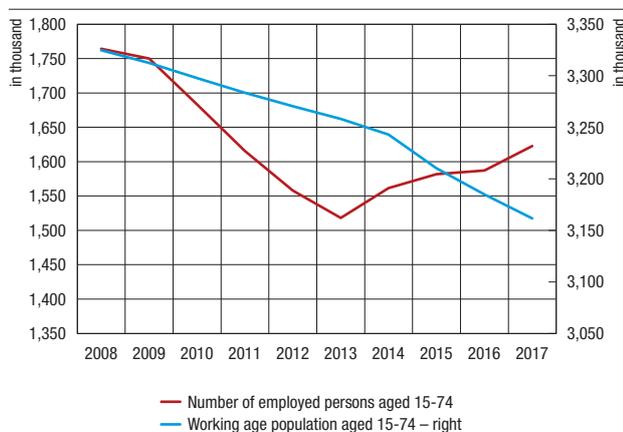
Box 1 The effect of change in the supply and age composition of labour force on employment in Croatia

This box analyses the main factors of changes in labour force supply and their effect on the trends in the total number of employed persons in Croatia. According to the data obtained from the Labour Force Survey, after a strong decrease in employment during the crisis, in mid-2014, the labour market began to recover as a result of increased economic activity. Nevertheless, in 2017, the number of employed persons was still lower, on average, than in pre-crisis 2008. A detailed decomposition of the change in the number of employed persons shows that the population decline resulting from demographic changes had an unfavourable effect on the trends in employment both during the crisis and during the economic recovery. On the other hand, the ratio of employed persons to labour force decreased sharply at first (during the crisis), but increased in most observed age groups during the period of economic recovery.

The global economic crisis that began in 2009 had a negative effect on developments in Croatia's labour market. According to the data obtained from the Labour Force Survey, employment declined cumulatively by almost 250,000 during the several-year long recession. In mid-2014, the labour market began to recover as a result of increased economic activity, but the number of employed persons in 2017 was, on average, 140,000 lower than in pre-crisis 2008. Such trends are partly a result of unfavourable demographic changes and a decrease in labour force supply (Figure 1). Furthermore, data from the Labour Force Survey show that the period of economic recovery saw a continued steady decline of 0.4 percentage points in the activity rate of the population (Figure 2), which also had an unfavourable effect on the trends in the total number of employed persons.

This box, therefore, examines how the changes in labour force availability and its composition affected the developments in the total employment in Croatia. The trends in the number of employed persons are analysed separately for individual age groups, and in each age group, the change in the number of employed persons is decomposed into the respective contributions

Figure 1 Trends in the number of employed persons and labour force supply from 2008 to 2017

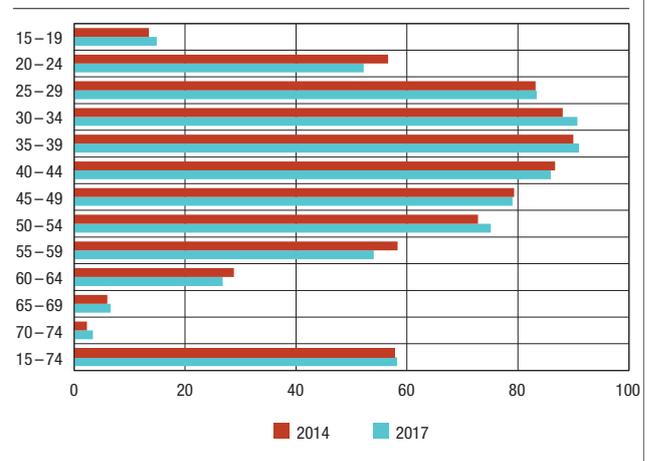


Sources: Eurostat and Labour Force Survey.

of the activity rate, population change and the employment-to-labour force ratio in the examined age group.²

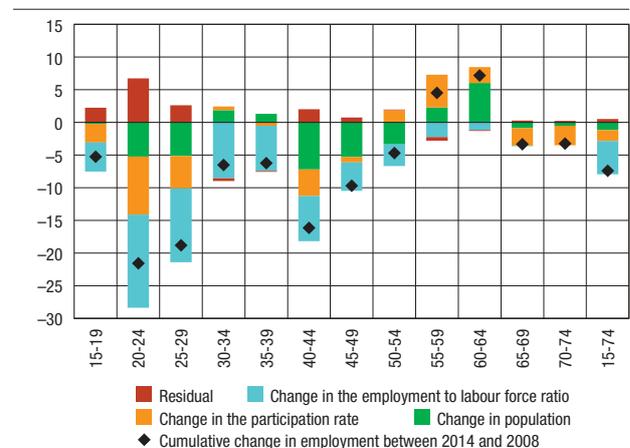
Figure 3 shows that, during economic crisis, the decline in the number of employed persons primarily resulted from the drop in the number of available jobs as the period witnessed a negative contribution of the employment-to-labour force ratio to the overall trends in employment. Nevertheless, the decomposition of the number of employed persons suggests that the contribution of the employment-to-labour force ratio was not the only unfavourable factor in the substantial fall in total employment. Over the same period, a continuous drop in the working age population was observed in most of the analysed age groups as a result of demographic changes.

Figure 2 Activity rates for different age groups, 2014 and 2017



Sources: Eurostat and Labour Force Survey.

Figure 3 Decomposition of the change in the number of employed persons by age for the 2008-2014 period as a share in the population of 2008



Source: Eurostat and CNB calculations according to ECB Economic Bulletin, Issue 1/2018, Labour supply and employment growth.

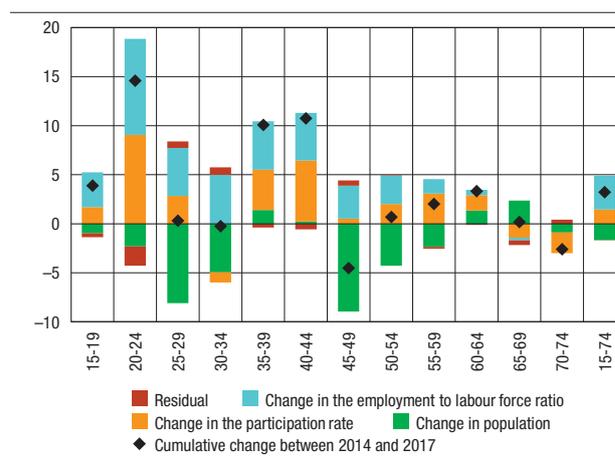
² Labour force equals the sum of the number of employed persons and the number of unemployed persons. The activity rate is calculated as the share of labour force in the working age population, while changes in employment are analysed according to the trends in the ratio of the number of employed persons to labour force. Analyses are usually based on the employment rate calculated as the share of the number of employed persons in the working age population, but in order to decompose the movement of the number of employed persons, the ratio of employed persons to labour force is used.

In mid-2014, economic activity recovered, and, as a result, the number of employed persons started to trend up again. Despite the continuous rise in the number of employed persons in the period from 2014 to 2017, the employment level in late 2017 was still 140,000 persons lower than in the pre-crisis period, i.e. before 2008. Figure 4 shows that population decline resulting from demographic changes and increased emigration³ continued to be a significant limiting factor in employment growth in Croatia in the period of economic recovery. On the other hand, the employment-to-labour force ratio is expectedly higher in the observed period, considering that the period was marked by economic expansion. The contribution of participation rates does not exhibit a clear trend, but its cumulative effect on the total movement of the number of employed persons is slightly negative (Figure 4).

The detailed decomposition of the number of employed persons according to age groups shows that the increase in the ratio of employed persons to the working age population in the 2014-2017 period in younger age groups (25-34 years of age) was not sufficient to compensate for the considerable population decline observed in these age groups, with the same developments observed in the age groups ranging from 45 to 54 years of age. On the other hand, a total increase in the number of employed persons was recorded in the age groups ranging from 35 to 44 years of age as a result of a rise in the employment-to-labour force ratio and a slight growth in working age population in these age groups,⁴ as well as in older age groups (55-64). The rise in employment in older age groups primarily reflects the increased activity of these age groups in the labour market. Still, the intensity of this activity was not sufficient to lead to an increase in the activity rate of the entire population.

Such developments suggest that population decline and an insufficient labour supply are the main factors that continuously

Figure 4 Decomposition of the change in the number of employed persons by age for the 2014-2017 period as a share in the population of 2014



Source: Eurostat and CNB calculations according to ECB Economic Bulletin, Issue 1/2018, Labour supply and employment growth.

limit employment growth in Croatia. Bearing in mind that unfavourable demographic changes and working age population ageing could continue in the future, the further increase of the activity rate of older population will be crucial for the future developments in Croatia's labour market.⁵ In addition, in order to limit the effect of unfavourable demographic developments on economic activity, economic productivity will also need to increase. Otherwise, such developments could have long-term unfavourable consequences for potential economic growth in Croatia.

³ In July 2013, Croatia became a full member of the European Union (EU), gaining access to the EU single market. According to CBS official data, following Croatia's accession to the EU, emigration flows from Croatia to some EU member states intensified considerably.

⁴ This analysis relies on CBS official data on the working age population included in the Labour Force Survey. The current draft sample used in the Labour Force Survey is based on the 2011 Census of Population, Households and Dwellings. Survey results obtained from selected households in the sample are weighted according to the estimate of the population distribution by age groups, sex and the National Classification of Spatial Units of Statistics in line with the 2011 Census, updated with data on live births and deaths and population migration in Croatia. The CBS receives data on population migration in Croatia from the Ministry of the Interior, with the data reflecting the number of persons registering their departure from the country with the Ministry of the Interior. Considering that such a method of emigration monitoring is not always precise and usually results in an underestimation of the total number of emigrants, as proven by Draženović et al. (2018), we may conclude that the labour force supply actually decreased even more in Croatia. The paper referred to above uses mirror statistics from EU national statistical offices, showing that total emigration from Croatia is, on average, 2.6 times higher than that registered by the CBS, and that it is concentrated in the younger population (under 40).

⁵ The issue of insufficient activity of older population was examined in numerous studies emphasizing that the practice of early retirement in Croatia significantly limits the activation potential of older age groups. In their paper *Jobless Population and Employment Flows in Recession*, Nestić and Tomić (2017) analyse the data for all EU countries, demonstrating that Croatia has the largest share of pensioners in the working age population in the EU.

5 Inflation

The average annual consumer price inflation increased to 1.6% in the first ten months of 2018 from 1.1% in the same period in 2017. Domestic inflationary pressures from the demand side were slightly pronounced in 2018, as in 2017, as suggested by the equal positive output gap (Figure 5.4), while pressures arising from the increase in unit labour costs strengthened considerably. The current year was thus marked by continued strong imported inflationary pressures arising from higher crude oil prices in the global market than in the preceding year. For more information on the mechanism of the adjustment of domestic fuel prices to the changes in crude oil prices on the global market, see Box 2 Asymmetry of the pass-through of crude oil prices to fuel prices in Croatia.

After total consumer price inflation picked up in the first half of the year, mainly due to an increase in the annual rate of growth in energy prices, the rest of the year witnessed a slow-down in inflation from 2.4% in June 2018 to 1.6% in October

2018. (Table 5.1). This was mostly brought about by a decrease in the annual growth rate in the prices of energy and non-processed food products (Figure 5.2). The decrease in the annual rise in energy prices was particularly pronounced in September, when the effect of the increase in the prices of electricity seen in the same month in 2017 on the annual rate of change in these prices disappeared. Prices of refined petroleum products increased relative to their levels recorded in mid-2018, but the annual rate of growth in refined petroleum prices dropped from 14.0% in June to 12.5% in October due to the negative effect of the base period. Energy is still the component providing the greatest contribution to inflation (1.0 percentage point), and refined petroleum products constitute its most significant part. In non-processed food products, the annual rate of growth in the prices of vegetables, fruit and meat decelerated over the last four months, so that in October, the contribution of this component was slightly negative.

Figure 5.1 Indicators of current inflation trends

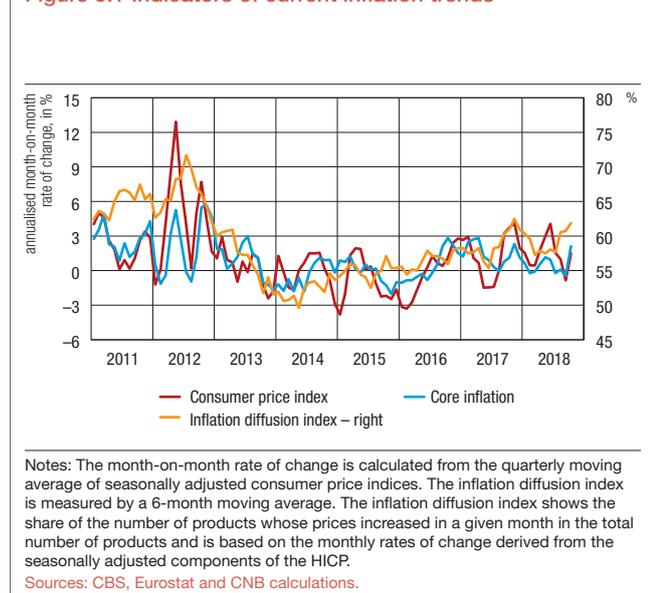


Figure 5.2 Year-on-year inflation rate and contributions of components to consumer price inflation

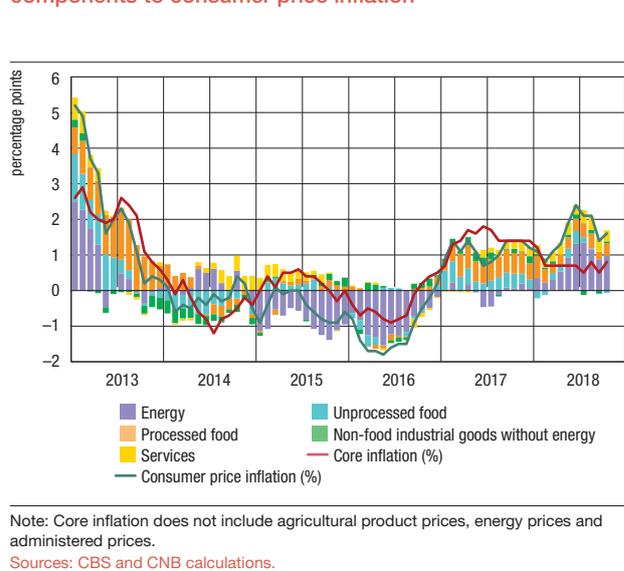


Table 5.1 Price indicators

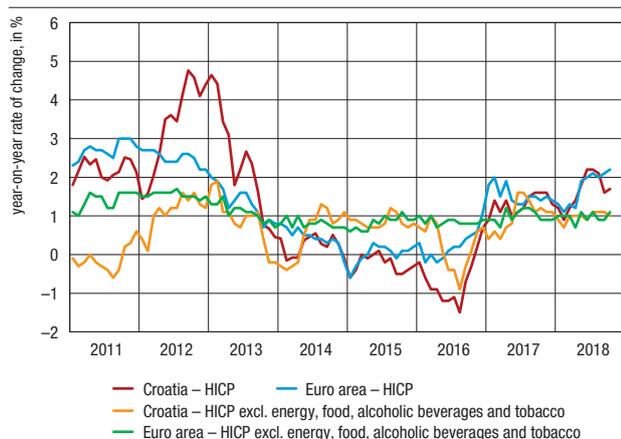
year-on-year rate of change

	12/17	3/18	6/18	9/18	10/18
Consumer price index and its components					
Total index	1.2	1.1	2.4	1.4	1.6
Energy	0.4	1.8	7.9	5.3	5.9
Unprocessed food	2.6	2.1	3.8	-0.1	-0.7
Processed food	2.0	1.1	1.5	0.9	1.5
Non-food industrial goods without energy	0.8	0.3	0.5	-0.3	0.2
Services	1.0	1.0	1.0	1.4	1.2
Other price indicators					
Core inflation	1.4	0.7	0.7	0.5	0.8
Index of industrial producer prices on the domestic market	2.1	1.2	3.4	3.4	3.6
Index of industrial producer prices on the domestic market (excl. energy)	1.0	0.5	-0.1	-0.2	-0.2
Harmonised index of consumer prices	1.3	1.2	2.2	1.6	1.7
Harmonised index of consumer prices at constant tax rates	1.2	1.1	2.1	1.5	1.6

Note: Processed food includes alcoholic beverages and tobacco.

Source: CBS.

Figure 5.3 Indicators of price developments in Croatia and the euro area



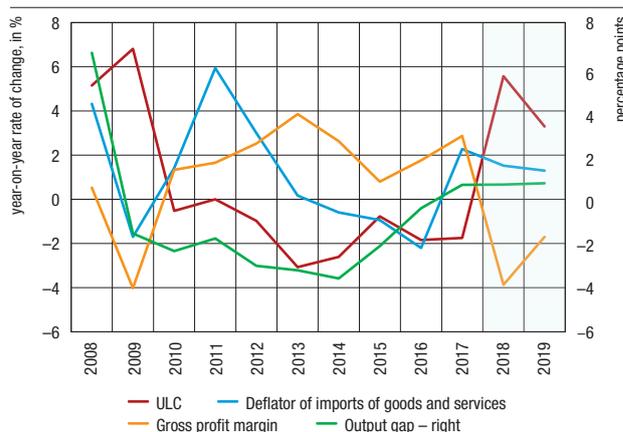
Sources: CBS and Eurostat.

In contrast, the contribution of prices of services to overall inflation increased moderately over the past four months, continuing the trend observed since mid-2017. Such developments reflect, among other things, imported and domestic inflationary pressures, such as increases in the prices of refined petroleum products and wages. In the last four months, the annual growth in the prices of communication, air passenger transport, catering services and insurance also accelerated. The annual rate of growth in the prices of processed food products stood at 1.5% in October, the same as at mid-year. Non-food industrial goods without energy have been a component with a very small contribution to inflation for a long time now; since early 2018, including the past four months, the contribution has moved within a range of -0.1 to 0.1 percentage points.

In contrast to the developments seen in Croatia, the annual rate of inflation measured by the harmonised index of consumer prices (HICP) in the euro area increased from 2.0% in June to 2.2% in October (Figure 5.3). This was primarily due to energy prices, whose annual growth increased from 8.0% in June to 10.7% in October, mainly owing to the acceleration in the annual growth in the prices of gas and refined petroleum products. The slight increase in the contribution of prices of services to annual inflation observed in Croatia over the past four months was also seen in the euro area. In contrast, the contribution of food to inflation in the euro area fell over the observed period. As in Croatia, non-food industrial products without energy are a component with a small contribution to inflation, and over the past four months, the contribution stood at only 0.1 percentage points. Core inflation (which excludes the prices of energy, food, alcoholic beverages and tobacco) accelerated from 0.9% in June to 1.1% in October, spurred mostly by the accelerated annual rise in the prices of services.

The annual inflation rate in Croatia, measured by the harmonised index of consumer prices (HICP), went down from 2.2% in June to 1.7% in October. The main reason for this was the slowdown in the annual growth in energy prices, primarily caused by the aforementioned disappearance of the effect of the increase in electricity prices seen in September 2017. As a result, inflation was 0.5 percentage points lower in Croatia in October than in the euro area. Broken down by components, a significantly lower annual growth was seen in energy (6.9% relative to 10.7% in the euro area) in October, since in contrast to Croatia, the euro area recorded significant increases in the

Figure 5.4 Domestic and foreign inflation indicators



Note: Gross profit margin is calculated as the difference between the annual rate of change of the GDP deflator and the annual rate of change of unit labour costs.
Sources: Eurostat, CBS and CNB calculations.

prices of natural gas, electricity and heating arising from higher prices of refined petroleum products. Core inflation (measured by the HICP excluding energy, food, alcoholic beverages and tobacco prices) edged up in Croatia, from 0.9% in June to 1.0% in October, and was only slightly lower than that in the euro area.

Projected developments

Considering the trends in prices in the first ten months and the developments expected for the rest of the year, the average annual inflation is estimated to pick up from the 1.1% recorded in 2017 to 1.5% in 2018, mainly due to the considerable increase in the average annual rate of growth in the prices of energy, particularly of refined petroleum products. The contribution of the consumer price index excluding food and energy is also expected to grow moderately, while the contribution of food prices to overall inflation should be lower than in 2017. Over the rest of 2018, the annual rate of growth in energy prices is expected to lose momentum due to a decline in the prices of refined petroleum products, particularly pronounced in November, reflecting a drop in the prices of crude oil on the global market. On the other hand, the rise in the consumer price index excluding food and energy could accelerate by the end of the year, driven by the announced increase in excise duties on cigarettes.

It is estimated that 2019 could see a slowdown in the average annual consumer price inflation to 0.9% (Figure 5.5), primarily as a result of temporary factors – administrative decisions on the reduction of the VAT rate for particular products at the beginning of the year and the anticipated fall in the prices of crude oil on the global market suggested by the developments in the forward market.

On the other hand, economic fundamentals point to certain inflationary pressures. Those from the external environment may include the anticipated strengthening of core inflation in the euro area and the lagged pass-through of the previous significant increase in the prices of refined petroleum products and some other raw materials (such as metals) on the global market to the prices of final goods. Furthermore, certain domestic inflationary pressures are present as well, primarily arising from the increase in domestic demand and cost pressures stemming from growing unit labour costs, i.e. the faster growth in wages than in labour productivity.⁶ The aforementioned factors could contribute to a

6 Still, ULC are expected to grow at a slower pace than in 2018.

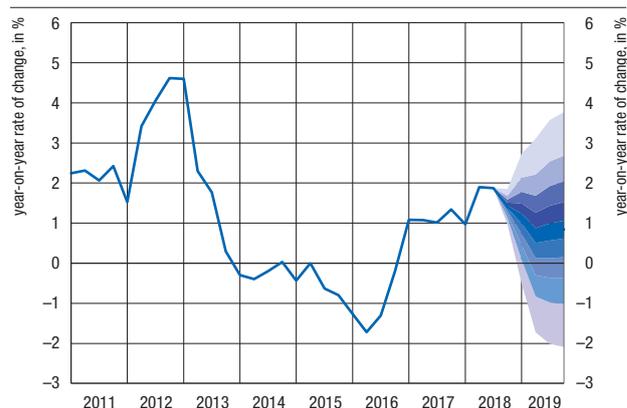
faster annual growth in the consumer price index excluding food and energy. Administrative decisions could have a neutral effect on the movement of the average annual growth rate of the aforementioned index in 2019. Specifically, the projected CPI excluding food and energy includes the direct effect of the VAT rate cut from 25% to 5% for over-the-counter drugs, but the effect is almost entirely offset by the contribution of the December 2018 cigarette price increase to the average CPI inflation excluding food and energy in 2019.

Despite the expected moderate increase in the prices of food raw materials on the global market, the average annual rate of growth in food prices is expected to slow down considerably in 2019 due to the reduction of the VAT rate from 25% to 13% on particular food products.⁷ The tax cut is estimated to affect prices only partly, since according to domestic experience, but also experiences from other countries⁸, the pass-through of VAT rate change to consumer prices is generally not full. There are several reasons accounting for the only partial pass-through of tax changes onto food product consumer prices. Among other things, the relatively sharp increase in personal consumption is a factor that could affect a weaker pass-through of the VAT rate cut to consumer prices. In addition, at the beginning of the year, the prices of fruit and vegetables usually increase seasonally, making it difficult to ascertain whether retailers indeed reduced prices. What is more, research has shown that the pass-through of tax changes onto prices is lower when tax is reduced than when it is raised.⁹

Furthermore, the deceleration in the annual increase in energy prices (primarily refined petroleum products) projected for 2019 results from the expected decrease in the average price of a barrel of Brent crude oil of about 6% (in kuna terms), following a 26% increase in the prices in 2018.

It is estimated that the risks of lower than projected or higher than projected inflation are balanced. Risks that could contribute to a higher than forecast inflation rate are primarily related

Figure 5.5 Projection of consumer price inflation



Sources: CBS and CNB calculations.

to a possible stronger rise in oil prices caused by growing geopolitical tensions and possible disruptions in crude oil supply. In addition, unexpected weather adversities could boost agricultural product prices. Certain administered prices (such as prices of natural gas) could increase in 2019 as well. In addition, the pass-through of the VAT rate cut applying to particular products could be weaker than expected in the current projection.

On the other hand, risks that might lead to a lower than projected inflation include possible lower prices of crude oil and other raw materials (in the event of a possible slump in global economic growth and/or a larger than expected increase in oil production) and a stronger pass-through of the VAT rate cut onto the retail prices of particular products.

Box 2 Asymmetry of the pass-through of crude oil prices to fuel prices in Croatia

Fuel prices have a significant influence on the trends in the overall consumer price inflation in Croatia due to the importance of fuel in household consumption and the direct influence of global crude oil prices. In this box, an econometric method is used to determine whether there is a difference, or asymmetry, in the speed of adjustment of domestic fuel prices to the changes in global crude oil prices. The analysis suggests that there are indications of asymmetry in the adjustment of petrol fuel prices, i.e. that prices of petrol adjust upwards faster than downwards when they are below or above their long-term equilibrium link. In contrast, prices of diesel fuel are characterised by a symmetric adjustment to the changes in crude oil prices.

Prices of fuel are an important and volatile component of the

energy price index and therefore have a significant influence on the trends in the overall consumer price inflation in Croatia (Figure 1).¹⁰ Since Croatia meets most of its needs for oil through imports¹¹, domestic fuel prices are significantly influenced by global crude oil prices (Figure 2). The changes in domestic fuel prices are also affected by the exchange rate of the kuna against the US dollar (because crude oil is usually purchased in US dollars), margins arising from processing, transportation and distribution to end consumers and taxes and excises. Taxes and excises constitute the largest part of the retail price of motor fuels in Croatia¹², so a change in their level may affect the pass-through of oil price changes onto domestic fuel prices.

The past five years have witnessed considerable changes in

7 Fresh meat, fish, fruit, vegetables and eggs. The share of these products in the overall CPI basket is considerable, standing at 11%, while in the food price index basket, it accounts for 42%.

8 See, for example, *Impact of the VAT rate increase in January 2012 on inflation*, Quarterly Report on Inflation, Box 3-2, Magyar Nemzeti Bank, March 2012; *Impact of the rise in VAT rates on inflation*, Macroeconomic Developments and Projections, Box 6.1, Banka Slovenije, October 2013.

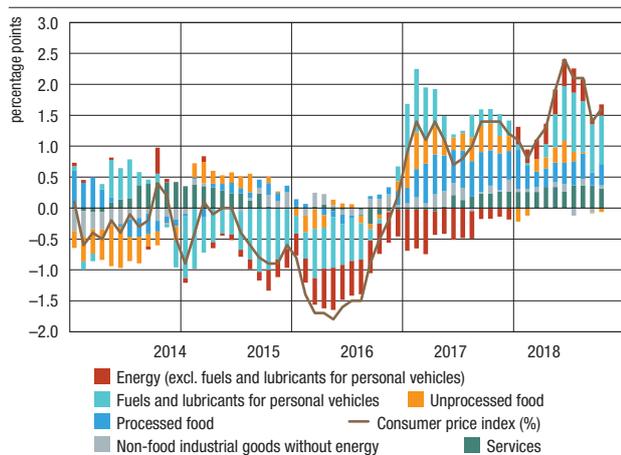
9 See, among other analyses, Benkovskis, K., and L. Fadejeva (2014): *The effect of VAT rate on inflation in Latvia: evidence from CPI microdata*, *Applied Economics*, Vol. 46, No. 21, pp. 2520-2533. The results of the aforementioned research suggest that, in the case of Latvia, the estimated pass-through of the VAT rate increase at the beginning of 2009 was 84%, while the estimated pass-through of VAT rate decrease in mid-2012 was only 36%.

10 The share (weight) of fuels and lubricants for personal vehicles in the energy consumer price index averaged 37.6% in the past five years, while in the total consumer price index, it accounted for 6.6%.

11 The average share of crude oil imports in the total consumption of crude oil in Croatia was around 78% in the period from 2011 to 2016. It is necessary to note that Croatia imports a certain amount of refined petroleum products as well, most notably diesel fuels. For more details, see the annual energy report [Energy in Croatia 2016](#).

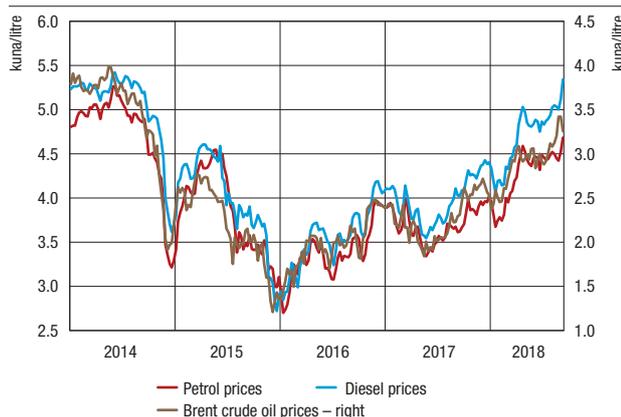
12 According to [European Commission](#) data, taxes and excise duties accounted for an average of around 58% (49%) of the retail price of petrol (diesel), while margins arising from processing and distribution constituted a share of about 14% (21%).

Figure 1 Year-on-year inflation rate and contributions of components to consumer price inflation



Sources: CBS and CNB calculations.

Figure 2 Brent crude oil price movement and motor fuel prices in Croatia



Notes: Brent crude oil prices are indicated in kuna per litre, derived by applying the exchange rate of the kuna against the US dollar and the ratio of 158.987 litres per barrel. Fuel prices in Croatia are expressed without VAT and excise duties.
Sources: Bloomberg, European Commission and CNB calculations.

the trends and the intensity of oil price movements on the global oil market. Against such a backdrop, the question arises as to whether manufacturers adjust domestic fuel prices to the upward and the downward movements of global oil prices equally, i.e. whether there is asymmetry in fuel price adjustment.

The refined petroleum product market in Croatia was fully liberalised in February 2014, when the new Oil and Oil Derivatives Market Act entered into force¹³. Since then, prices of motor fuels have usually been changing once a week in Croatia. Most adjustments of domestic fuel prices to changes in global oil prices seem to take place with a delay of one or two weeks (Table 1). Among other things, this may be due to decisions of retailers to transfer a portion of the change in crude oil prices, if the change is substantial, to domestic fuel prices in the subsequent price calculation. Also noteworthy is the fact that retailers do not anticipate price changes, as suggested by the insignificant

Table 1 Correlation of weekly changes in fuel prices in Croatia and global crude oil prices

	(-1)	(0)	(1)	(2)	(3)	(4)
Benzin	0.02	0.01	0.39	0.60	0.04	0.01
Dizel	0.07	0.04	0.38	0.67	0.06	-0.04

Notes: (-1) i (1) indicate the correlation between the weekly change in global Brent crude oil prices and prices of petrol and diesel in Croatia in the preceding and the following week. Fuel prices in Croatia are expressed without VAT and excise duties. The period observed was from February 2014 to October 2018.

Sources: Bloomberg, European Commission and CNB calculations.

correlation between weekly changes in oil prices and domestic fuel prices in the preceding week.

The existence of asymmetric adjustment in fuel prices in Croatia was tested by a simple two-step error correction model (ECM), in line with the approach developed by Engle and Granger (1987)¹⁴, taking into consideration the asymmetry in adjustment as well. The aforementioned method enables the finding of long-term equilibrium links between the variables, the speed of adjustment to long-term equilibrium and the estimation of other relevant short-term parameters. In this box, long-term equilibrium refers to the estimate of the effect of global crude oil prices on domestic fuel prices. Equilibrium adjustment parameters are the parameters that measure the number of periods (weeks) required to restore long-term equilibrium. Here, we assess the asymmetry in the speed of adjustment to long-term equilibrium in the event of positive and negative deviations from long-term equilibrium. Data used in the analysis refer to weekly petrol and diesel prices without VAT and excise duties, taken from the European Commission database.¹⁵ Oil prices are Brent crude oil prices, in US dollars per barrel, taken from the U.S. Energy Information Administration database. To enable a comparison with the prices of fuel, oil prices are indicated in kuna per litre, using the exchange rate of the kuna against the US dollar and the ratio of 158.987 litres per barrel.

The results of the estimation of the long-term equilibrium link and the cointegration test are provided in Table 2, showing, among other things, that the coefficient of fuel price elasticity to the change in crude oil prices amounts to 0.6 in the long term (γ_1). This means that a 10% change (increase or decrease) in oil prices results in a 6% change (increase or decrease) in the prices of petrol and diesel. The Engle-Granger cointegration test confirms that there is a long-term equilibrium link between the prices of fuel and the prices of crude oil.

The results of the symmetric ECM are shown on the left side of Table 3. The choice of variables and time lags is based on the general-to-specific approach, with initially included fuel price changes with one time lag and oil price changes with three time lags. According to the proposed specification, changes in the prices of petrol and diesel in the current period (week) were determined by the change in crude oil prices in the preceding week $\Delta(c)_{t-1}^n$ and two weeks earlier $\Delta(c)_{t-2}^n$. The speed of adjustment to long-term equilibrium was $\alpha = -0.13$ for petrol prices and $\alpha = -0.19$ for diesel prices. This means that 13% (19%) of petrol (diesel) price deviations from their long-term equilibrium is corrected in the first week. Prices of petrol take an average of eight weeks to achieve equilibrium, while prices of diesel take five weeks.

The asymmetric ECM used in this box assumes that the only source of asymmetry is in the expression u_{t-1} . Errors are divided

13 Oil and Oil Derivatives Market Act (OG 19/2014). The Croatian government retained the option of regulating the maximum allowed level of retail prices for particular refined petroleum products for an uninterrupted period of no longer than 90 days in case of large disruptions in the market or jeopardised government interests, for the purpose of consumer protection, market regulation or for other justified reasons. This option has not been used yet.

14 Engle, R., and C. Granger (1987): *Cointegration and error-correction: representation, estimation and testing*, *Econometrica*, 55, pp. 251-276.

15 The data are available from July 2013 onwards, but in this box, only the data from the period after the liberalisation of the refined petroleum product market were used.

Table 2 Estimation of long-term equilibrium and cointegration test

FMOLS estimation method				
Long-term equilibrium				
	Petrol		Diesel	
γ_0	0.859***	(45.181)	0.882***	(65.849)
γ_1	0.564***	(27.570)	0.608***	(42.230)
– Adjusted R ²		0.872		0.919
– Long-term variance		0.007		0.003
– Number of observations		235		235
Engle-Granger cointegration test				
	Petrol		Diesel	
H_0 : non-cointegrated series				
– Engle-Granger t-statistics	–6.010***	[0.000]	–7.553***	[0.000]
– Engle-Granger z-statistics	–62.706***	[0.000]	–93.287***	[0.000]

Notes: t-statistic values are given in brackets. P-values are shown in square brackets. ***, **, * signify the statistical level of significance of 1%, 5% and 10% respectively. Parameter γ_0 indicates a fixed margin. Critical cointegration test values were obtained from MacKinnon (1996).¹⁶

Source: CNB calculations.

into positive and negative, i.e. positive u_t^+ and negative u_t^- deviations of fuel prices from the equilibrium are distinguished. Hence, first indications of the possible existence of asymmetry exist if the estimated parameters of the speed of adjustment to long-term equilibrium are not equal for both positive and negative deviations.

Results of asymmetry testing, shown on the right side in Table 3, show that the coefficients of speed of adjustment to long-term equilibrium, $\alpha_1 = -0.20$ and $\alpha_2 = -0.07$, are statistically significant with the usual levels of significance and that petrol prices adjust

faster upwards when they are below their long-term equilibrium. If there are negative deviations, petrol prices take an average of five weeks to achieve equilibrium, whereas in the case of positive deviations, this period averages 14 weeks. This points to possible signs of asymmetry in the adjustment of petrol prices. The Wald F-test for the statistical equality of parameters shows that the hypothesis of the existence of symmetry cannot be rejected with a 5% level of significance, but can be rejected with a 10% level of significance. As regards the prices of diesel fuels, coefficients of speed of adjustment to long-term equilibrium,

Table 3 Symmetric and asymmetric error correction model (ECM)

		Symmetric ECM				Asymmetric ECM			
		Petrol		Diesel		Petrol		Diesel	
Constant	η_0	0.000	(0.089)	0.000	(0.219)	–0.003	(–1.305)	0.000	(0.204)
$\Delta(c^i)_{t-1}$	$\beta_{1,1}$	0.143***	(4.626)	0.103***	(3.302)	0.137***	(4.424)	0.102***	(3.272)
$\Delta(c^i)_{t-2}$	$\beta_{1,2}$	0.279***	(10.228)	0.290***	(11.206)	0.275***	(10.082)	0.289***	(11.139)
u_{t-1}	α	–0.125***	(–3.938)	–0.189***	(–4.815)				
u_{t-1}^-	α_1					–0.204***	(–3.744)	–0.186***	(–3.523)
u_{t-1}^+	α_2					–0.073*	(–1.711)	–0.193***	(–3.291)
Adjusted R ²		0.540		0.626		0.391		0.625	
SSR		0.086		0.067		0.113		0.067	
DW		1.827		2.187		1.905		2.187	
F-statistics		91.418		130.052		38.080		97.116	
Wald F-statistics	$H_0: \alpha_1 = \alpha_2$					3.155*	[0.077]	0.007	[0.934]

Notes: u_{t-1} represents the error correction term. T-statistic values are given in brackets. P-values are shown in square brackets. ***, **, * signify the statistical level of significance of 1%, 5% and 10% respectively. Similar results were obtained using fuel prices that include VAT and excises.

Source: CNB calculations.

$\alpha_1 = -0.19$ and $\alpha_2 = -0.19$, show that diesel prices adjust upwards and downwards with the same dynamics when they are below or above their long-term equilibrium. This means that diesel prices require an average of five weeks to achieve equilibrium with both positive and negative deviations from the equilibrium. The Wald F-test shows that the hypothesis of the existence of symmetry cannot be rejected with a 1% level of significance. The analysis therefore suggests that there are indications of asymmetry in the adjustment of petrol prices, while it seems that diesel prices

are characterised by a symmetric adjustment to the changes in crude oil prices. This could, among other things, be explained by the fact that diesel fuels are frequently purchased by industrial consumers that purchase in bulk and may have better connections to retailers, enabling them to negotiate special prices. It is also possible that some consumers store diesel fuel for future consumption, adjusting more easily to price changes. Such circumstances may discourage retailers from behaving asymmetrically in the adjustment of diesel fuel prices.

6 Current and capital account

The current and capital account surplus was notably wider in the third quarter of 2018 than in the same period of the previous year. This was largely due to the steep rise in net exports of services driven by another good tourist season and, to a lesser extent, by the improvement in the sum of balances in the secondary income account and in the account of capital transactions. On the other hand, the performance in the current and capital account was adversely affected by the larger foreign trade deficit and a worsening of the balance in the primary income account. If cumulative results over the last year are observed, the surplus in the current and capital account stood at 4.2% of GDP in the third quarter of 2018.

Foreign trade and competitiveness

Foreign trade developments in the first nine months of 2018 were marked by a noticeably slower growth in exports. After a decrease in the first three months (partly due to an unfavourable base effect), the rise in goods exports recovered partly in the rest of the year. However, cumulative results for the first three quarters show that goods exports grew notably less than in the same period of 2017 (5.1% vs 12.8%, according to the balance of payments data). The growth in goods imports also decelerated, though at a slower pace than exports (6.2% vs 12.7%). As a result, the foreign trade deficit increased by 7.7%, which is less than in the first nine months of 2017 (12.5%).

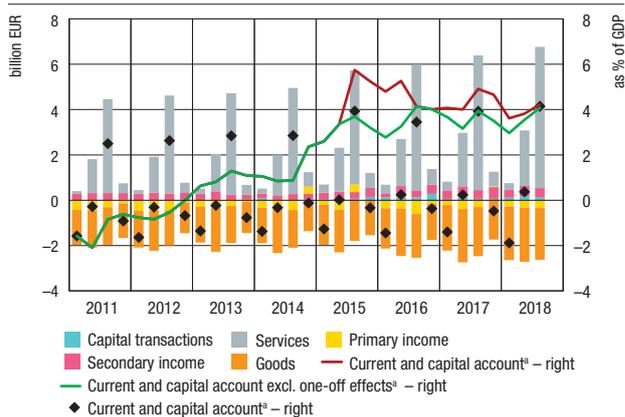
A breakdown by products¹⁷ shows that the foreign trade deficit was worse in the third quarter of 2018 than in the same period of the preceding year as a result of growth in net imports of energy products, particularly oil and refined petroleum products, as well as medical and pharmaceutical products, electrical machinery, apparatus and appliances and road vehicles. By contrast, adverse developments were largely counteracted by the rise in net exports of other transport equipment and the decrease in net imports of scientific and control instruments.

Total exports of goods rose by 6.5% from the third quarter of 2017 to the third quarter of 2018, while the increase in the exports of the narrow aggregate (excluding energy products) was smaller, standing at 5.3%. The upturn in the exports of other goods was largely driven by larger exports of ships, road vehicles and particular categories of capital goods, notably telecommunication apparatus and machinery specialised for particular industries. On the other hand, exports of medical and pharmaceutical products took a dive.

Goods imports grew at an annual rate of 5.6% in the third

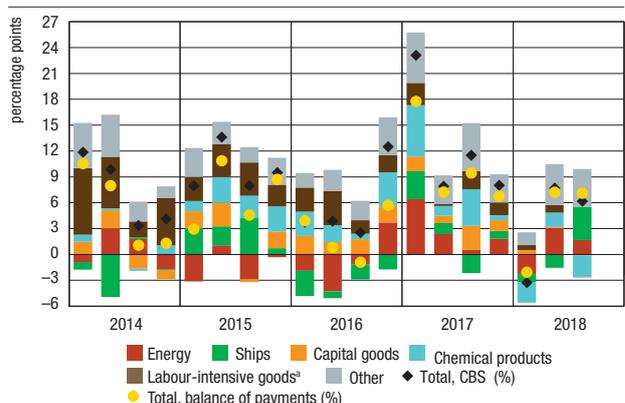
quarter, which was mostly attributable to the growth in the imports of energy, in particular oil and refined petroleum products. At the same time, imports of other goods went up 2.4%, mainly owing to the growth in imports of road vehicles, other transport equipment and capital goods, particularly electrical machinery,

Figure 6.1 Current and capital account balance and its structure



^a Sum of the last four quarters.
Note: One-off effects include conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017 and 2018.
Source: CNB.

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



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

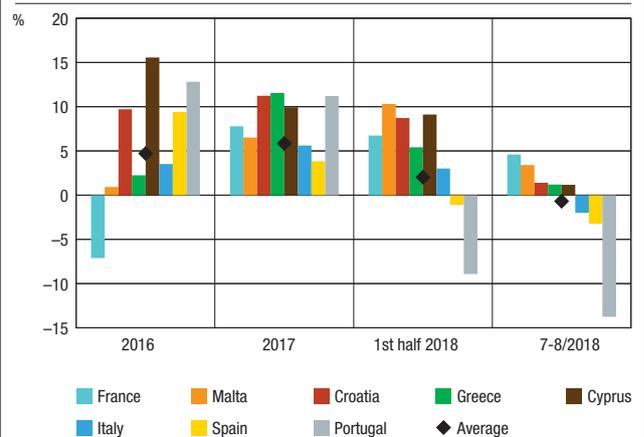
17 These data refer to data on the foreign trade in goods published by the CBS. Their coverage is not in line with the goods trade in the balance of payments (for more details, see Box 3 Foreign trade developments according to the balance of payments data, Macroeconomic Developments and Outlook No. 2, July 2017).

apparatus and appliances and telecommunications apparatus, which ran parallel to a sharp fall in imports of power generating machinery and equipment.

In contrast to adverse trends in the foreign trade in goods, the third quarter saw a sharp improvement in the foreign trade balance of services (of 5.0%) from the same period of the previous year. This was again mostly due to tourism, although the rise in income from consumption by foreign guests was noticeably smaller than in the same period of 2017 (4.8% vs 9.1%). The percentage rise in income from tourism outstripped the corresponding figures for the number of arrivals (3.1%) and nights of foreign guests in commercial accommodation (1.6%). The growth in volume indicators was particularly spurred by guests from Germany, the United Kingdom and Hungary.

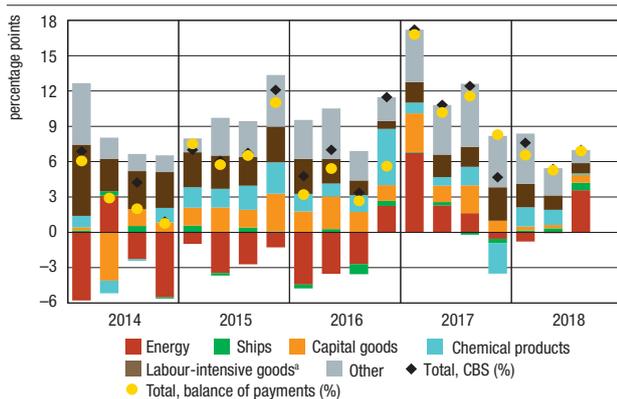
The slower growth in income from tourism may be attributed to several factors. First, the competition in the Mediterranean region tightened, which, among others, refers to Turkey and North African countries (Egypt and Tunis), where the political situation has eased to some extent. Also, some European tourists, probably during the World Football Championship in June and July, decided to stay in their countries or travelled to Russia,

Figure 6.5 Year-on-year rate of change in the number of nights stayed by foreign tourists



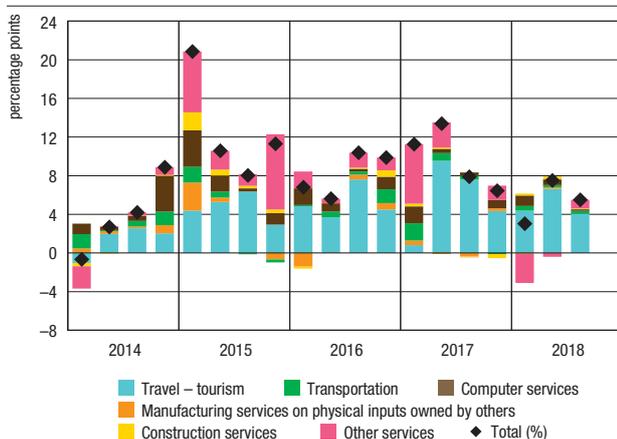
Source: Eurostat.

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



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

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



Source: CNB.

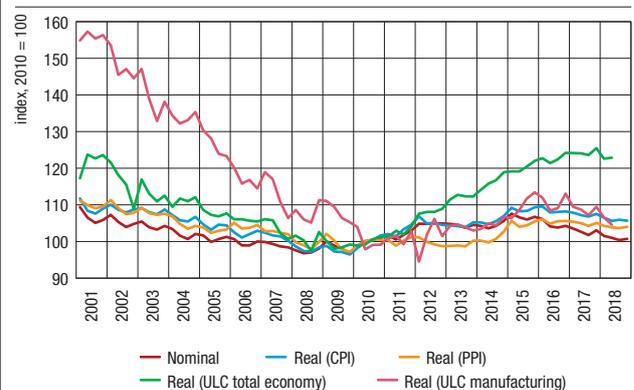
which reduced tourist traffic in traditional summer destinations. Furthermore, as Croatian income from tourism has grown faster than in competitor countries for several consecutive years, the attained base is high, so that maintaining similar growth dynamics is unsustainable in the long run. Poorer results in the main tourist season were also seen in some other Mediterranean countries, in particular Spain, Portugal and Italy.

The weaker increase in exports in 2018 coincided with a slight deterioration in the price and cost competitiveness of Croatian exports. The real effective exchange rates of the kuna deflated by consumer and producer prices appreciated mildly in the first half of 2018, remaining almost unchanged in the rest of the year according to indicators available by October.

Income and transactions with the EU

The deficit in the primary income account deteriorated from the same period of the previous year. The upsurge in net expenditures on equity investments was largely offset by the sharp rise in revenues from compensation of employees and a slight decrease in net expenditures on debt investments. The growth in

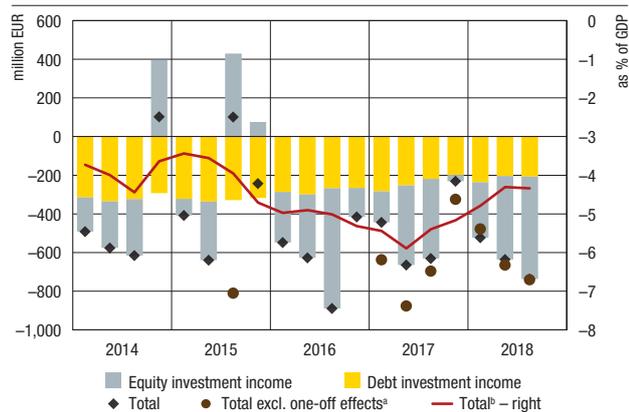
Figure 6.6 Nominal and real effective exchange rates of the kuna



Notes: A fall in the index indicates an effective appreciation of the kuna. In the fourth quarter of 2018, data on the real exchange rate deflated by consumer and producer prices refer to October and data on the nominal exchange rate to October and November.

Source: CNB.

Figure 6.7 Investment income



^a One-off effects include conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017 and 2018.
^b Sum of the last four quarters, excluding one-off effects.
 Source: CNB.

net expenditures on equity investments reflects better profitability of domestic business entities in non-resident ownership, mostly banks, as well as enterprises in the information and communication, and real estate activities. The profits of foreign enterprises in domestic ownership edged up in the same period. The drop in interest expenditure for foreign debt of domestic sectors related mostly to other domestic sectors and credit institutions.

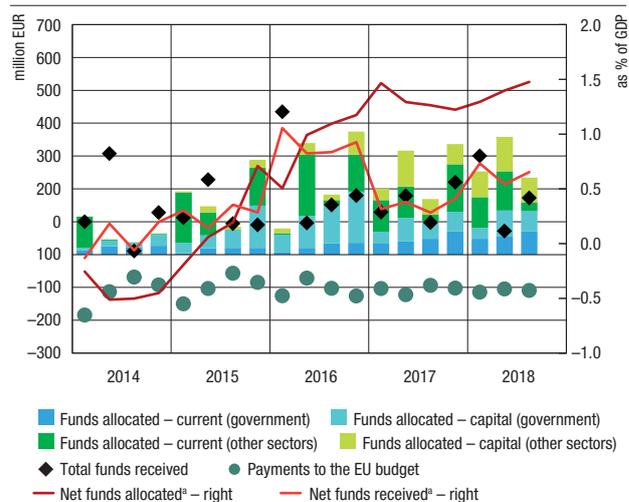
Total net revenues arising from transactions with the EU budget were larger in the third quarter of 2018 than in the same period in 2017. End beneficiaries received more current and capital revenues. The positive balance in transactions with the EU budget, i.e. the surplus of funds utilised from EU funds over payments to the EU budget, reported as the sum of the last four quarters, grew from 1.2% of GDP at the end of 2017 to 1.5% of GDP at the end of the third quarter of 2018. Funds from the EU budget have become an increasingly important financing source for domestic sectors, with the government and households being the main beneficiaries of European structural and investment funds, while non-financial corporations accounted for a smaller share (see Box 3 Characteristics of corporate beneficiaries of European structural and investment funds). Other income, which excludes income from equity and debt investments and transactions with the EU budget, also recorded an upsurge due to the steep rise in revenues from compensation of employees abroad and personal transfers.

Projected developments

In the last quarter of 2018, the deficit in the current and capital account might be approximately the same as in the corresponding period of 2017. The wider foreign trade deficit will be largely offset by more favourable developments in other accounts, mostly thanks to intensified use of EU funds. As a result, the surplus in the current and capital account might amount to 4.1% of GDP at the entire 2018 level, down from 4.7% of GDP in 2017. However, excluding the negative effect of the crisis in the Agrokor Group on last year's bank profits (estimated at 1.1% of GDP), developments were more favourable in 2018 than in the preceding year.

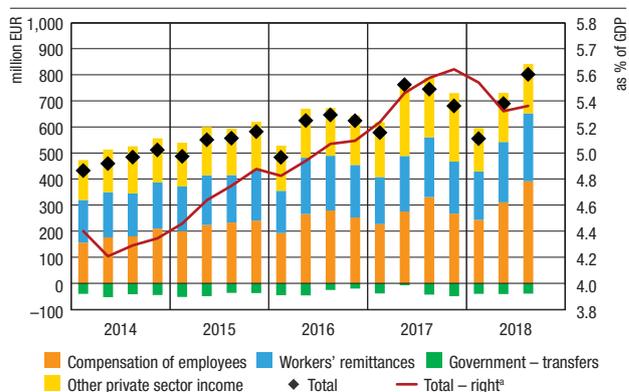
The foreign trade deficit is expected to deepen further in 2018 as a whole, owing to trade in energy products (notably oil and refined petroleum products due to prices of crude oil in the global market that were steeper than in 2017) and, to an even larger extent, trade in other goods. In line with trends in the

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.

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



^a Sum of the last four available quarters.
 Note: Compensation of employees is recorded in the primary income account, while other series (workers' remittances, other private sector income and government transfers) are recorded in the secondary income account.
 Source: CNB.

first nine months, annual rates of growth in exports and imports should be noticeably lower than last year. The deterioration in the foreign trade deficit is the only factor adversely affecting the estimate of the current and capital account surplus in 2018. Unfavourable trends in foreign trade were largely offset by the ongoing rise in net exports of services, primarily based on tourism consumption of non-residents. Nevertheless, income from tourism might grow at a slower pace in 2018 as a whole than in the preceding three years.

The estimated annual growth in the deficit based on investment income in 2018 is exclusively attributable to the base effect associated with the effects of provisions for loans to the Agrokor Group on last year's bank profits. Excluding those effects, the balance should be more favourable than in 2017 owing to lower bank profits on other bases and smaller interest expenditure for foreign

debt liabilities. In 2018, the surplus in the current and capital account has also been boosted by the estimated growth in inflows based on other income, above all net transactions with the EU budget and revenues from compensation of employees abroad.

The surplus in the current and capital account is expected to drop to 3.4% of GDP in 2019, mostly due to the persistent increase in the foreign trade deficit. The balance of investment income is also expected to deteriorate, albeit to a smaller extent. Unfavourable developments might be partly offset by the steady increase in net exports of services and stronger use of EU funds.

Foreign trade might continue to lose steam in 2019. The expected slump in export growth is above all associated with trends in the external environment, i.e. slower growth both in foreign demand by the main foreign trade partners and the volume of global trade. Also, the positive effects of the entry to the EU, which in the first years of membership contributed strongly to the high growth rates of Croatian exports, have been gradually declining. At the same time, notwithstanding the slowdown from last year, imports might grow faster than exports as they are supported by the steady rise in personal consumption and investment, Croatian economy import dependency (including the service sector) and a stronger growth in placements.

In contrast to the deterioration in the goods trade deficit, the surplus in the international trade in services might continue to grow in 2019, particularly income from travel services, albeit at a slower rate than in 2018. This estimate is based on the

expectation of slower growth in the main outbound markets, steadily rising competition in the global tourism market, and limitations regarding further growth in accommodation facilities. By contrast, the expected rise in income is underpinned by investments to improve the quality of accommodation facilities and the perception of Croatia as a relatively safe tourist destination.

The deficit based on investment income is also expected to grow in 2019, due to the rise in profitability of domestic enterprises owned by non-residents. At the same time, net inflows of other income might increase. This primarily relates to a further increase in the use of EU funds, so that a positive net impact of transactions with the EU budget might grow to 2.0% of GDP. Growth in revenues from compensation of employees working abroad and personal transfers is also expected to continue, albeit at a slower pace.

Downside risks prevail as far as the risks to the projected current and capital account balance are concerned. Particularly noteworthy are a potential adverse impact of mounting trade protectionism on global growth and a more sluggish increase in foreign demand of Croatia's main trading partners. The negative risk arises also from possible larger growth in interest rates and volatility in the global financial market, while further intensification of competition in the global tourism market might additionally curb the rise in domestic revenues from tourism. By contrast, there are also some upside risks, which are mostly related to bigger withdrawals of EU funds.

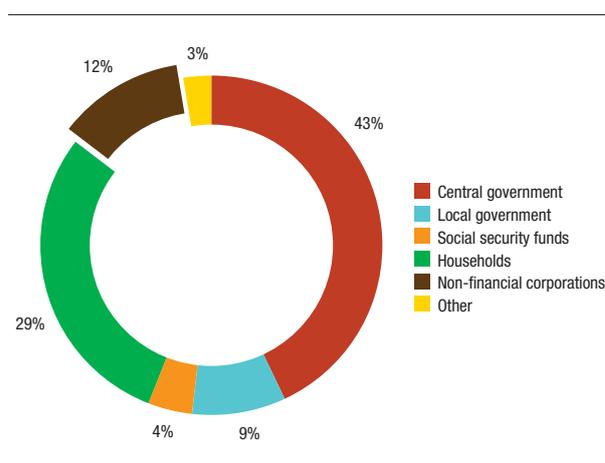
Box 3 Characteristics of corporate beneficiaries of European structural and investment funds

Over the last few years, European structural and investment (ESI) funds have become an increasingly important funding source for domestic enterprises. An analysis of related flows so far shows that the dynamics of payments intensified strongly only two years after Croatia's full accession to the EU and that the funds are very concentrated in a small number of enterprises. In particular, while small and medium-sized enterprises predominate in the total number of beneficiaries, they account for a much smaller amount of the total funds paid to the corporate sector. The majority of corporate beneficiaries of ESI funds come from manufacturing industry, i.e. from low- and medium-low technology activities. This suggests that there is considerable room for further improvement both in terms of the volume and the structure of ESI funds payments to the corporate sector to achieve the largest possible beneficial effects for the domestic economy.

As of the accession to the European Union, Croatia has been eligible for considerable grants from European structural and investment funds. These funds may contribute considerably to the overall economic development of Croatia, so their use is very important for both the professional and general public. A large portion of ESI funds is intended for the corporate sector, which is highly indebted¹⁸ in Croatia, with many SMEs having limited access to funding¹⁹. Therefore, financing through ESI funds may mitigate existing structural deficiencies and raise investment and development potential of the private sector. This box shows the main characteristics of enterprises²⁰ that have so far been beneficiaries of ESI funds²¹

In the period from July 2013 to the end of 2017, a total of HRK 12.1bn was paid from ESI funds²² to end beneficiaries, with most funds (56%) being paid to the government sector, mostly central government bodies and, to a lesser extent, local government units and social security funds (Figure 1). Apart from the

Figure 1 Structure of total ESI funds payments by the sector of end beneficiaries from July 2013 to end-2017



Note: Total payments are reduced by refunds.
Source: MoF data processed by the CNB.

18 See Martinis, A., and I. Ljubaj (2017): *Corporate Debt Overhang in Croatia: Micro Assessment and Macro Implications*, Working Papers, W-51, CNB.

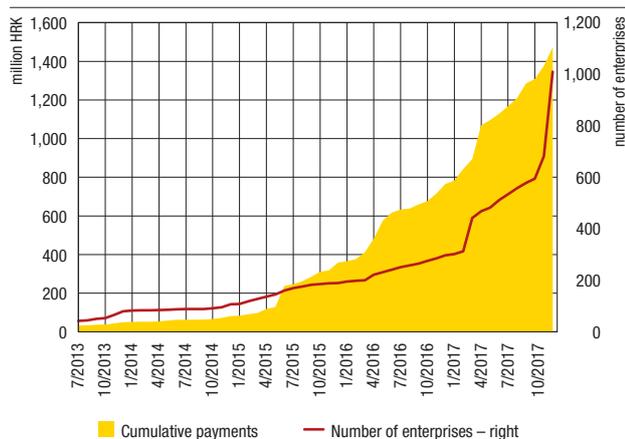
19 See Macroeconomic Developments and Outlook No. 3, 2017, Box 3 Survey on the access to finance of SMEs – Survey findings.

20 Covered are non-financial corporations in accordance with the ESA 2010 sector classification of institutional units, both private and public, with the exception of public enterprises that are included in the general government sector.

21 Used were MoF data on payments of ESI funds and FINA database of annual financial statements of enterprises.

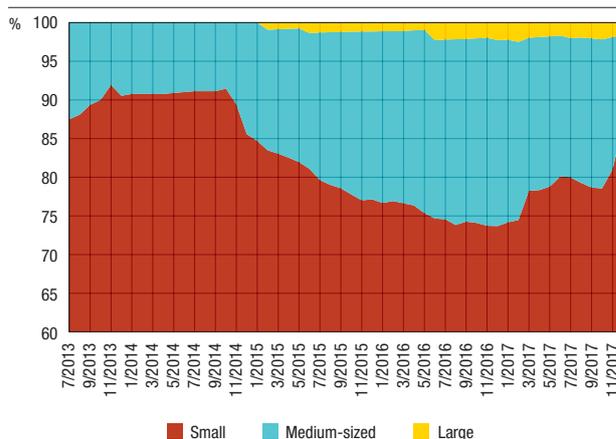
22 In addition to ESI funds, there are some other funds that are financed from the EU budget. With HRK 12.1bn from ESI funds, end beneficiaries in Croatia received another HRK 10.1bn in the period under review, HRK 6.0bn of which were agricultural aids, and the rest was mostly intended for the general government sector.

Figure 2 Time dynamics of ESI funds payments to the corporate sector



Note: Shown are monthly data cumulatives.
Source: MoF data processed by the CNB.

Figure 3 Structure of the number of corporate beneficiaries in terms of size



Note: Shown are monthly data cumulatives.
Sources: MoF and FINA data processed by the CNB.

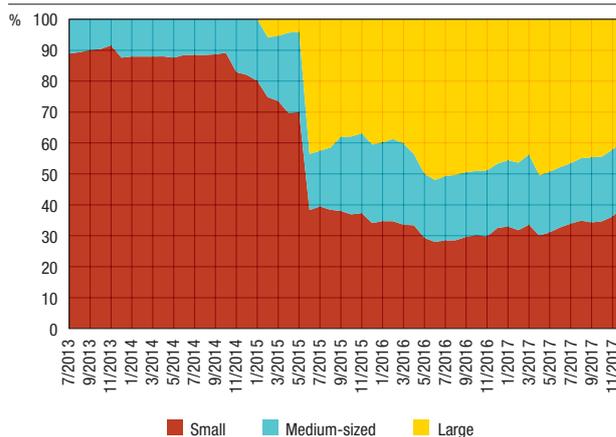
government, the household sector is also an important user of such funds, which are used mostly for agricultural investments by family farms. Only around HRK 1.5bn or 12% of total payments were accounted for by non-financial corporations, i.e. a total of 1012 enterprises were recipients of ESI funds in the period under review. Public non-financial corporations received HRK 0.6bn, while privately controlled corporations accounted for only HRK 0.9bn. Still, the number of corporations refers only to direct beneficiaries of ESI funds that are used to finance own development projects. Furthermore, corporations may benefit from payments to other sectors, for example, by responding to invitations to tender as contractors or suppliers of goods and services for projects financed through ESI funds in cases in which public authorities or some other beneficiaries are the direct project developers.

The time dynamics of ESI funds payments to the corporate sector was rather uneven during the period under review (Figure 2). In particular, in the first two years of membership, i.e. up to July 2015, a relatively modest amount of HRK 237m was paid to around 160 corporate beneficiaries. The payment dynamics picked up considerable steam afterwards, particularly in 2017, when HRK 700m was disbursed (almost half of the total payments so far), with over 700 new corporate beneficiaries (out of 1012 total beneficiaries in the whole period observed).

A detailed analysis of the structure of corporate beneficiaries of ESI funds in terms of size²³ shows that small enterprises predominated in the total number of beneficiaries (86.6%). The share of medium-sized enterprises is much smaller, 11.9%, whereas large enterprises account for only 1.6% of the total number of beneficiaries. Immediately after EU accession, ESI funds were mostly used by small enterprises, while medium-sized and large enterprises became more engaged as late as in 2015 (Figure 3).

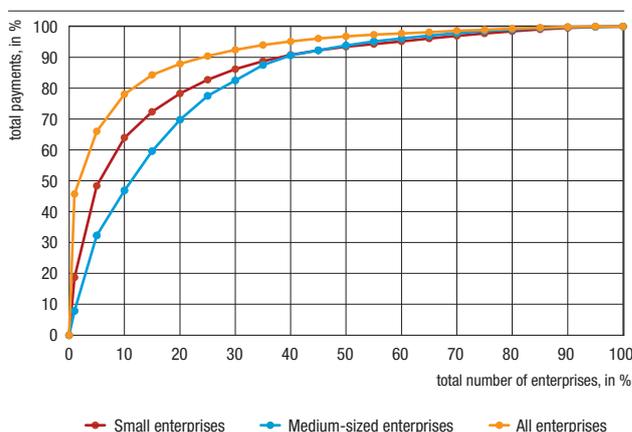
However, the share of individual corporations in the total number of beneficiaries does not mean that they had the same share in total payments: SMEs account for around 60% (HRK 0.9bn) of total funds paid out, while they make up more than 98% of the total number of corporate beneficiaries (Figure 4). By contrast, large enterprises account for a negligible share in the

Figure 4 Structure of payments in terms of corporate size



Note: Shown are monthly data cumulatives.
Sources: MoF and FINA data processed by the CNB.

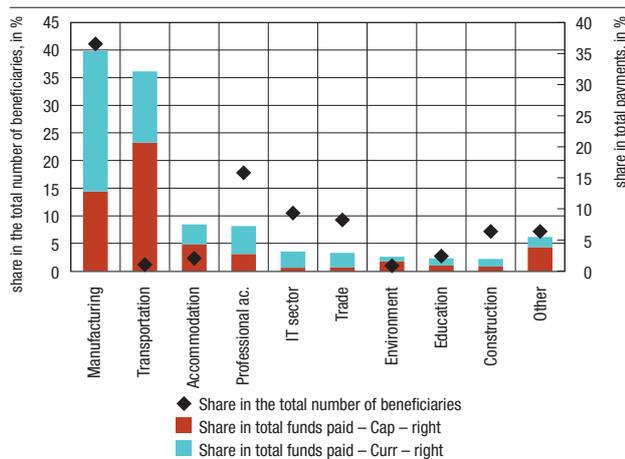
Figure 5 Concentration of total ESI funds payments to the corporate sector from July 2013 to end-2017



Sources: MoF and FINA data processed by the CNB.

23 The criteria for classifying enterprises by size were taken from the Accounting Act (Official Gazette 120/2016) and they include total assets, turnover and the average number of employees over a year.

Figure 6 Structure of the number of corporate beneficiaries of ESI funds and amounts paid by activities



Sources: MoF and FINA data processed by the CNB.

total number of ESI funds beneficiaries and for around 40% of disbursed funds (HRK 0.6bn).

The structure of ESI funds corporate beneficiaries and amounts paid described is partly the result of the fact that ESI funds are used to finance projects that are very different in terms of their features, in particular their financial value. For example, financing goes in parallel for projects to develop SMEs (for the acquisition of production apparatus, machinery and equipment) and infrastructure projects worth hundreds of millions of kuna. As a result, the funds disbursed are highly concentrated in a small number of beneficiaries, particularly large enterprises (Figure 5). More precisely, around a hundred corporations received as much as HRK 1.2bn in total in the observed period, which means that 10% of beneficiaries received almost 80% of the total amount disbursed. Also, a high concentration is also noticed if only small enterprises are observed, which is particularly due to the uneven distribution of capital revenues paid out.

Among the beneficiaries of ESI funds, the largest number is accounted for by enterprises from manufacturing industries (around 40%), particularly metals, wood and food industries, followed by scientific and professional activities (around 18%), particularly architecture and engineering activities and business consulting (Figure 6). Furthermore, a notable number of corporate beneficiaries come from trade (around 10%), wholesale trade in particular, as well as information and communication activities (around 10%), with a significant number of companies engaged in computer programming. Noteworthy also is the construction activity (around 7% of the total number of beneficiaries), where enterprises engaged in specialised construction activities and building construction predominate. As a result of the high concentration of disbursed funds, the share in the total number of enterprises does not correspond to the share of individual activities in total payments, the only exception being manufacturing industry. This is particularly evident in the transportation activity, where a few corporate beneficiaries account for a substantial portion of total ESI funds paid. Excluding the transportation sector, in which specific large infrastructure projects are realised, payments to manufacturing industry are equal to the sum of payments to all other activities (Figure 6).

24 According to Eurostat glossary, the sector approach is a special classification of manufacturing industry activities according to the level of their technological intensity (investment in research and development/value added) using the National Classification of Activities (NACE) on 2-digit and 3-digit levels.

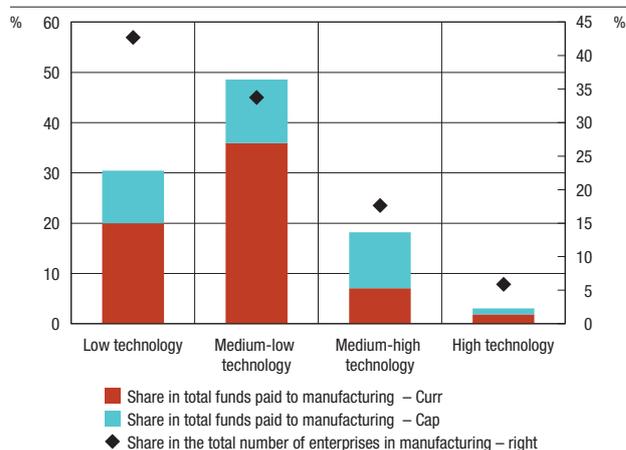
Also, it is interesting to see the extent to which enterprises use ESI funds as either current or capital revenues (Figure 6). Data analysis shows that capital revenues predominate slightly in the transportation and accommodation sectors as these sectors are usually involved in capital investment formation, while current revenues predominate in trade and information and communication activities. Manufacturing industry stands out as an important beneficiary of both current and capital revenues.

In view of the share of the manufacturing sector in withdrawals of ESI funds, also analysed was their structure in terms of technological²⁴ equipment as an indicator of value added. According to this breakdown, more than three fourths of the number of manufacturing companies that used ESI funds are in the low technology sector (in particular the wood industry and manufacture of furniture and the food industry) and medium technology sector (mostly metal industry and manufacture of plastic products), which received almost four fifths (HRK 392m) of the total funds paid to the manufacturing sector (Figure 7). Companies in the medium-high technology sector (machinery and equipment and electrical equipment) accounted for less than a fifth of the total number of enterprises in the manufacturing sector and received a total of around HRK 90m. A mere HRK 15m was paid to the high technology sector (mostly manufacture of electronic and optical equipment). Current revenues predominated in payments to companies in the low- and medium-low technology sectors, while capital revenues accounted for a marginally larger share in payments to the medium-high technology sector. This is in line with expectations as companies with a higher level of technological intensity usually also have a higher level of capital intensity.

Observing the structure of payments by region, the funds were mostly paid to the activities that are traditionally developed in the given area. For example, in Dalmatia, most funds were paid to the transportation sector because of a large infrastructure project. However, excluding this sector, payments to accommodation activities prevail, as expected. As regards other parts of Croatia, mostly prevailing are payments to manufacturing companies, particularly in central and northern Croatian counties. Apart from the manufacturing sector, significant payments were seen in scientific and professional activities in the City of Zagreb and Slavonia and the IT sector in the City of Zagreb.

The amount of grants from ESI funds to the corporate sector in Croatia has been increasing over the last few years, but a

Figure 7 Structure of corporate beneficiaries of ESI funds and amounts paid in manufacturing industry in terms of the technological equipment level



Note: Cap – capital revenues and Curr – current revenues.

Sources: MoF and FINA data processed by the CNB.

detailed analysis points to some unfavourable trends. First, the amount paid has remained relatively small, particularly taking into account only payments to SMEs. Second, the funds paid are highly concentrated in a small number of enterprises, and have mostly gone to just a few large companies. Also, apart from the transportation sector, most funds were disbursed to low- and

medium-low technology companies in the manufacturing industry. This suggests that there is considerable room for further improvement both in terms of the volume and the structure of ESI funds payments to the corporate sector to achieve the largest possible beneficial effects for the domestic economy.

7 Private sector financing

The several-year trend of improvements in financing conditions of domestic sectors mostly continued in the second half of 2018. The costs of short-term government borrowing remained at historic low levels. The interest rate on one-year kuna T-bills remained unchanged from February 2018 and still stood at 0.09% in November, while the interest rate on one-year euro T-bills held steady in October at 0.00%, i.e. at the level that was first reached in May 2018. If long-term borrowing costs are observed, in the beginning of July 2018, the government issued the second tranche of a 5-year kuna bond of HRK 5.5bn, yielding 1.22%, and a new 11-year bond of HRK 5.0bn, yielding 2.58%, which represents the most favourable financing conditions of this sector so far. More favourable financing conditions are also evident in the yield curve for kuna bonds without a currency clause (Figure 7.1a), and in particular the yield curve for kuna bonds with a currency clause in euro, which declined significantly from the end of 2017 (Figure 7.1b).

During the second half of 2018, the average cost of government borrowing on the foreign market, estimated on the basis of the EMBI index for Croatia and the yield on the German government bond, remained at the level of the average of the first half of the year, standing at 2.4% (Figure 7.3), while during November it was up by 0.3 percentage points from the end of the previous year. The credit default swap (CDS) was almost unchanged at the end of November from the end of 2017, standing at 95 basis points. As regards rating agencies' perception of Croatian risk, after two agencies upgraded Croatia's credit rating from 'BB' to 'BB+' (one notch below investment grade) in the first quarter of 2018, Fitch changed the outlook from stable to positive in July, while Standard & Poor's followed suit in

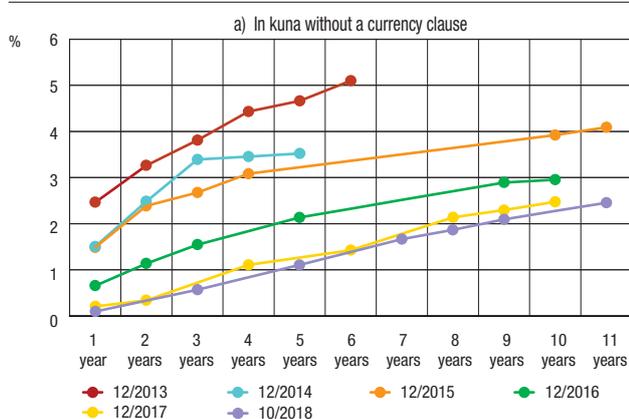
September. Moody's rating and outlook have been unchanged since March 2017 at Ba2, i.e. two notches below investment grade with stable outlook.

The costs of corporate financing continued to fall. When compared with the average of the first six months of 2018, the average interest rate on short-term kuna loans without a currency clause fell by 0.4 percentage points in the period from July to October, and held steady below 4% (Figure 7.2). At the same time, the average interest rate on long-term corporate loans with a currency clause decreased by 0.2 percentage points (Figure 7.3) and stood below 3% for the first time in September and October. The favourable movements of corporate financing costs in the period from July to October were also reflected in the decrease in interest rates relative to loan amount (Figure 7.4). Interest rates on loans above HRK 7.5m were considerably lower and more volatile, since such loans are used by a smaller number of large companies with more collateral and better access to alternative financing.

The interest rates on household loans on average also continued a downward trend. The average interest rate on long-term loans with a currency clause, excluding housing loans, fell sharply by 0.4 percentage points in the period from July to October from the first half of the year, despite growth in October. Average interest rates decreased moderately in long-term kuna financing, but the costs of financing in long-term housing loans with a currency clause showed on average no change from the first half of the year due to a mild growth in September and October (Figures 7.2 and 7.3).

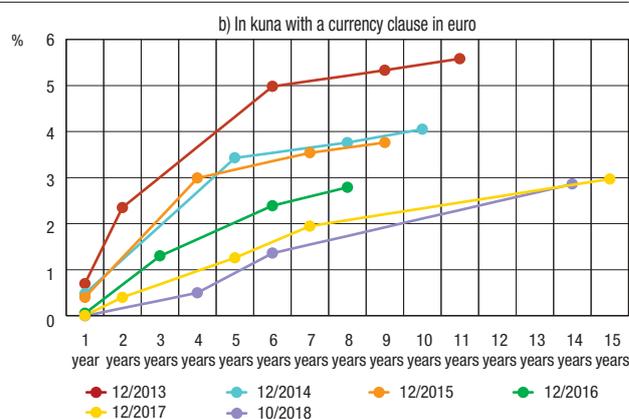
The continued several-year trend of more favourable conditions for corporate and household financing was due to the very

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.

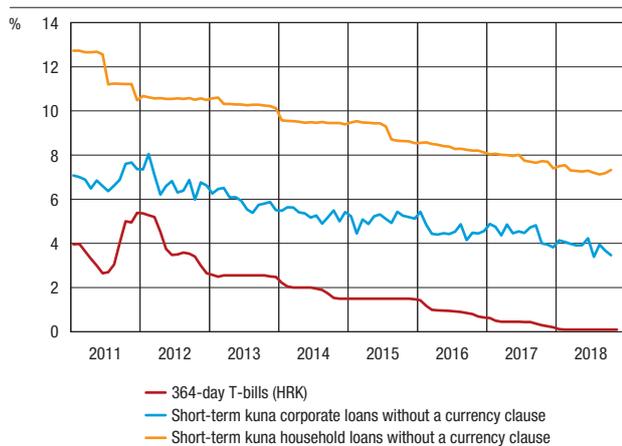
Source: CNB.



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 and the end of 2017 refer to November and October respectively.

Source: CNB.

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



Sources: MoF and CNB.

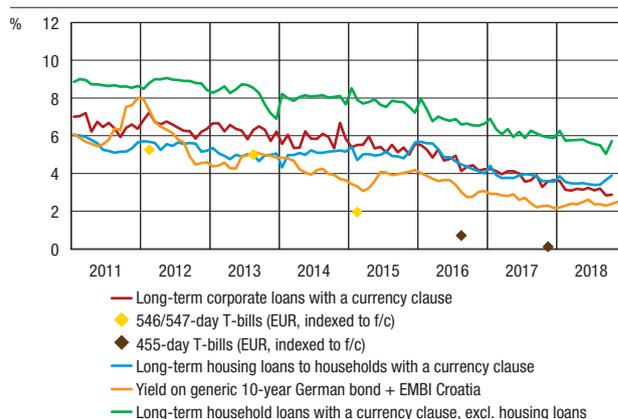
high liquidity in domestic and international financial markets and the continued fall in the costs of funding sources of the Croatian banking system, with EURIBOR still in negative territory (Figure 2.3), while the national reference rate (NRR)²⁵ continued to trend downwards (Figure 7.5).

As regards the structure of interest rates, at the end of October, loans with a fixed-to-maturity interest rate (37.8%, Figure 7.6a) were the most represented, followed by loans tied to the NRR and the EURIBOR. Loans granted at the interest rate fixing shorter than the maturity accounted for 13.3% of household loans, of which two thirds referred to fixing longer than three years. As regards corporate loans, the largest portion of loans had a fixed-to-maturity interest rate (34.7%, Figure 7.6b), while EURIBOR was the second most represented according to the currency structure in which the euro is predominant. When compared with the end of October 2017, the shares of the fixed-to-maturity interest rate increased the most, i.e. by 4.3 percentage points in household loans and 4.9 percentage points in corporate loans.

According to the results of the bank lending survey, credit standards for corporate loans also eased in the second and the third quarter of 2018, albeit at a much lower intensity than in the first quarter (Figure 7.7). If a slight tightening in the second and the third quarter of 2017 is excluded, the developments in 2018 are a continuation of an almost three-year long trend of easing of credit standards for corporate lending. In the first nine months of 2018, the easing of standards was on average mostly driven by favourable liquidity conditions and possibilities of banks' financing in the market, while in the third quarter, the positive effect of expectations with regard to overall economic developments was pronounced. The results of the second round of the Survey on the access to finance of enterprises also point to the improvement of financial conditions, although for some groups of enterprises obstacles in the access to finance are still pronounced (see Box 4 Characteristics of small and medium-sized enterprises in the access to finance – Survey findings). Apart from the decline in the last quarter of 2017, corporate

25 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 the 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).

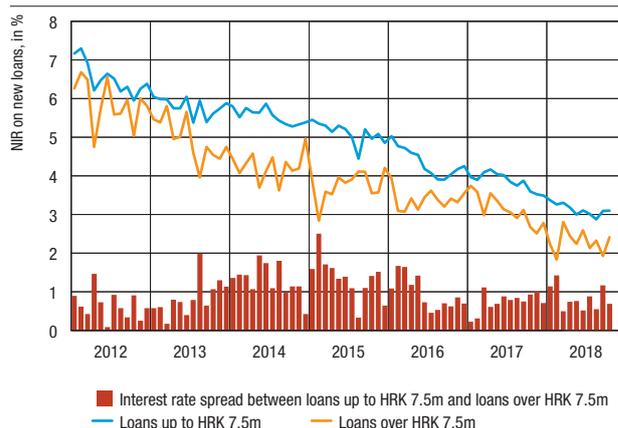
Figure 7.3 Long-term financing costs in kuna with a currency clause and in foreign currency



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

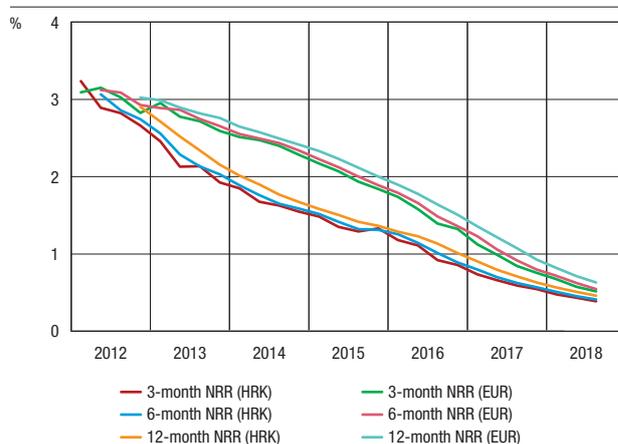
Sources: MoF, Bloomberg and CNB.

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



Source: CNB.

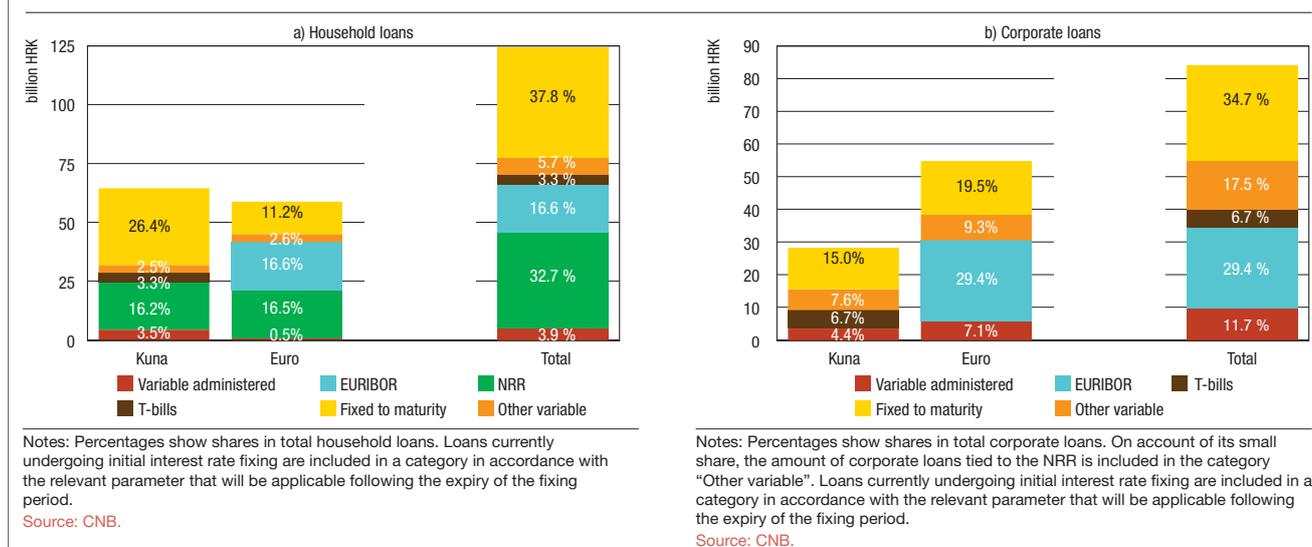
Figure 7.5 National reference rate (NRR)



Note: The rates shown refer to the rates for all natural and legal persons.

Source: HUB.

Figure 7.6 Structure of interest rates, October 2018



demand for loans continued a several-year growth trend in the third quarter, albeit at a slower pace than in the first half of the year. The most important drivers of rising demand for loans in the first three quarters of 2018 were still enterprises' needs to finance inventories and working capital as well as investments, and to a lesser extent, debt restructuring.

As regards credit standards for household loans, they eased in the third quarter (Figure 7.8), mostly due to competition among banks and the reduced effect of legislative changes. The considerable tightening of credit standards for household loans in the first half of the year was particularly the consequence of the application of the new Foreclosure Act and the Decision on the additional criteria for the assessment of consumer creditworthiness and on the procedure for collection of arrears and voluntary settlement which had an unfavourable effect on creditworthiness of part of the household sector. In addition, the growth in demand for housing, consumer and other loans continued and now it has been ongoing for the full four years, except the decrease in demand for housing loans in early 2017. The boost to demand for both types of loans is still strongly driven by consumer confidence. The demand for housing loans was additionally attributed to favourable circumstances in the real estate market, while the consumption of durable consumer goods spurred growth in demand for other types of household loans.

The total debt of non-financial corporations²⁶ decreased in the third quarter of 2018, mostly due to private companies' deleveraging abroad. As regards the annual dynamics, growth continued, so that the increase in total corporate debt at the end of September 2018 stood at 1.6% (transaction-based), which is higher than in the previous years (Figure 7.9). The driver of annual growth is private companies' borrowing, in particular domestically, while public enterprises reduced their external debt considerably and slightly increased their domestic debt.

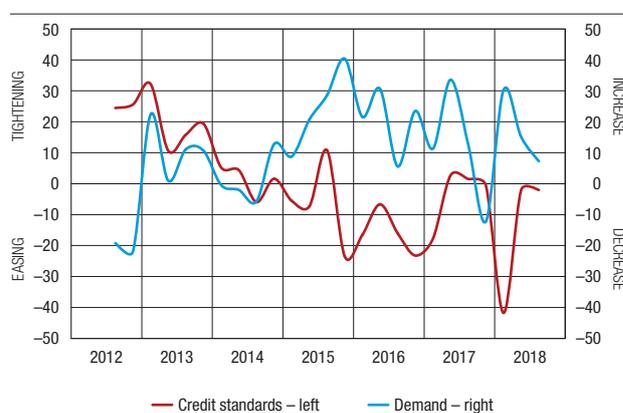
Domestic credit institutions' placements to non-financial corporations rose by HRK 3.0bn (3.3%) in the first ten months of 2018 (transaction-based, Figure 7.10). As in 2017, the rise was entirely generated in the first half of the year, while the period from July to October saw a decline in placements. However, the annual growth of corporate placements accelerated to the highest level since 2012, and at the end of October stood at

3.7% (transaction-based). By contrast, the annual rate of change in corporate placements calculated on the basis of nominal values remained negative (-1.0% at the end of October), which is mostly due to the sale of non-performing placements and the appreciation of the kuna against the euro.

In the first ten months of 2018, the growth of corporate placements was spread across different activities, with the biggest contribution to growth being made by manufacturing, accommodation and food service and other activities, particularly professional, scientific and technical activities and supply of electricity, gas, steam and air conditioning (Figure 7.11). By contrast, the several-year trend of deleveraging in construction continued, while debt in agriculture also decreased moderately, after the growth in the previous three years. As regards corporate loans by purpose, the annual growth in investment loans intensified from the middle of the year and at the end of October stood at 9.5% (Figure 7.12), while loans for working capital decreased slightly from October 2017.

Following accelerated growth in household placements, which lasted from the final quarter of 2016, their annual growth held steady from August 2018 at the level of about 6%

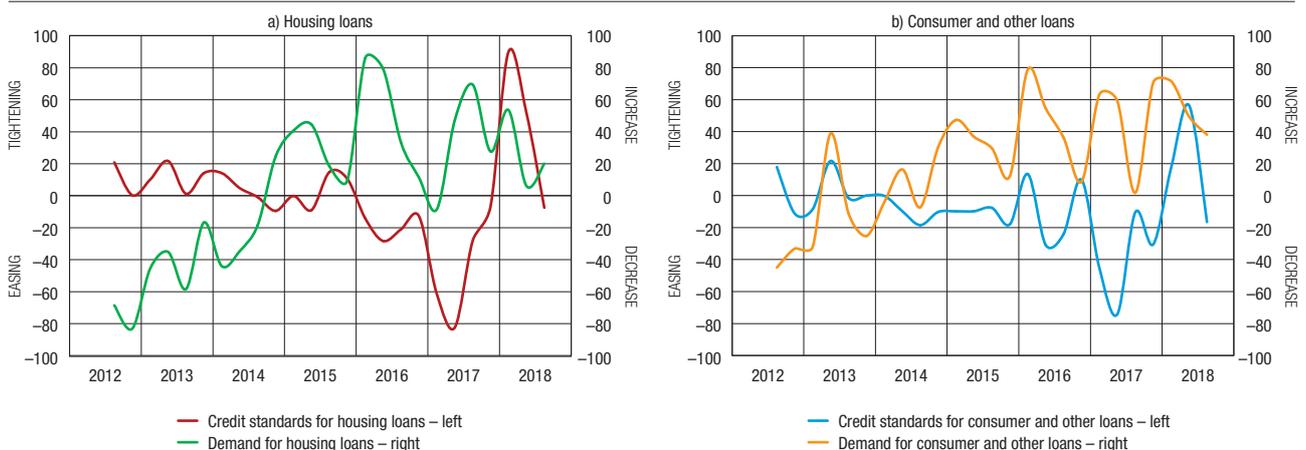
Figure 7.7 Credit standards and corporate demand for loans



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

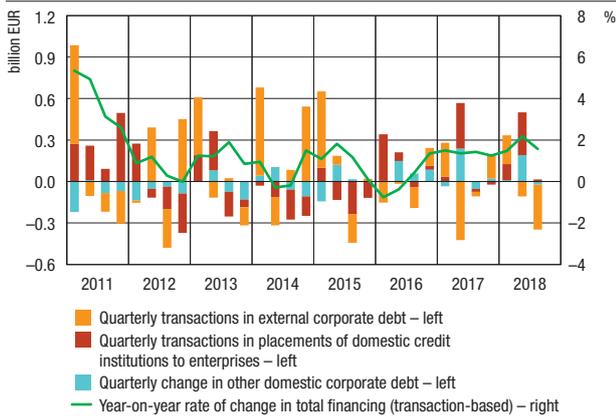
26 Non-financial corporations do not include public enterprises included in the general government sector.

Figure 7.8 Credit standards and household demand for loans



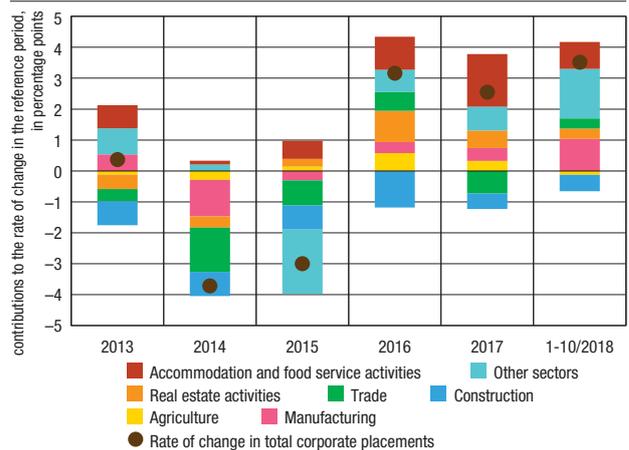
Note: Data show the net percentage of banks weighted by the share in total household loans.
Source: CNB.

Figure 7.9 Corporate financing



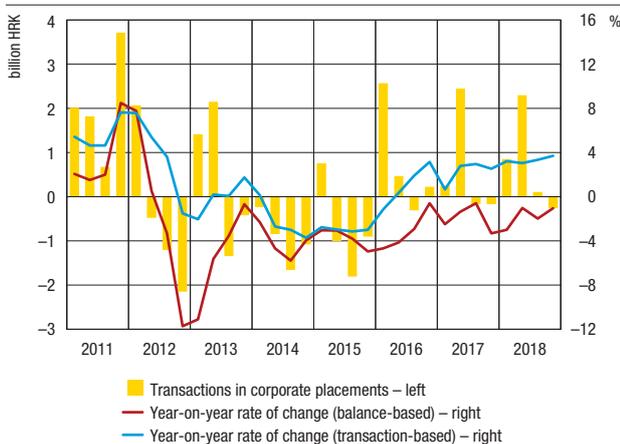
Notes: Other domestic financing includes borrowing from domestic leasing companies and the CBRD. Foreign debt excludes the effect of debt-equity swaps. All changes were calculated according to transactions (except for other domestic debt).
Sources: HANFA, CNB and CNB calculations.

Figure 7.11 Growth of corporate placements by activity transaction-based



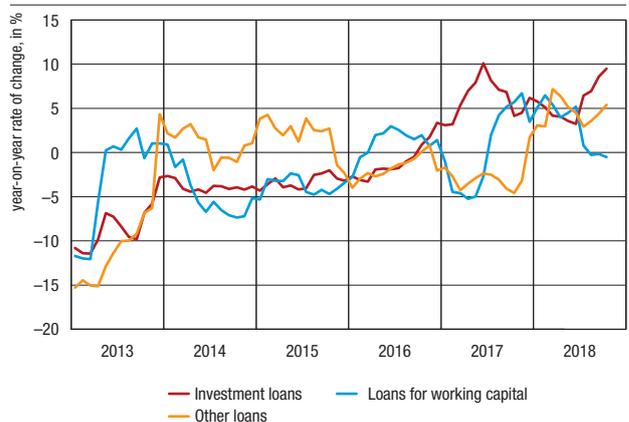
Source: CNB.

Figure 7.10 Corporate domestic placements of credit institutions



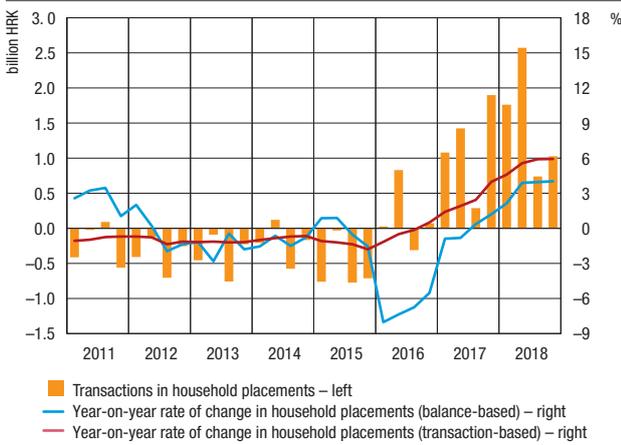
Note: Data for the fourth quarter of 2018 refer to October.
Source: CNB.

Figure 7.12 Growth of corporate loans by purpose transaction-based



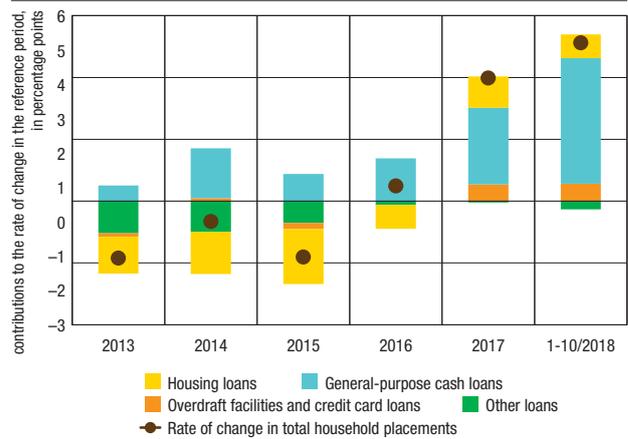
Source: CNB.

Figure 7.13 Household placements



Note: Data for the fourth quarter of 2018 refer to October.
Source: CNB.

Figure 7.14 Growth of household placements by loan type transaction-based



Source: CNB.

(transaction-based, Figure 7.13). The increase in household lending was still driven by lower financing costs, growth in employment and rising consumer confidence. As regards the structure of loans, all major types of loans grew during the first ten months of 2018 (Figure 7.14), with general-purpose cash loans, which accounted for four fifths of the increase in that period, being the main drivers of growth.

Projected developments

Total placements (government excluded) in 2018 might grow by 4.7% (transaction-based), following the increase of 2.9% in 2017. This growth acceleration is the result of faster growth of placements to corporates and households, which is in line with a further recovery of economic activity and growth in investments,

employment and personal consumption. As regards their nominal stock, the growth of total placements in 2018 was slower than the growth based on transactions, owing to a still considerable impact of the sale of irrecoverable claims. A moderate strengthening of the growth of placements to the private sector is expected in 2019.

The risks to the realisation of the projected credit growth dynamics are balanced. Uncertainties regarding the spillover of the negative effects of the restructuring of the Agrokor Group on the rest of the economy still exist. Furthermore, the increased price of borrowing as a result of growth in the interest rates of the largest central banks continues to pose a risk over the medium term. By contrast, further cleaning of the banks' balance sheets paves the way for faster credit growth over the medium term.

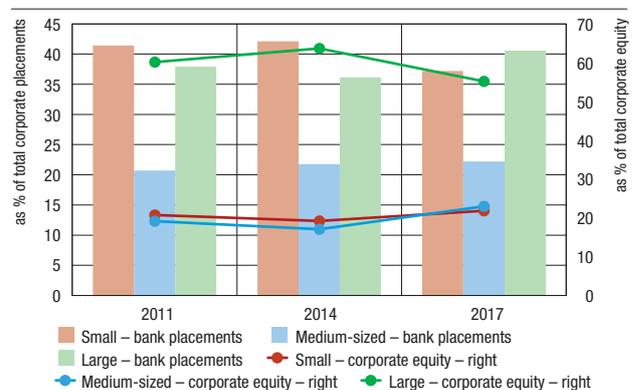
Box 4 Characteristics of small and medium-sized enterprises in the access to finance – Survey findings

The improvement of financing conditions, as reported by non-financial corporations in the second Survey on the access to financing of small and medium-sized enterprises (SMEs), is in line with the improved macroeconomic indicators and lower corporate debt. However, this favourable overall assessment combines diverse developments as regards the individual segments within the non-financial corporations sector. About 40% of SMEs do not use bank loans in their operations; over a half of such enterprises were unable to get a loan. The high share of small and especially young enterprises in this group confirms that obstacles in the way of access to finance still pose a problem.

The results of the first Survey on the access to finance of SMEs conducted in 2015 showed that SMEs in Croatia were unanimous in their view of the unfavourable institutional and business environment as the greatest hindrance to doing business, and two thirds of enterprises claimed that the access to finance impedes their business to a lesser or greater extent.

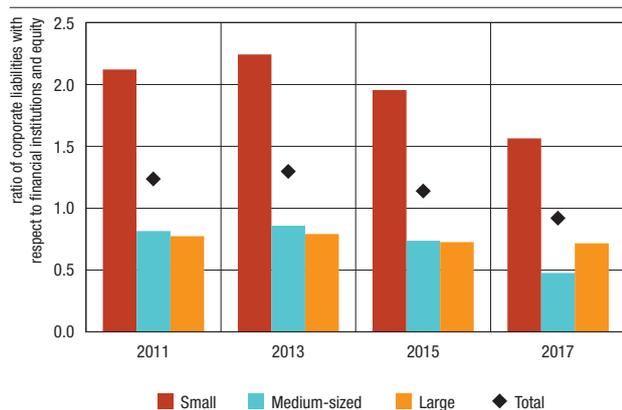
Two years later, in the second Survey, pressures on the labour market took the third place among the obstacles to doing business, immediately after the still leading business and institutional obstacles. Although during the second Survey enterprises

Figure 1 Corporate placements of banks and equity according to the size of enterprises



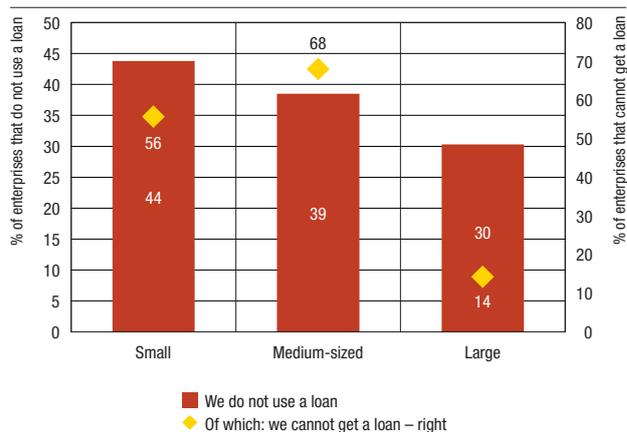
Note: On 31 December 2017, total corporate placements stood at HRK 90bn, i.e. HRK 33bn in small, HRK 20bn in medium-sized and HRK 37bn in large enterprises, and the total equity (capital and reserves) of the corporate sector stood at HRK 450bn, i.e. HRK 100bn in small, HRK 100bn in medium-sized and HRK 250bn in large enterprises.
Sources: FINA and CNB.

Figure 2 Corporate deleveraging shown by the ratio of financial liabilities and equity, according to the size of enterprises



Note: The ratio of long-term and short-term financial liabilities with respect to banks and other financial institutions, securities issued and equity (debt-to-equity ratio).
Sources: FINA and CNB calculation.

Figure 3 The share of enterprises not using a loan, of which the share of enterprises that cannot get a loan



Note: Calculated using the procedure which takes account of Survey weights.
Source: Survey on the access to finance of SMEs, CNB and Ipsos, 2017.

emphasised improved accessibility and more diverse sources of financing, for some groups of enterprises, such as, for example, small and medium-sized and start-up enterprises, access to finance was still recognised as a problem, but in a comparison with the responses from the first wave of the Survey, there was no deterioration.

Financial characteristics of SMEs

SMEs account for over 99% of the total number of enterprises and generate more than a half of gross value added, employing about 70% of the total number of employed persons in non-financial corporations.

The corporate placements of banks account for slightly less than a half of the total placements of banks to the private sector, with 60% of corporate placements directed precisely to small and medium-sized enterprises, and the remaining 40% to large enterprises. By contrast, equity is concentrated in large enterprises (Figure 1).

The sources of financing of SMEs became much more diverse in the previous two years, with a higher contribution of the absorption of EU funds. At the same time, the period was also marked by significant deleveraging by enterprises with respect to financial institutions (Figure 2). The improved access to finance is also recognised in the responses given by the enterprises participating in the Survey.

Access to finance – Survey responses

The decision to use internal or external funds depends on many factors. If a hypothetical economy with a perfect market is observed, internal (capital) and external (debt) sources of financing are perfect substitutes and “a firm’s investment decisions are independent of its financial condition” (Fazzari et al., 1988)²⁷. In practice, however, such a hypothetical economy does not exist, and factors such as transaction costs, tax advantages, administrative obstacles, asymmetric information, etc., have as a consequence the imperfect substitutability of internal sources

by external sources. As a result, the cost of borrowing may differ from the opportunity cost of internal finance. Therefore, financial constraints impact real variables, such as investments, working capital and the growth of the enterprise, in particular for enterprises with insufficient internal funds.

The enterprises that face financing constraints can be objectively defined through balance sheet items, for instance, as enterprises whose foreseen investments exceed the available financing. Another direction is enterprises’ self-assessment through survey questions (Ferrando and Mulier, 2015²⁸; Gomez, 2018²⁹), in which enterprises respond on the importance of bank financing for their operations, on obstacles caused by problematic access to finance or the reasons because of which they could not or did not want to take a bank loan.

In the Survey on the access to finance of SMEs³⁰, enterprises replied to questions about the importance of loans as sources of financing for their operations, with the following responses to the questions offered: “we used a loan” (currently or previously) and “we have never used a loan nor is this source important for our operation”. For about 40% of SMEs loans “are not important”, while, as expected, only 30% of large enterprises claim that for them loans “are not important”.

The fact that an enterprise does not use bank financing does not mean that the enterprise is facing financial constraints. On the contrary, such a financial structure may be the result of a deliberate business decision. For this reason, enterprises were asked why they did not use a bank loan, with the offered response options: “we were not able to” and “we did not want to”. If the enterprises that are not using loans are observed, over a half of small and two thirds of medium-sized enterprises were not able to get a loan. In the group of large enterprises, only 14% could not get a loan, of an otherwise small group of 30% of large enterprises that do not use loans (Figure 3).

Enterprises claimed that they could not get a loan for the following reasons (which are not mutually excluded): rejection of loan application, too long and/or too complex granting

27 Fazzari, S. M., R. G. Hubbard, and B. C. Petersen (1988): *Financing Constraints and Corporate Investment*, Brookings Papers on Economic Activity, Vol. (1), pp. 141-195.

28 Ferrando, A., and K. Mulier (2015): *Firms’ Financing Constraints: Do Perceptions Match the Actual Situation?*, Economic and Social Review, Vol. 46(1), pp. 87-117.

29 Gómez, M. G.-P. (2018): *Credit constraints, firm investment and growth: evidence from survey data*, No. 2126, European Central Bank, Working Paper Series.

30 For more details, see *Survey on the access to finance of SME-s – Survey findings*, Macroeconomic Developments and Outlook No. 3, 2017 and Bulletin No. 220, 2015.

procedure, too high interest and/or fee, unacceptable collateral requirements and inadequate creditworthiness. The reasons for such a problematic access to finance can be systemic or specific to a certain enterprise.

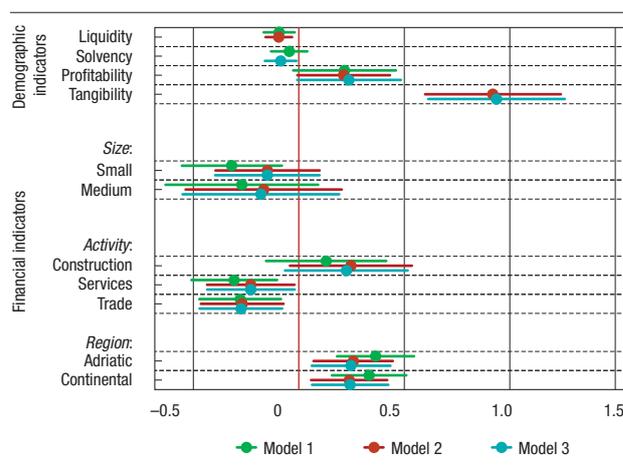
The enterprises to which loans “are not important in operation” were analysed through the binary-choice model. The variables that explain the behaviour of these enterprises are the financial indicators of enterprises (cash ratio, solvency, profit-to-sales and tangibility³¹ as a proxy variable³² for collateral), and their demographic characteristics (size, activity and region)³³.

Among the determinants of the enterprises to which “loans are not important in operation”, in all of the combinations of indicators, the share of tangible assets in total assets and demographic characteristics are emphasised constantly and consistently. In addition, the statistical significance of the ratios associated with cash ratio and solvency indicates that banks direct their placements towards those enterprises they estimate to be most likely to be able to repay. Enterprises with a stable and predictable cash flow have access to loans, irrespective of the share of tangible assets in total assets.

The Survey responses additionally suggest that young enterprises are hit the strongest by financial constraints. Young enterprises are also most frequently small, with a small share of tangible assets and, as a rule, a not very sizeable cash flow. Although the age of the enterprise is not explicitly included in the model, such findings are in line with references (Haltiwanger, 2011³⁵; Banerjee, 2014³⁶).

In conclusion, the Survey responses confirm a generally improved access to finance. However, small and in particular young enterprises face tightened financing conditions relative to other enterprises, in an environment in which intangible assets³⁷ have an increasing importance for the business performance of enterprises. The problem of start-up enterprises that derives

Figure 4 Ratios associated with the determinants of enterprises that do not use a bank loan in operation³⁴



Notes: Calculated using the binary-choice model, which uses the Survey weights. Dependent variable: “loan is not important in our operation” = 1, while “we use a loan” = 0. The reference enterprise for the binary variable calculation (base): large, industry activity Zagreb region. The dot marks the point estimate of the ratio, and horizontal lines show the confidence interval. If zero (the red vertical in the figure) does not intersect the confidence interval, the ratio is statistically significant.

Model 1 = $\beta_0 + \beta_1 \text{cash} + \beta_2 \text{solv} + \beta_3 \text{profit} + \text{dummy}_{\text{size, activity, region}}$

Model 2 = $\beta_0 + \beta_1 \text{cash} + \beta_2 \text{solv} + \beta_3 \text{profit} + \beta_4 \text{tang} + \text{dummy}_{\text{size, activity, region}}$

Model 3 = $\beta_0 + \beta_1 \text{cash} + \beta_2 \text{solv} + \beta_3 \text{profit} + \beta_4 \text{tang} + \text{dummy}_{\text{size, activity, region}}$

Sources: Survey on the access to finance of SMEs, CNB and Ipsos, 2017, FINA and CNB calculation.

from their lack of collateral is part of a broader issue of the financial market development. This market is shallow, and partly even non-existent, precisely in those segments that should be directed towards the financing of such enterprises.

8 Foreign capital flows

The financial account of the balance of payments saw a sharp net capital outflow in the third quarter of 2018. Excluding changes in gross international reserves³⁸, net foreign liabilities of domestic sectors dropped by EUR 3.9bn, as a result of the decrease in net debt liabilities, while net equity liabilities increased. The decrease in net debt liabilities mostly refers to the banks that used the inflow of foreign currency from tourism during the summer months to reduce their foreign liabilities. In the same period, the foreign position of the central bank deteriorated as a result of withdrawal of government deposits with the CNB for the repayment of a due bond.

The net inflow of equity investments in the third quarter of 2018 stood at EUR 0.6bn, which was significantly higher than in the previous few quarters. However, new direct equity

investments in Croatia were very modest and mostly associated with investments in real estate and trade activities. On the other hand, reinvested earnings of domestic entities owned by non-residents were significantly higher than in the same period last year, particularly in financial intermediation. Last year’s operating results of credit institutions were under a strong adverse impact of provisions for placements with the Agrokor Group. In addition, slightly higher reinvested earnings were recorded in information and communication and real estate activities, while it decreased in manufacturing and construction.

The considerable decline in net debt liabilities in the third quarter of 2018 (by EUR 4.5bn, CNB reserves and liabilities excluded) was the result of an almost equal increase in domestic sectors’ foreign assets and a decrease in their foreign liabilities.

31 Cash ratio = cash on hand/current liabilities; solvency = cash flow/total liabilities calculated as liabilities minus equity; profit-to-sales = (operating revenues – operating expenditures)/sales revenues; tangibility = share of tangible assets in total assets.

32 Proxy variable.

33 Size: total revenues \geq HRK 100.00 and (number of employees from 5 to 49 for small, 50 to 249 for medium-sized, \geq 250 for large enterprises, and size according to the Accounting Act = 1, 2, 3); activity according to NACE: industry (B, C, D), construction (F), trade (G), services (H, I, J, L, M, P, Q, R, S); NUTS2: Adriatic, Continental excluding Zagreb and Zagreb.

34 Jann, B. (2014): *Plotting regression coefficients and other estimates in Stata*, Stata Journal Vol. 14(4), pp. 708-737; StataCorp (2017): *Stata Statistical Software*, Release 15.

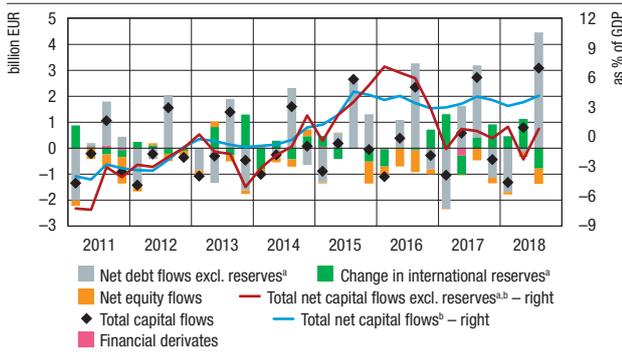
35 Haltiwanger, J. (2011): *Firm Dynamics and Productivity Growth*, EIB Papers, Vol. 16(1), pp. 116-136.

36 Banerjee, R. (2014): *SMEs, financial constraints and growth*, BIS Working Paper, No. 475.

37 Intangibles = research and development, concessions, licences, goodwill, patents, etc.

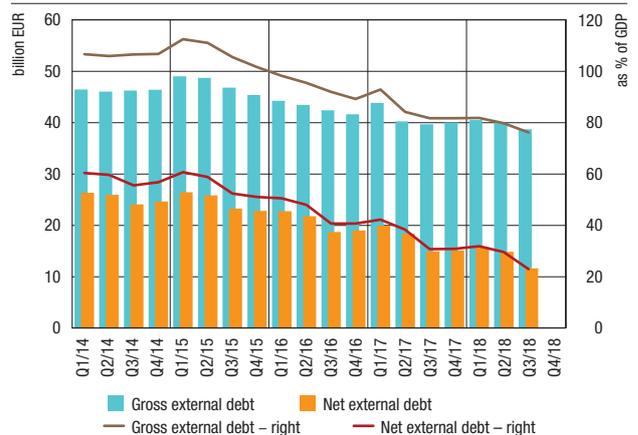
38 The investment of a share of international reserves in repo agreements resulted in an equivalent increase in gross international reserves and an increase in the external debt of the CNB.

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



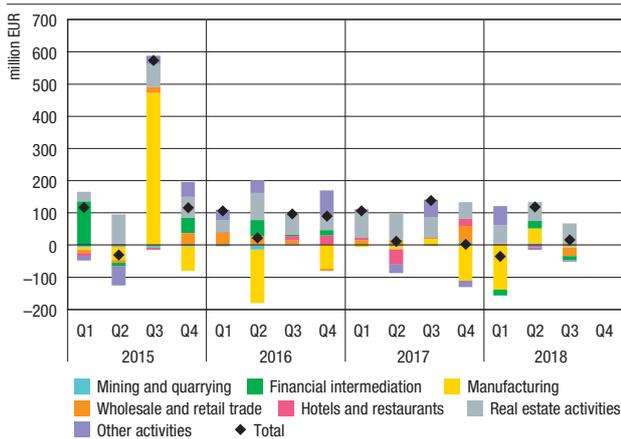
^a Changes in gross international reserves net of CNB liabilities.
^b Sum of the previous four quarters.
 Notes: Net flows mean the difference between changes in assets and liabilities. Equity flows comprise changes in foreign direct equity investments, reinvested earnings and portfolio equity investment,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

Figure 8.4 Stock of gross and net external debt



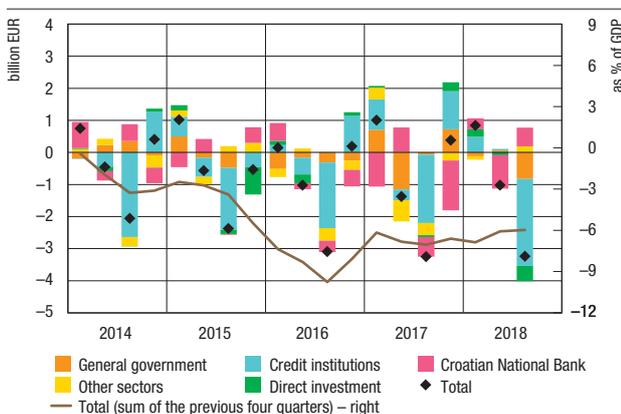
Note: Net external debt is calculated as the gross external debt stock net of foreign debt claims.
 Source: CNB.

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 8.3 Net external debt transactions by sectors



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

The net foreign position of banks, and to a certain extent that of the central government, which repaid a foreign bond in July, improved the most. Other domestic sectors slightly increased their liabilities with respect to foreign banks, in particular non-banking financial institutions and public non-financial corporations. By contrast, private non-financial corporations deleveraged additionally, in particular with respect to affiliated creditors.

The decrease in the debt liabilities of domestic sectors in the third quarter resulted in the improvement of relative indicators of external debt, which was additionally spurred by the rise in nominal GDP. At end-September 2018, gross external debt stood at EUR 38.7bn or 76.2% of GDP, down by 5.5 percentage points from the end of 2017. Since external debt assets increased at the same time, the improvement of the relative indicator of net external debt during the first three quarters was even more pronounced. Net external debt stood at EUR 11.9bn or 23.0% of GDP at the end of September 2018, down by 7.9 percentage points from the end of 2017.

Croatia's international investment position also improved, up from -61.9% of GDP at the end of 2017 to -53.3% of GDP at the end of the third quarter of 2018. Such developments were the result of the continuation of domestic sectors' deleveraging, while the net liabilities position associated with equity investments did not change considerably.

Projected developments

In accordance with the results in the first three quarters, at the level of the whole of 2018, a notable net capital outflow is also likely, primarily based on a decline in net debt liabilities of domestic sectors. A seasonal net capital inflow is expected in the last quarter of 2018.

As regards equity investments, the growth in net equity liabilities at the entire 2018 level could be more pronounced than in 2017. This is largely contributed to by higher credit institutions' reinvested earnings and smaller foreign investments than in 2017. At the same time, smaller equity investments in Croatia are expected, which reflects the results in the previous part of the year.

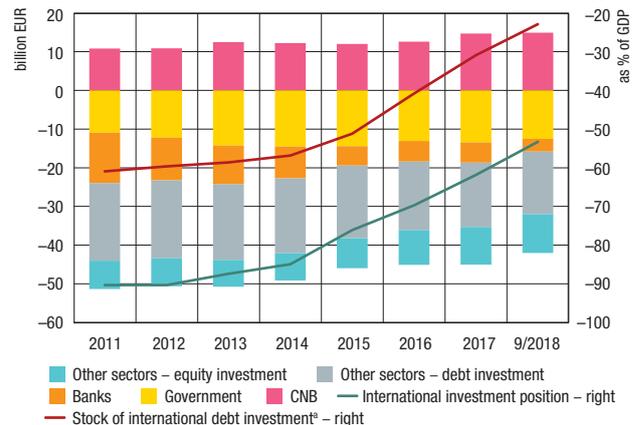
The estimated decline in net debt liabilities of domestic sectors in 2018 mostly relates to credit institutions and to a lesser extent to the government. Accordingly, relative indicators of external debt might improve additionally. Gross external debt might decline to about 75% of GDP, and net external debt,

owing to further growth in gross international reserves, to below one fourth of GDP.

Net capital outflow is also expected to continue in 2019, although at a slower pace than in 2018. The main factor of net capital outflow will probably be the continuation of domestic sectors' deleveraging, primarily of credit institutions. This should also be reflected in a further improvement of the relative indicators of external imbalances. Gross external debt could amount to about 70% of GDP by the end of 2019. The indicators of net external debt are expected to improve, which is additionally contributed to by the forecast growth of gross international reserves. At the same time, net inflow of equity investments in 2019 could exceed the results in the previous year, owing to the rise in new equity investments in Croatia, as well as the growth of profitability of domestic foreign-owned enterprises.

Negative risks related to the projection of capital flows mostly arise from a potential intensification of the process of normalisation of monetary conditions in the environment and a consequential deterioration of global financing conditions. Capital flows are increasingly exposed to the risk of global geopolitical and trade tensions, which may increase risk premiums significantly, reduce the availability of capital and limit the possibilities of refinancing foreign liabilities. In addition to an overall deterioration in the global investment climate in the conditions of heightened uncertainty, slow progress made in the

Figure 8.5 International investment position (net) by sectors



^a Stock of international debt investments (net) equals the negative value of the net external debt.
Source: CNB.

implementation of structural reforms in Croatia could additionally limit direct foreign equity investments, which have been very subdued anyway.

9 Monetary policy

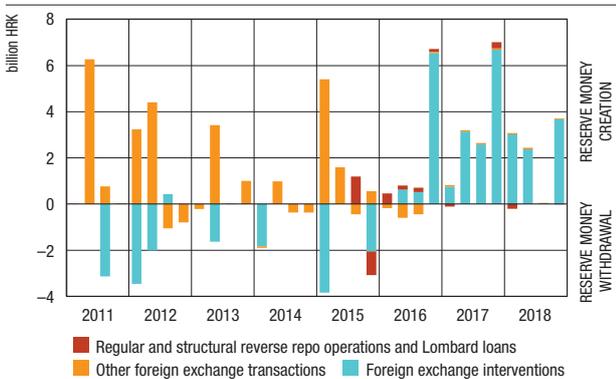
The CNB continued to pursue an expansionary monetary policy in the second half of 2018. In response to appreciation pressures on the exchange rate of the kuna against the euro, the central bank intervened in January and May and then again in early December by purchasing a total of EUR 1.2bn from banks. The CNB purchased from the Ministry of Finance EUR 27.9m from the beginning of 2018 to the beginning of December. In all foreign exchange transactions, the CNB created HRK 9.3bn (Figure 9.1).

As regards kuna operations, the CNB continued to conduct

regular weekly reverse repo auctions at a fixed repo rate of 0.3%. However, in the conditions of large kuna liquidity surpluses in the monetary system, there was such little interest on the part of banks that the CNB did not place any funds at these auctions from the beginning of 2018.

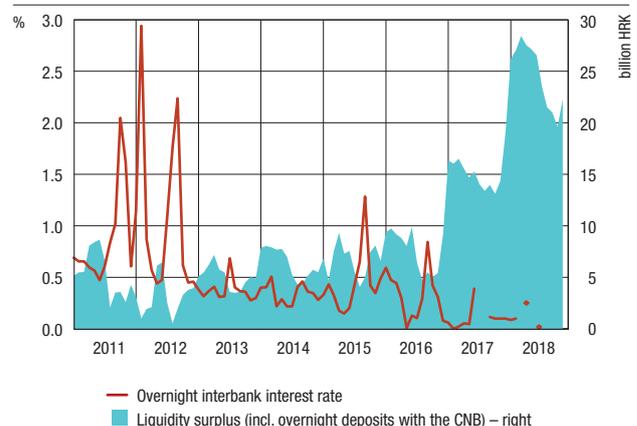
The average surplus kuna liquidity rose to HRK 24.6bn in the first eleven months of 2018, or HRK 9.4bn more than the average surplus in 2017 (Figure 9.2), which was mostly the result of reserve money creation by the purchase of foreign exchange from banks. Against this background, the average

Figure 9.1 Flows of reserve money (M0) creation



Notes: Other foreign exchange transactions include the purchase of foreign exchange from and the sale of foreign exchange to the MoF and the EC and foreign currency swaps with banks, where the positive values refer to the purchase of foreign exchange by the CNB. Data for the fourth quarter of 2018 are up to the beginning of December of 2018.
Source: CNB.

Figure 9.2 Bank liquidity and overnight interbank interest rate



Source: CNB.

weighted interest rate in overnight interbank trade stood at 0.11% in the period from January to November, and was almost the same as in 2017. The interbank rate leaped to 0.25% in April as a reflection of the only transaction made in that month, and it dropped to 0.00% in July, after which there was no trade in the remainder of the year, as in the most part of 2018.

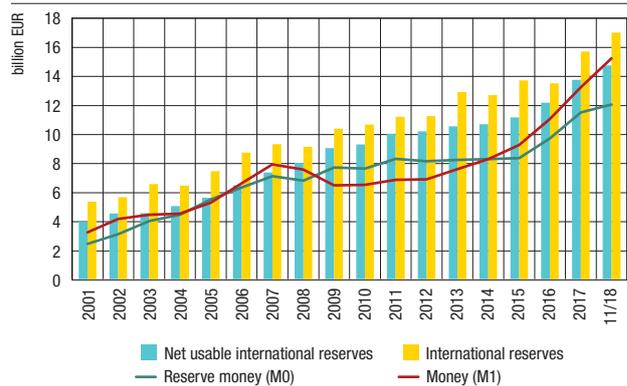
The exchange rate of the kuna against the euro stood at EUR/HRK 7.42 at the end of November 2018, down by 1.7% from the end of November 2017, while the average exchange rate in the first eleven months of 2018 was 0.5% lower than in the same period of the previous year (Figure 9.3). Appreciation pressures were associated with favourable balance of payments developments driven by growing exports and stronger inflows from EU funds, as well as lower euroisation and the ongoing economic recovery, all of which reduced fiscal risks and other macroeconomic imbalances. On the other hand, the exchange rate of the kuna against the US dollar and the Swiss franc was higher in late November than at the end of November 2017, reflecting the weakening of the euro against these two currencies on global financial markets.

Gross international reserves of the Republic of Croatia stood at EUR 17.0bn (Figure 9.4) at end-November and were EUR 1.3bn (8.3%) larger than at end-2017. Net usable reserves also went up in the same period, by EUR 1.0bn, amounting to EUR 14.7bn at the end of November. The growth in gross and net reserves was mostly due to purchases of foreign currency from banks and, to a lesser extent, the recent strengthening of the US dollar against the euro, as a portion of international reserves is held in that currency. Gross international reserves remained at higher levels than money (M1) and reserve money (M0).

The marked annual growth of total liquid assets (M4) continued in the first ten months of 2018 as a result of the strong increase in net foreign assets of the monetary system and a decrease in net domestic assets driven mostly by government's deleveraging with respect to domestic credit institutions (Figure 9.5).

The upward trend in real monetary aggregates continued in the first ten months of 2018. The annual rate of the real growth in total liquid assets (M4) stood at 3.2% at end-October, while real money (M1) and reserve money (M0) grew annually by 17.5% and 18.7% respectively (Figure 9.6). The increase in M1 was mostly driven by the rise in kuna funds in transaction

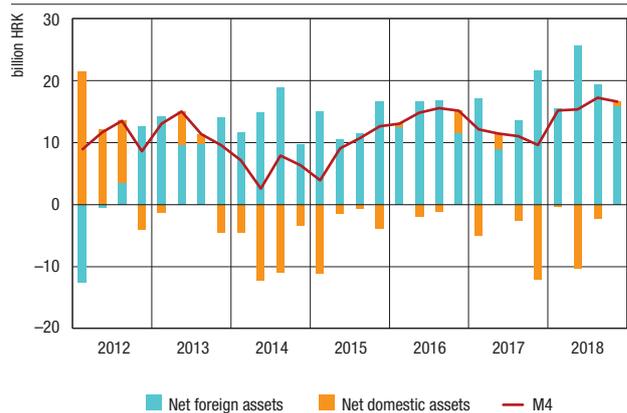
Figure 9.4 International reserves of the CNB and monetary aggregates



Notes: Net usable international reserves are defined as international reserves net of CNB foreign liabilities, reserve requirements in f/c, government foreign currency deposits and off-balance sheet liabilities (swaps). The most recent data available for M1 refers to the end of October 2018.

Source: CNB.

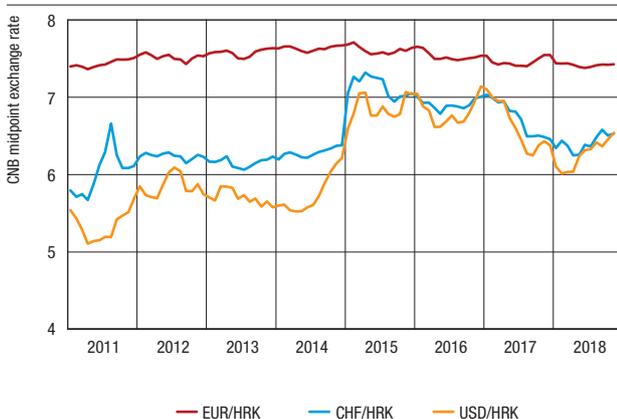
Figure 9.5 Net foreign assets, net domestic assets and total liquid assets (M4) absolute changes in the last 12 months



Notes: Absolute changes in the last twelve months excluding the exchange rate effect. Data for the fourth quarter of 2018 are up to October.

Source: CNB.

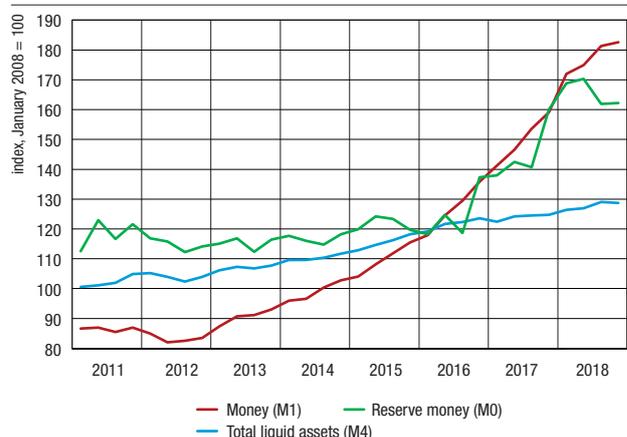
Figure 9.3 Nominal exchange rates of the kuna against selected currencies



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 fourth quarter of 2018 refer to the end of October.

Source: CNB.

accounts in a setting of low interest rates on savings and time deposits, while the rise in M0 primarily reflected large kuna liquidity surpluses created in CNB foreign exchange transactions.

Monetary policy will keep its expansionary character and

work towards the maintenance of the stable kuna/euro exchange rate. The central bank will continue to support high monetary system liquidity and thereby foster conditions for ongoing economic recovery in the setting of subdued inflation.

10 Public finance

According to the quarterly data on the execution of the consolidated general government budget (ESA 2010), the budget recorded a surplus of HRK 1.1bn (0.3% of GDP³⁹) in the first half of 2018, a considerable improvement from the same period last year, which saw a deficit of HRK 2.4bn (0.7% of GDP). The positive general government balance in the first half of 2018 reflects favourable developments in the second quarter, while the first quarter witnessed a budget deficit similar to that seen in the same period in 2017. Ministry of Finance data suggest that favourable developments in public finance continued in the third quarter as well.

In early November, the Croatian government adopted amendments to the state budget and financial plans of budgetary users that do not envisage any changes to the planned deficit of the general government budget for 2018. The deficit should thus total 0.5% of GDP under ESA 2010. According to the revision, favourable results that are expected in revenues affecting the budget balance should be offset by planned expenditures linked with invoked guarantees to shipyards.

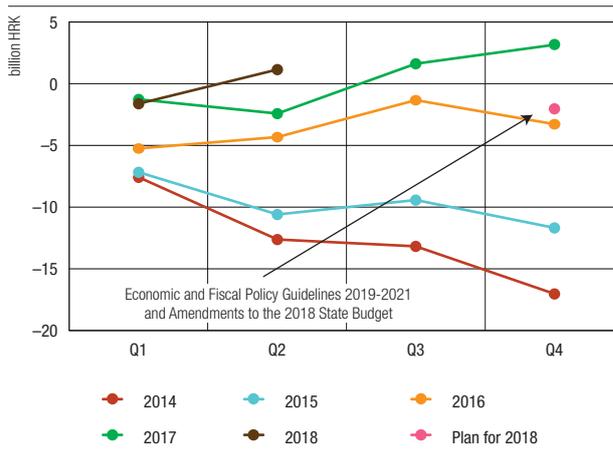
A detailed analysis of the revenue side of the budget (ESA 2010) shows that the first half of 2018 was marked by mostly favourable trends, with total revenues increasing noticeably from the same period in 2017 (5.0%). Indirect taxes and social contributions made a noticeable positive contribution, supported by favourable general economic trends. Revenues from direct taxes, primarily income tax revenues boosted by the relatively strong increase in the wage bill, also had a positive effect, although to a slightly lesser extent. On the other hand, other current revenues were slightly lower on an annual basis.

In the first half of 2018, the expenditure side of the consolidated general government budget (ESA 2010) saw a slight increase of 0.5% in total expenditures relative to the same period in 2017. Expenditures for employee compensations rose, probably under the influence of an increase in the number of civil servants and government employees as well as due to the whole-year effect of the gradual increase in the wage base of civil servants and government employees in 2017. Expenditures for social benefits increased as well (primarily under the influence of pension adjustments based on gross wages growth and consumer price index increase), as did the expenditures on government intermediate consumption. On the other hand, expenditures for investments decreased sharply, along with other current expenditures, expenditures for subsidies and interest expenditure.

The available MoF cash-basis consolidated central government data (GFS 2001) for the third quarter of 2018 suggest that favourable fiscal developments seen in the first half of 2018 continued, with revenues growing faster than expenditures on an annual basis (6.0% versus 4.4%)⁴⁰. Under the influence of economic growth, all main categories of tax revenues grew on an annual basis, as did revenues from social contributions, revenues

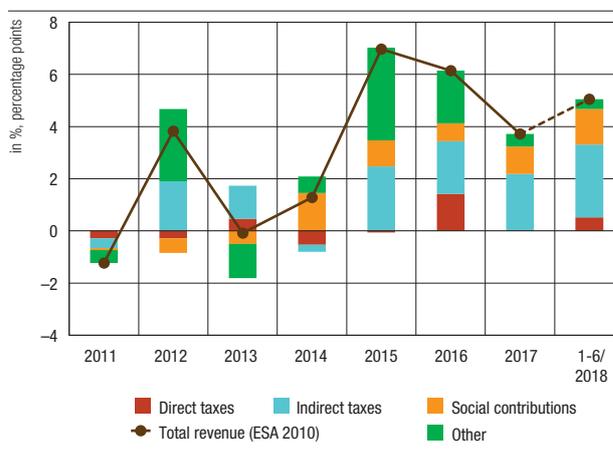
from grants and other revenues. On the other hand, most expenditures increased as well, although this was very largely a result of an increased use of EU funds which does not directly affect the budget balance. Expenditures on social benefits, employee compensations and expenditures for the use of goods and services contributed the most to the increase in total expenditures, while interest expenditure had the opposite effect. All this led to a cumulative surplus of central government revenues of HRK 4.6bn in the first nine months of 2018, relative to a surplus of HRK 3.6bn recorded in the same period in 2017.

Figure 10.1 General government cumulative balance by quarters
ESA 2010



Sources: Eurostat and MoF (CNB calculations).

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

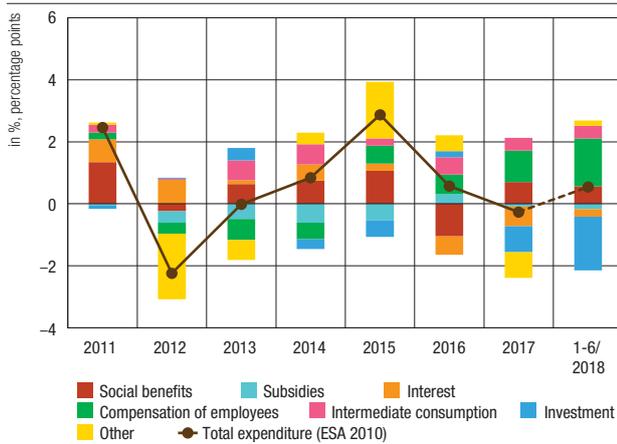


Source: Eurostat (CNB calculations).

39 As the sum of GDPs in the last four available quarters.

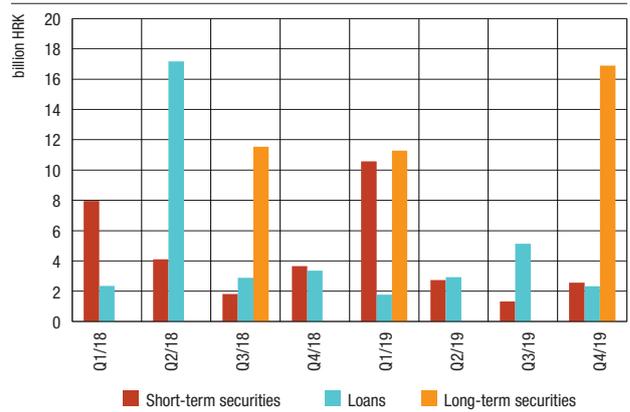
40 Consolidated central government total revenues no longer include income tax revenues, which have been fully transferred to the local government by the last tax reform.

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



Source: Eurostat (CNB calculations).

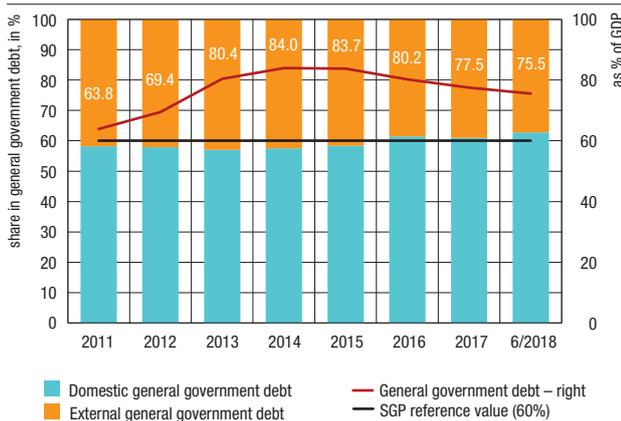
Figure 10.5 General government debt maturity



Note: Projection of the repayment of short-term and long-term securities is based on the balances as at 1 December 2018 and projection of the repayment of loans on the balance as at 30 September 2018.

Sources: MoF and CNB.

Figure 10.4 General government debt
end-period stock



Note: Nominal GDP for the last four available quarters was used for the calculation of the relative indicator at the end of June 2018.

Source: CNB.

Consolidated general government debt totalled HRK 282.1bn at the end of August 2018, a decrease of HRK 1.3bn from the end of 2017, partly reflecting the appreciation of the exchange rate of the kuna versus the euro in the observed period. As for the relative indicator of public debt, thanks to the favourable influence of economic growth, the same period saw a decrease in the public debt to GDP ratio, which fell from 77.5% at the end of 2017 to 75.5% of GDP. The government used favourable circumstances in the domestic and international financial markets in the first half of the year to repay maturing liabilities and, in part, to accumulate deposits to finance the budget deficit at the end of the year. In June 2018, the government issued a foreign bond worth EUR 750m, while in July, the second tranche of domestic bonds with a nominal value of HRK 5.5bn was issued, maturing in 2023, along with a new bond nominally valued at HRK 5.0bn, maturing in 2029. In addition to regular T-bill issues, with zero interest rates recorded for the first time on euro T-bills, at the beginning of the second quarter, the government refinanced the EUR 1.8bn debts of CM, ARZ and CR with a syndicated loan made by domestic banks under more favourable conditions.

11 Deviations from the previous projection

The estimate of real global developments for 2018 is less positive than expected in the July projection. Recent third quarter developments in the global economy were slightly below expectations, so that the estimated global growth rate for 2018 was lowered by 0.2 percentage points (Table 11.1). Among developed markets, expectations for the euro area deteriorated the most, including Italy and Germany –important Croatian trading partners. As regards monetary policy, the expected pace of tightening of the Fed's monetary policy and expectations regarding the ECB's policy through to the end of 2018 have remained almost the same as in the previous projection.

The expected economic growth rate for 2018 has remained almost the same as in the July projection, so that real Croatian GDP might grow by 2.7% (vs the previously projected 2.8%). The most important correction was made in capital investments, which might grow by 3.7% instead of the previously anticipated 6.4%, reflecting a slump in private and public sector investment. Furthermore, the expected growth rate in exports of goods and services has also been revised downwards due to worse than expected performance in the second and third quarters. As a result, total exports might rise by 3.6% in 2018 instead of the previously expected 4.9%. The expected personal consumption growth rate is also lower than previously projected (3.2% vs 3.6%), exclusively due to poorer results in the third quarter of 2018. By contrast, the growth in government consumption might provide a larger positive contribution than anticipated due to better performance over the year, so that the growth rate might be 3.7% in 2018 (vs the previously expected 2.7%). Finally, due to diminished expectations regarding exports of goods and services as well as investment, total imports might be lower than anticipated in the latest official projection. Imports of goods and services might grow by 5.1% in 2018 (against the previously projected 7.1%), so that the negative contribution of net foreign demand to economic growth will be lower than projected in this July (–0.7 percentage points vs

–1.0 percentage points).

The average annual consumer price inflation rate for 2018 is estimated at 1.5%, which is 0.2 percentage points lower than in the previous projection. This is the consequence of slower estimated annual growth in the index of prices excluding food and energy, due to lower results, particularly in July, as the seasonal drop in the prices of clothing and footwear was more pronounced than last year. In addition, the average annual increase in food prices has been revised slightly downwards, mostly because of much smaller than expected increases in August and September. The projected average annual growth in energy prices in 2018 remained unchanged from the previous projection.

The estimate of the current and capital account surplus in 2018 was raised from the previous projection by 1.0 percentage point, with the lower deficit expected in foreign trade and in the primary income account. The more favourable estimate of the foreign trade deficit was the result of a sharper decrease in imports than exports. The forecast for imports has been corrected due to weaker than anticipated investment activity and the slower increase in exports, as well as the lower price of crude oil, which reduces the value of imports of oil and refined petroleum products. At the same time, the forecast for goods exports has been adjusted downwards due to sluggish foreign demand. In addition, expected net exports of services, tourism in particular, have been revised downwards in line with the results for the year so far. In view of the more favourable balance in the current and capital account, the projection of the relative indicators of gross external debt at end-2018 has also been revised downwards from the July projection.

The projection for 2018 growth in credit institutions' placements (excluding the government) has been revised slightly upwards from previous expectations. Placements might grow by 4.7% in 2018, compared with the previously projected 4.6% (on the basis of transactions). The marginal pick-up in bank

Table 11.1 Basic assumptions, deviations from the previous projection

	2018		
	Previous projection (7/2018)	Current projection	Deviation
GDP (real rate of change, in %)			
Rest of the world	3.9	3.7	–0.2
Euro area	2.4	2.0	–0.4
USA	2.9	2.9	0.0
Developing countries and emerging market countries	4.9	4.7	–0.3
Central and Eastern European countries	4.3	3.8	–0.5
Main trading partners of the Republic of Croatia	2.6	2.4	–0.2
Prices			
Euro area HICP ^a	1.4	1.7	0.3
Oil prices (USD/barrel) ^b	72.7	72.8	0.1
Key interest rates			
EURIBOR 3M (end of year) ^c	–0.29	–0.31	0.0
ECB main refinancing rate ^c	0.00	0.00	0.0
US federal funds target rate ^c	2.40	2.50	0.1

^a ECB, September 2018. ^b Bloomberg, Brent crude oil futures. ^c Bloomberg.

Source: IMF (WEO), October 2018.

Table 11.2 Domestic indicators, deviations from the previous projection

	2018			2019		
	Previous projection (7/2018)	Outturn	Deviation	Previous projection (7/2018)	Current projection	Deviation
National accounts (real rate of change, in %)						
GDP	2.8	2.7	-0.1	2.8	2.7	-0.1
Personal consumption	3.6	3.2	-0.4	3.1	3.5	0.4
Government consumption	2.5	3.3	0.8	1.7	2.6	0.9
Gross fixed capital formation	6.4	3.7	-2.7	6.7	6.0	-0.7
Exports of goods and services	4.9	3.6	-1.3	4.7	3.4	-1.2
Imports of goods and services	7.1	5.1	-2.0	6.0	5.3	-0.7
Labour market						
Number of employed persons (average rate of change, in %)	2.2	2.4	0.1	1.9	1.8	-0.1
Registered unemployment rate	10.0	9.9	-0.1	9.0	8.8	-0.3
ILO unemployment rate	9.7	8.4	-1.3	8.8	7.2	-1.5
Prices						
Consumer price index (rate of change, in %)	1.7	1.5	-0.2	1.6	0.9	-0.7
External sector						
Current account balance (as % of GDP)	2.3	2.9	0.5	1.8	2.0	0.2
Current and capital account balance (as % of GDP)	3.2	4.1	1.0	2.8	3.4	0.6
Gross external debt (as % of GDP)	75.8	75.0	-0.7	69.4	70.0	0.6
Monetary developments (rate of change, in %)						
Total liquid assets – M4	5.3	5.2	0.0	5.2	5.4	0.2
Total liquid assets – M4 ^a	5.3	5.4	0.1	5.4	5.5	0.1
Credit institution placements	2.7	2.7	0.0	5.0	3.9	-1.0
Credit institution placements ^b	4.6	4.7	0.1	5.0	4.8	-0.2

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

Source: CNB.

lending is the outcome of stronger lending to households and other financial institutions, coupled with a weaker than expected lending to enterprises in the preceding part of the year. As regards changes in placements in nominal terms, current projections show an increase of 2.7% in 2018, the same as previously expected.

The projected growth of total liquid assets (M4) in 2018 is slightly higher than expected in the previous projection (5.4% relative to 5.3%, excluding the exchange rate effect). This was largely due to better performance of foreign currency deposits and money (M1) thanks to the successful tourist season and the ongoing economic recovery.

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	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Croatian National Bank (July 2018)	2.7	2.7	3.2	3.5	3.7	6.0	3.6	3.4	5.1	5.3	-	-	1.4	0.9
World Bank (June 2018)	2.7	2.5	-	-	-	-	-	-	-	-	-	-	-	-
The Institute of Economics, Zagreb (March 2018)	2.8	2.8	3.8	3.6	4.1	5.4	4.3	4.2	6.2	5.9	-	-	1.6	1.5
Eastern Europe Consensus Forecasts (May 2018)	2.7	2.9	3.5	3.4	4.6	6.6	3.6	4.0	5.7	5.8	-	-	1.6	1.2
European Bank for Reconstruction and Development (May 2018)	2.7	2.7	3.5	2.8	4.2	5.2	-	-	-	-	1.4	2.5	1.6	1.9
European Commission (May 2018)	2.8	2.6	-	-	-	-	-	-	-	-	-	-	1.6	1.5
Addiko Bank Economic Research ^a (April 2018)	2.6	2.5	-	-	-	-	5.5	6.0	6.1	7.0	1.0	2.7	1.4	2.0
International Monetary Fund (April 2018)	3.0	2.9	3.8	3.1	5.3	5.1	4.3	4.9	6.9	6.8	-	-	1.6	1.5
Ministry of Finance (April 2018)	3.0	3.0	3.6	3.0	5.0	6.5	7.5	5.5	8.4	7.3	2.6	3.0	1.6	1.6
Raiffeisen Research ^a (November 2017)	2.6	2.7	-	-	-	-	-	-	-	-	-	-	-	-

^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 the Convergence Programme of the Republic of Croatia for the period 2018-2021.

Sources: Publications of the respective institutions.

13 Annex B: Comparison of Croatia and selected countries

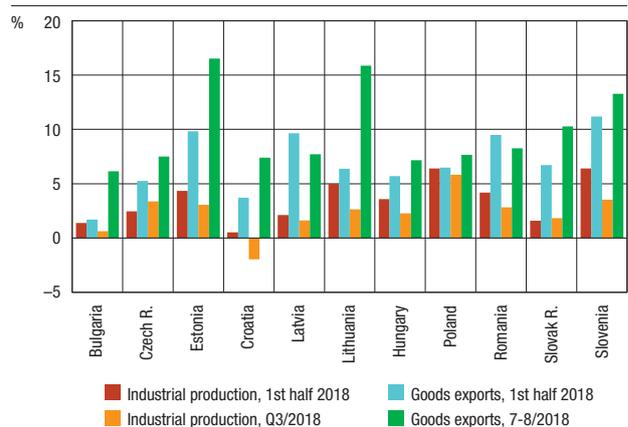
Table 13.1 Gross domestic product

	Year-on-year rate of change, original data			Quarter-on-quarter rate of change, seasonally adjusted data			
	2015	2016	2017	Q4/17	Q1/18	Q2/18	Q3/18
Bulgaria	3.5	3.9	3.8	0.7	0.9	0.8	-
Czech R.	6.3	2.5	4.3	0.7	0.5	0.7	-
Estonia	1.9	3.5	4.9	1.9	0.2	1.4	-
Croatia	2.4	3.5	2.9	0.2	0.8	1.0	0.6
Latvia	3.0	2.1	4.6	0.7	1.4	1.0	-
Lithuania	2.0	2.4	4.1	1.3	1.0	0.9	-0.4
Hungary	3.5	2.3	4.1	1.3	1.2	1.0	-
Poland	3.8	3.1	4.8	1.0	1.6	1.0	-
Romania	3.9	4.8	7.3	0.3	0.1	1.4	1.9
Slovak R.	4.2	3.1	3.2	-	-	-	-
Slovenia	2.3	3.1	4.9	2.0	0.5	0.8	-
Average^a	3.3	3.1	4.4	1.0	0.8	1.0	0.7

^a Simple average.

Sources: Eurostat, EC, CBS and CNB.

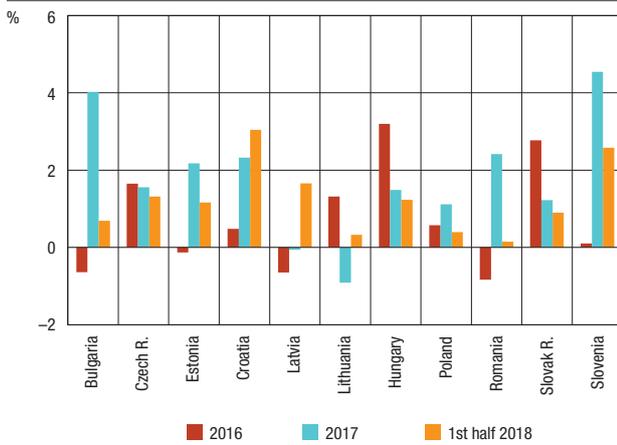
Figure 13.1 Industrial production and goods exports
year-on-year rate of change



Note: The most recent data available on industrial production in Romania refers to August 2018 and that for other countries to September 2018.

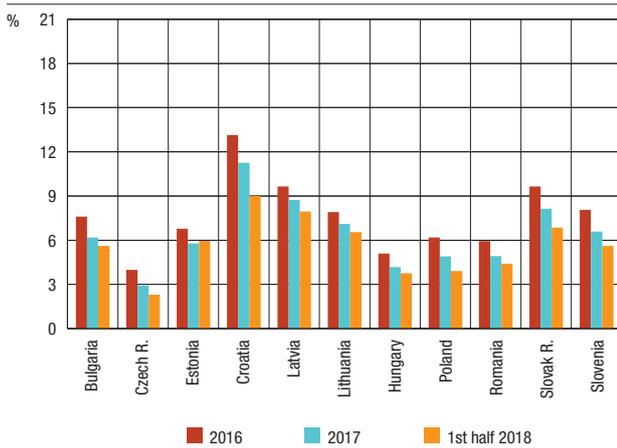
Sources: Eurostat and CBS.

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



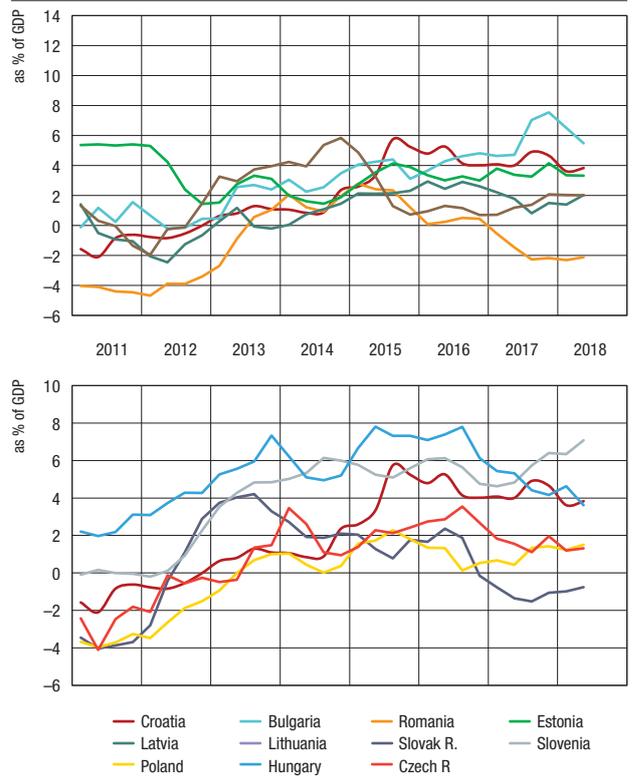
Source: Eurostat.

Figure 13.3 Labour Force Survey unemployment rate



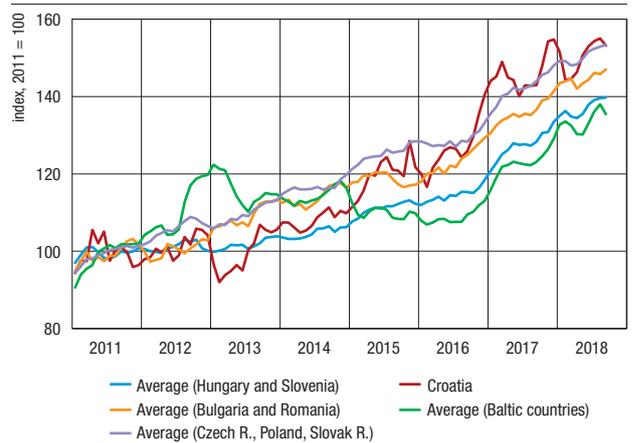
Source: Eurostat.

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



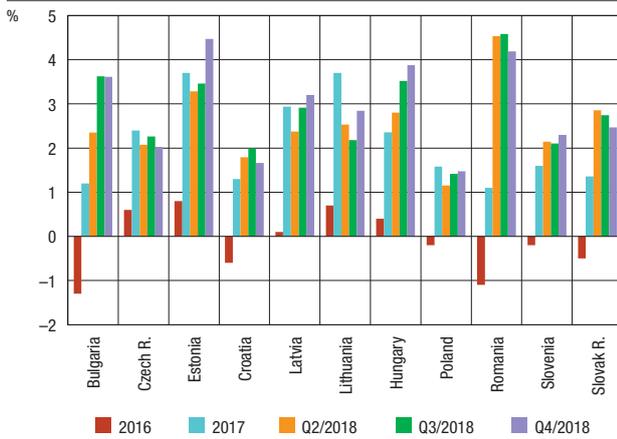
Sources: Eurostat and CNB.

Figure 13.5 Goods exports
quarterly moving average, seasonally adjusted data



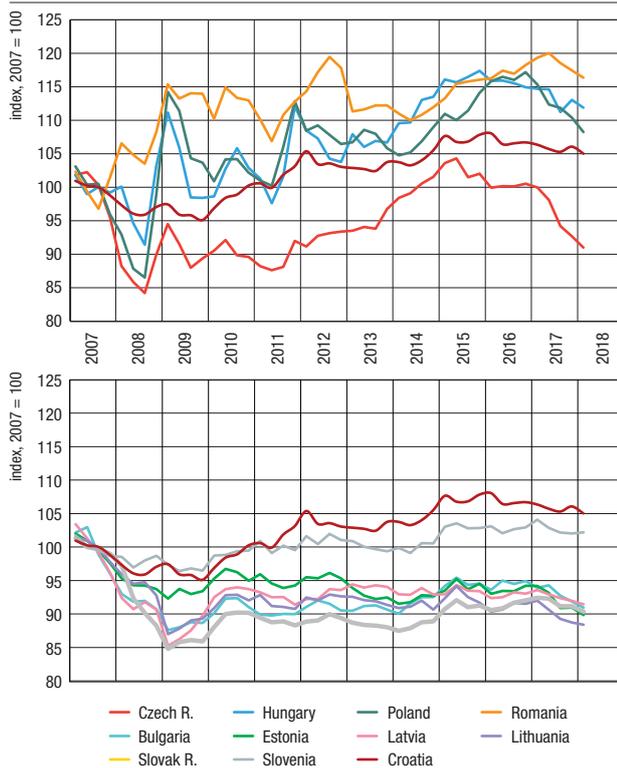
Sources: Eurostat and CNB.

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



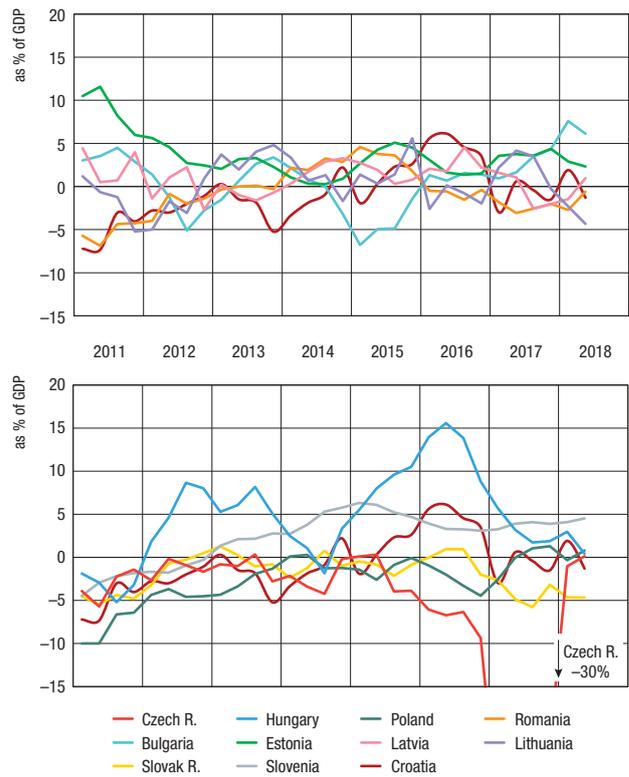
Note: Data for the fourth quarter of 2018 refer to October.
Source: Eurostat.

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



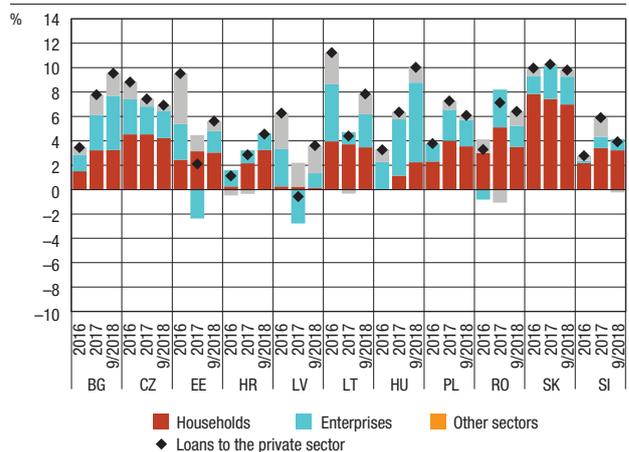
Notes: Data for 2018 refer to the first quarter. A fall in the index indicates a real effective appreciation.
Sources: BIS and CNB.

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



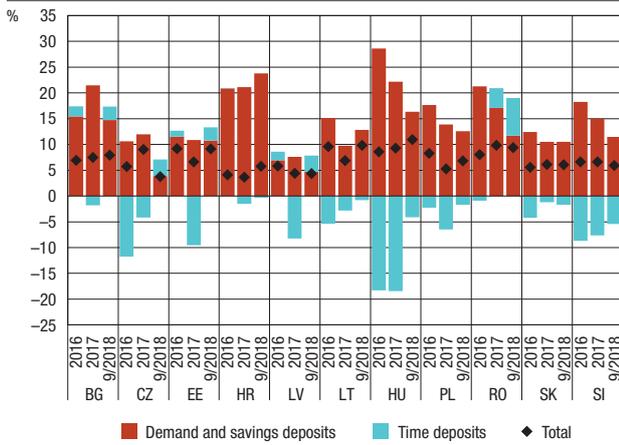
Sources: Eurostat and CNB.

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



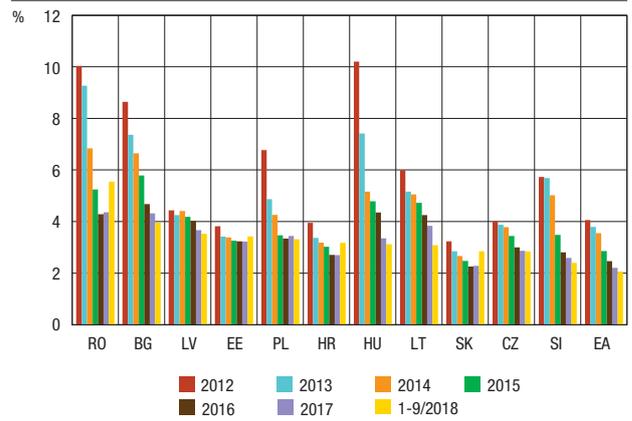
Sources: ECB and CNB.

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



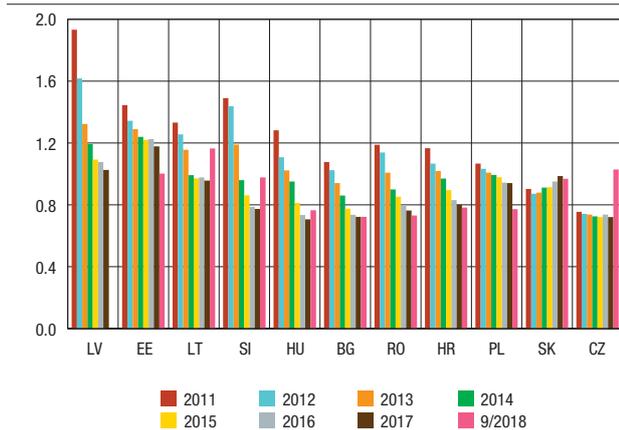
Sources: ECB and CNB.

Figure 13.13 Short-term interest rates on corporate loans



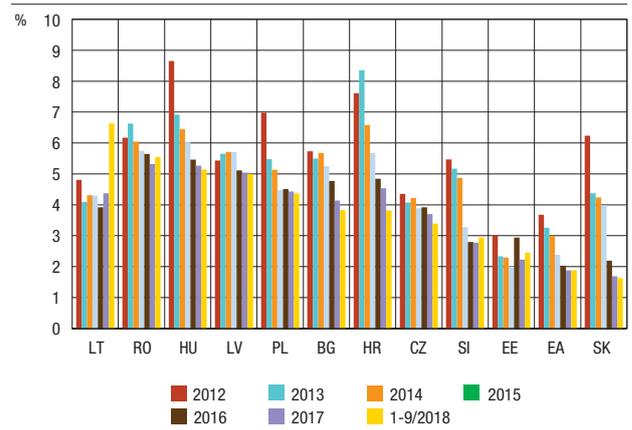
Note: Includes average interest rates on corporate loans up to EUR 1m and with a maturity of up to 1 year.
Source: ECB.

Figure 13.11 Placement to deposit ratio of the private sector



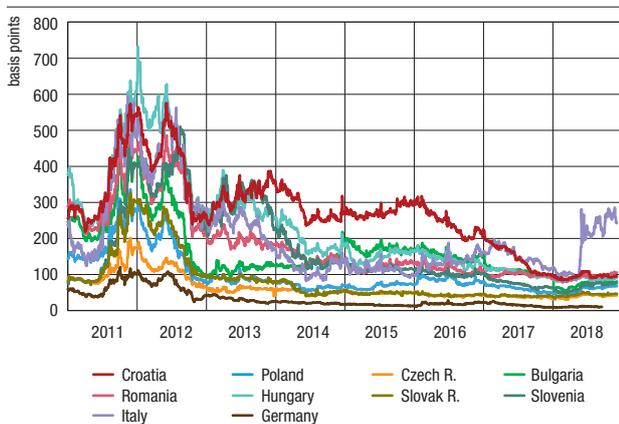
Sources: ECB and CNB.

Figure 13.14 Interest rates on housing loans



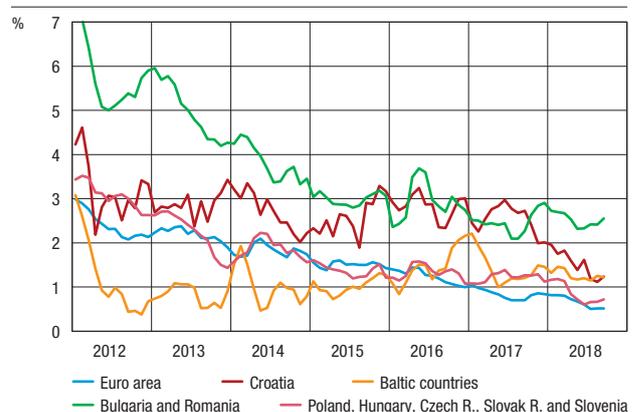
Sources: ECB and NCBS.

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



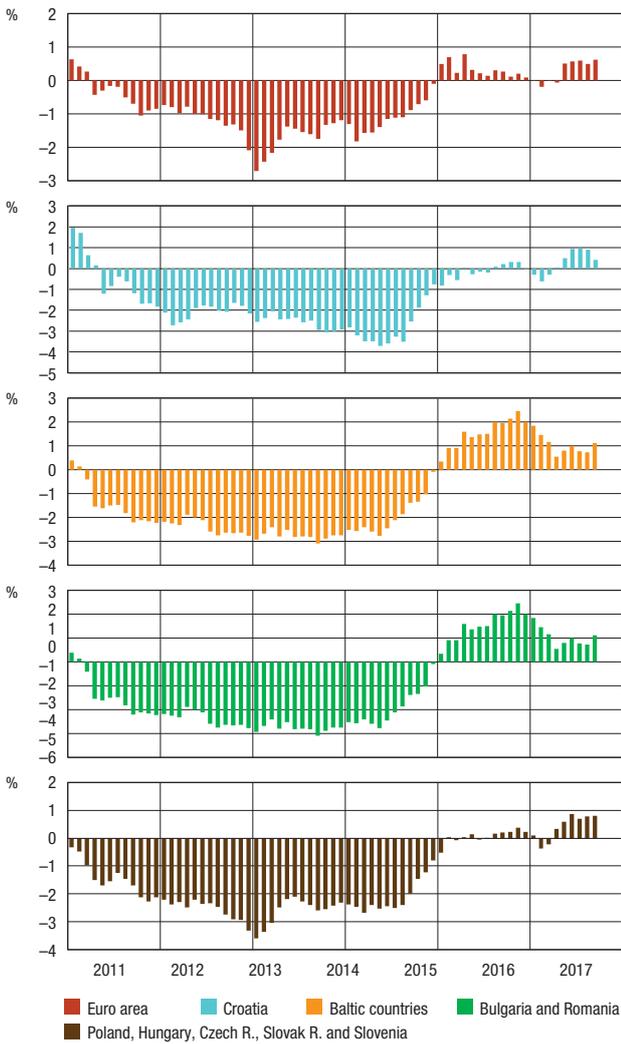
Note: Credit default swaps (CDS) spread is an annual premium that a CDS buyer pays for protection against credit risk associated with an issuer of an instrument.
Source: S&P Capital IQ.

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.

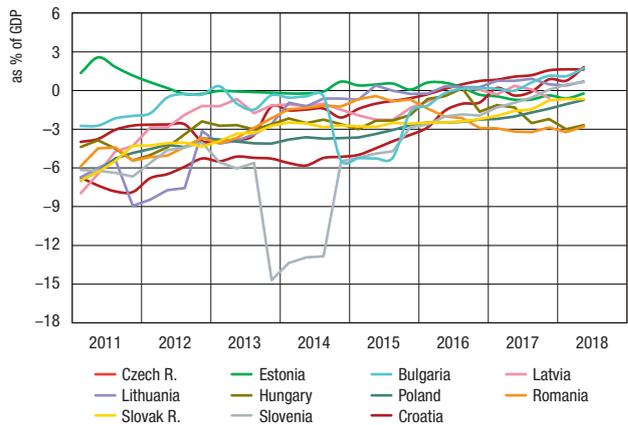
Figure 13.16 Spread between expected and achieved real interest rate on corporate loans up to EUR 1 and with maturity up to 1 year



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.

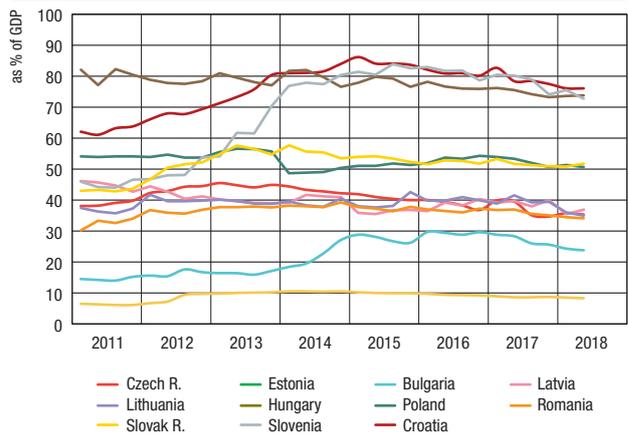
Sources: ECB and Consensus Forecasts.

Figure 13.17 Consolidated general government balance four-quarter moving sums



Sources: Eurostat and CNB.

Figure 13.18 General government debt end-quarter stock



Sources: Eurostat and CNB.

Abbreviations and symbols

Abbreviations

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

Three-letter currency codes

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

Two-letter country codes

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

Symbols

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

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