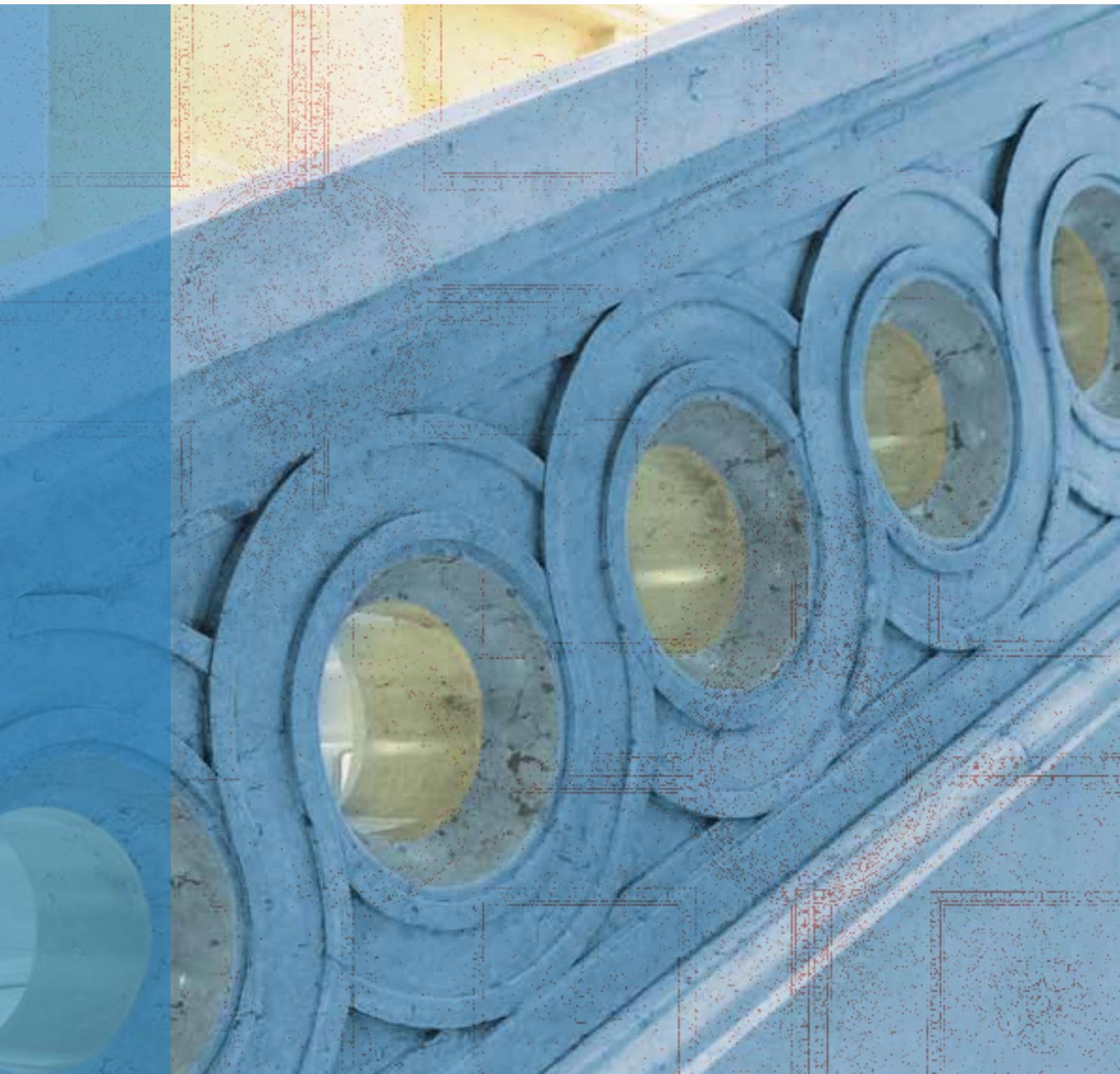




Macroeconomic Developments and Outlook

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General information on Croatia

Economic indicators

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	4.310	4.303	4.290	4.280	4.268	4.256	4.238	4.204	4.174	4.125	4.089
GDP (million HRK, current prices) ^b	346,735	330,771	328,824	333,215	330,509	331,209	331,343	339,696	351,169	366,426	382,624
GDP (million EUR, current prices)	48,003	45,067	45,130	44,822	43,966	43,732	43,426	44,640	46,640	49,118	51,608
GDP per capita (in EUR)	11,138	10,474	10,520	10,472	10,301	10,275	10,247	10,619	11,174	11,907	12,621
GDP – real year-on-year rate of growth (in %)	1.8	-7.4	-1.5	-0.3	-2.2	-0.5	-0.1	2.4	3.5	3.1	2.6
Average year-on-year CPI inflation rate	6.1	2.4	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.1	1.5
Current account balance (million EUR) ^c	-5,048	-2,959	-974	-799	-789	-461	111	1,452	994	1,679	973
Current account balance (as % of GDP)	-10.5	-6.6	-2.2	-1.8	-1.8	-1.1	0.3	3.3	2.1	3.4	1.9
Exports of goods and services (as % of GDP)	36.4	32.7	36.2	38.9	39.6	40.5	43.3	46.4	47.7	50.1	50.6
Imports of goods and services (as % of GDP)	46.6	38.3	37.9	40.6	41.2	42.5	43.7	46.1	46.5	49.4	51.4
External debt (million EUR, end of year) ^c	43,919	48,173	49,423	49,117	47,575	48,471	49,095	48,230	44,714	43,683	42,710
External debt (as % of GDP)	91.5	106.9	109.5	109.6	108.2	110.8	113.1	108.0	95.9	88.9	82.8
External debt (as % of exports of goods and services)	251.1	327.0	302.3	282.0	273.4	273.6	260.9	232.7	201.0	177.5	163.7
External debt service (as % of exports of goods and services) ^d	37.7	56.0	51.2	42.5	46.1	43.5	46.3	44.0	35.7	33.1	27.1
Gross international reserves (million EUR, end of year)	9,121	10,376	10,660	11,195	11,236	12,908	12,688	13,707	13,514	15,706	17,438
Gross international reserves (in terms of months of imports of goods and services, end of year)	4.9	7.2	7.5	7.4	7.5	8.3	8.0	8.0	7.5	7.8	7.9
National currency: kuna (HRK)											
Exchange rate on 31 December (HRK : 1 EUR)	7.3244	7.3062	7.3852	7.5304	7.5456	7.6376	7.6615	7.6350	7.5578	7.5136	7.4176
Exchange rate on 31 December (HRK : 1 USD)	5.1555	5.0893	5.5683	5.8199	5.7268	5.5490	6.3021	6.9918	7.1685	6.2697	6.4692
Average exchange rate (HRK : 1 EUR)	7.2232	7.3396	7.2862	7.4342	7.5173	7.5735	7.6300	7.6096	7.5294	7.4601	7.4141
Average exchange rate (HRK : 1 USD)	4.9344	5.2804	5.5000	5.3435	5.8509	5.7059	5.7493	6.8623	6.8037	6.6224	6.2784
Consolidated general government net lending (+)/borrowing (-) (million HRK) ^e	-9,792	-20,005	-21,261	-26,369	-17,695	-17,678	-17,725	-11,262	-3,884	2,914	992
Consolidated general government net lending (+)/borrowing (-) (as % of GDP) ^e	-2.8	-6.0	-6.5	-7.9	-5.4	-5.3	-5.3	-3.3	-1.1	0.8	0.3
General government debt (as % of GDP) ^e	39.3	48.7	57.8	64.4	70.1	81.2	84.7	84.4	81.0	78.0	74.8
Unemployment rate (ILO, persons above 15 years of age)	8.5	9.2	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.2	8.4
Employment rate (ILO, persons above 15 years of age)	48.6	48.2	46.5	44.8	43.2	42.1	43.3	44.2	44.6	45.8	46.9

^a The population estimate of the Republic of Croatia for 2000 is based on the 2001 Census and that for the 2001-2017 period on the 2011 Census. Data for 2018 are preliminary.

^b The GDP data are presented according to the ESA 2010 methodology. Data for 2017 and 2018 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 2019 and data on the gross external debt position as at the end of September 2019.

^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

Economic growth picked up in the third quarter of 2019 after having slowed down in the second quarter. The intensification of real activity reflected an increase in personal consumption and exports of goods and services that was stronger than in the previous quarter. In addition, a sharp deceleration was seen in total imports growth. The real GDP growth rate might reach 3.0% for 2019 as a whole and 2.8% in 2020. The labour market should see continued growth in the number of employed persons and a fall in the unemployment rate. Inflation is expected to slow down to 0.8% in 2019, mainly due to a smaller contribution of energy prices and to the reduction in the value added tax rate on food and pharmaceutical products. Inflation might speed up to 1.4% in 2020, spurred by the increase in the annual growth rate of food prices and the rise in excises. Notwithstanding the further deepening of the foreign trade deficit, the surplus in the current and capital account might be larger in the whole of 2019 than in 2018 owing to the rising exports of services, increased use of EU funds and the growth in income from personal remittances, but it is expected to decrease in 2020. The trend of improvement in the relative indicators of external debt might continue. The CNB's monetary policy is expected to keep its expansionary character, supporting the high liquidity in the monetary system and maintaining the stability of the kuna against the euro. As regards fiscal policy, the amendments to the 2019 budget suggest that, following a surplus recorded in 2018, the general government might run a slight deficit of 0.1% of GDP in 2019, whereas the budget proposal for 2020 anticipates a surplus of 0.2% of GDP. General government debt is likely to continue to fall in line with the prescribed fiscal rules.

Economic growth accelerated in the third quarter of 2019, with real GDP growth picking up to 0.8%, after being 0.5% in the April-June period. Viewed on an annual level, real GDP grew by 2.9% in the third quarter of 2019, with the biggest contribution to total growth coming from exports of goods and services. As available monthly data point to steady economic growth in the last three months, the GDP growth rate might come to 3.0% in 2019. The largest individual contribution to real GDP growth should come from personal consumption growth in 2019, which

is expected to outpace that seen in 2018, whereas stronger investment activity is also expected to give a strong contribution. As regards foreign demand, exports of goods and services are expected to continue growing at a pace similar to that in the previous year. By contrast, the rise in total imports might be slower than in 2018 due to the exceptionally low imports of goods in the third quarter. As a result, the negative contribution of net foreign demand to economic growth might be lower in 2019 than in the previous year. Economic activity is expected to grow

Table 1.1 Summary table of projected macroeconomic measures

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
National accounts (real rate of change, in %)											
GDP	-1.5	-0.3	-2.2	-0.5	-0.1	2.4	3.5	3.1	2.7	3.0	2.8
Personal consumption	-1.5	1.0	-2.4	-1.6	-2.5	0.2	3.1	3.2	3.2	3.5	3.7
Government consumption	-0.6	0.5	-1.4	-0.1	1.8	-0.9	0.5	2.2	1.3	3.2	2.8
Gross fixed capital formation	-15.2	-2.7	-3.3	1.4	-2.8	3.8	6.5	5.1	4.1	8.2	7.1
Exports of goods and services	6.2	2.3	-1.5	2.5	7.4	10.3	7.0	6.8	3.7	3.7	3.3
Imports of goods and services	-2.5	3.2	-2.9	3.3	3.2	9.4	6.5	8.4	7.5	5.3	5.3
Labour market											
Number of employed persons (average rate of change, in %)	-4.2	-1.1	-1.2	-1.5	-2.0	0.7	1.9	1.9	2.3	2.3	1.8
Registered unemployment rate	17.4	17.8	18.9	20.2	19.6	17.0	14.4	11.6	9.2	7.7	7.0
ILO unemployment rate	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.2	8.4	6.7	5.9
Prices											
Consumer price index (average rate of change, in %)	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.1	1.5	0.8	1.4
Consumer price index (rate of change, end of period, in %)	1.8	2.1	4.7	0.3	-0.5	-0.6	0.2	1.2	0.8	1.3	1.5
External sector											
Current account balance (as % of GDP)	-2.2	-1.8	-1.8	-1.1	0.3	3.3	2.1	3.4	1.9	1.9	1.2
Current and capital account balance (as % of GDP)	-1.6	-1.6	-1.5	-0.9	0.7	4.0	3.7	4.5	3.3	3.9	3.2
Gross external debt (as % of GDP)	109.4	109.6	108.2	110.8	113.1	108.0	95.9	88.9	82.7	75.7	70.6
Monetary developments (rate of change, in %)											
Total liquid assets – M4	1.9	5.6	3.6	4.0	3.2	5.2	4.7	2.1	5.5	4.0	4.5
Total liquid assets – M4 ^a	0.7	4.4	3.5	3.8	2.4	4.6	5.3	3.2	6.1	4.6	4.6
Credit institution placements to the private sector	4.7	4.8	-5.9	-0.5	-1.6	-3.0	-3.7	-1.2	2.0	2.0	3.6
Credit institution placements to the private sector ^a	2.3	3.5	-1.2	0.8	-1.5	-2.3	1.1	2.9	4.4	3.1	4.0
Credit institution placements to corporates ^a	5.9	7.6	-1.5	1.8	-3.7	-3.0	3.2	2.5	1.9	-1.1	2.6
Credit institution placements to households ^a	-1.4	-0.7	-1.1	-1.2	-0.7	-1.8	0.5	4.0	6.2	6.7	5.8

^a 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

further in 2020, so that real GDP might increase by 2.8%. The slower growth than that estimated for 2019 reflects a smaller expected increase in total exports and domestic demand. By contrast, personal consumption growth might be sharper than in the preceding year.

It is estimated that the risks to GDP projections in the projection period are tilted to the downside. The most pronounced downside risks arise from the external environment and are related to potential additional strengthening of protectionism on a global level, adverse effects of the UK's exit from the EU and a sharper-than-expected slowdown in the growth of Croatia's major trading partners. Domestic risks are primarily associated with the labour market as the projection assumes a further increase in employment and a slight improvement in the participation rate.

Labour market developments are expected to remain favourable in 2019. Employment might continue to grow at a rate similar to that in the year before, rising by 2.3%, while the ILO unemployment rate could drop from 8.4% in 2018 to 6.7%. Wage growth might be slower in 2019, but is expected to be more dynamic in 2020, in part due to wage increases in the public sector.

The deceleration of the CPI inflation to the expected 0.8% in 2019 (from 1.5% in 2018) is largely a result of the fall in the average annual growth rate of energy prices and food prices, triggered by the drop in the prices of refined petroleum products and the cut in the VAT rate on some food products early in 2019. The projected acceleration of inflation to 1.4% in 2020 may mostly be attributed to the increase in the average annual rate of change in food prices, largely as a result of the positive base period effect. It is estimated that the annual rate of growth of the consumer price index excluding food and energy might also accelerate in 2020, to a large extent due to the announced increase in excises (on cigarettes, alcoholic beverages and sugary non-alcoholic beverages) and, to a lesser extent, the effect of domestic inflationary pressures, i.e. expected solid growth in personal consumption and a faster increase in unit labour costs, on consumer price movements. Imported inflationary pressures are expected to be mostly subdued in 2020, taking into account, for instance, the expected fall in the prices of crude oil on the global market, the slight increase in the prices of other raw materials and the low inflation in the major trading partners. It is estimated that the risks of lower than projected or higher than projected inflation are balanced.

The surplus in the current and capital account might reach 3.9% of GDP in 2019, up by 0.6 percentage points from the

previous year. This estimate is based on the steady increase in the positive balance in the international trade of services (primarily thanks to tourism revenues), intensified absorption of EU funds, and the rise in net income from personal remittances, which offset the adverse effects of the widening of the foreign goods trade deficit driven by the faster increase in goods imports than in exports. By contrast, the surplus in the current and capital account is expected to fall in 2020, mostly due to the further widening of the foreign trade deficit. As regards foreign capital flows, net outflows expected in 2019 and 2020 are related to the ongoing decrease in the net debt liabilities of domestic sectors and the increase in international reserves. This should be reflected in a continued improvement of the relative indicators of external imbalances.

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. In such conditions, banks had no interest in the short-term kuna funds offered at regular weekly auctions. High liquidity also continued to support the several-year trend of improvement in financing conditions of domestic sectors. In the first ten months of 2019, the annual increase in total domestic placements of credit institutions slowed down, with placements to non-financial corporations falling due to several one-off effects. The rise in household placements, which has been steadily picking up momentum for several years, became stable in 2019. Growth in general-purpose cash loans slowed down on an annual level owing also to the Recommendation on actions in granting non-housing consumer loans, which the CNB issued to credit institutions in late February 2019. On the other hand, housing loans recorded faster annual growth in the second half of the year, spurred also by the continued implementation of the government's housing loan subsidy programme.

As regards fiscal policy, the amendments to the 2019 budget suggest that, following a surplus recorded in 2018, the general government might run a slight deficit of 0.1% of GDP in 2019. The budget proposal for 2020 suggests that the general government would again record a surplus, of 0.2% of GDP, which should rise modestly in the forthcoming years. On the other hand, projections of the European Commission from this November show a marginal surplus of 0.1% of GDP in 2019 and a balanced general government budget in 2020. In the same period, 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.

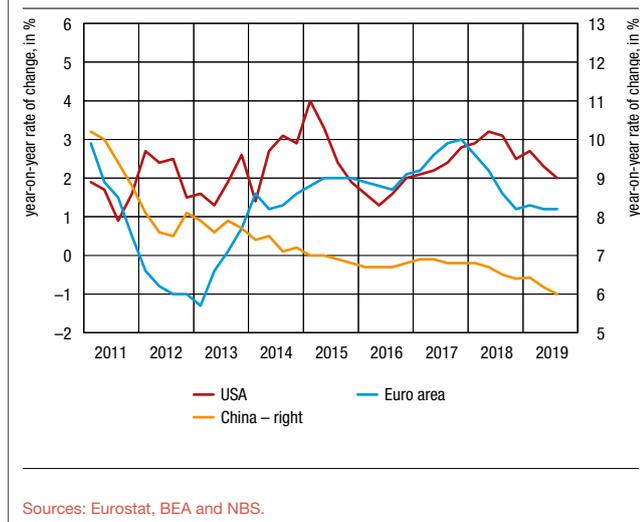
2 Global developments

The global economic slowdown that began in 2018 continued in the first nine months of 2019 and was coupled with weaker global trade, particularly in capital goods, cars and car parts. Global trade was adversely affected by a number of factors, the most prominent being heightened uncertainty arising from the strengthening of trade protectionism and the UK's exit from the EU, as well as the associated weakening of investment consumption and the crisis in several emerging market countries. Economic slowdown was synchronised and widespread, in both developed and emerging market countries. Economic activity in Croatia's main trading partners also weakened noticeably. The slower economic growth and the fall in crude oil prices

helped to mitigate global inflationary pressures even more. Due to the accommodative monetary policies of central banks worldwide, financing conditions remained relatively favourable, except in several unstable emerging market countries.

While in 2018 the economic growth rates were noticeably higher in the US than in other developed countries, the growth steadily lost pace throughout 2019, particularly in the second and third quarters, falling from 2.9% in 2018 to 2.0% in the third quarter 2019 (Figure 2.1). The growth was largely driven by continued strong expansion of personal consumption, fuelled by the ongoing strong favourable trends in the labour market and government consumption, coupled with the noticeably

Figure 2.1 Economic growth in selected markets



slower investment activity. Inflation remained below the 2% target in the first nine months.

After slowing down perceptibly in the course of 2018, euro area economic growth became stable in 2019 and was 1.2% higher in the third quarter than in the same quarter of the previous year, as it had been in the three preceding quarters. Since the beginning of the year, euro area activity has been characterised by divergent trends between export-oriented members that are strong in manufacturing, such as Germany, and economies that are more oriented towards the service sector and domestic demand, such as France. Germany recorded an economic downturn from the first to the second quarter and only a marginal growth in the third quarter, thus evading a technical recession. Specifically, the slump in foreign demand and the fall in car sales in the global markets, in particular China and the euro area, led to a significant drop in the production of the German manufacturing industry. The problems in the German manufacturing sector have not yet been reflected in the labour market. This was due to the use of reduced working hours at the expense of the state budget and the fact that employers are reluctant to dismiss workers in view of the long-lasting difficulties with finding qualified labour, which might become even more pressing due to the impending retirement wave of elderly workers.

Developing and emerging market countries recorded notably slower growth in the first nine months of 2019 than in the previous years. The Chinese economic slowdown continued, driven by accumulated macroeconomic imbalances and the trade tensions with the USA. The Chinese economy grew by 6.0% on an annual level in the third quarter of 2019, which was the lowest rate in the last several decades. Growth deceleration in emerging market countries was also largely a result of the economic slump in India, owing to structural weaknesses, particularly in the financial sector, and the downturn in the crisis-hit markets, such as Turkey, Iran and Argentina.

Croatia's main trading partners

In the first nine months of 2019, Croatia's main trading partners, particularly those in the euro area, recorded much weaker economic activity. In addition to the mentioned slowdown in Germany, modest growth continued in Italy, which, following a technical recession in mid-2018, recorded a quarterly growth of only 0.1% in four consecutive quarters. Similar trends were seen in Slovenia and Austria, though their growth remained relatively

dynamic. By contrast, the countries of Southeastern Europe continued to be the most dynamic economies among Croatia's main trading partners, though their growth was also slower than in the same period of the previous year.

Prices, exchange rates and financing conditions

The trend of growth in crude oil prices on the global market that marked early 2019 came to a halt in mid-May. The crude oil price per barrel came to USD 74 at that time and decreased in the rest of the year, coming to USD 63 in mid-November. The fall in crude oil prices was due to the global economic slowdown and the rise in US production. Though global crude oil prices spiked after the attacks on oil facilities in Saudi Arabia in mid-September, they stabilised relatively quickly after it turned out that the damage was much less than initially anticipated.

Prices of raw materials excluding energy went up in the first seven months and then dropped in the remainder of the year, but stayed higher than in the same period of 2018. The recent decline was widespread among various groups of raw materials, including food products, beverages, agricultural raw materials and metals.

Adverse developments in the global economy over 2019 also led to a reversal of the monetary policy stance. After raising the target interest rates on as many as four occasions in 2018, the Fed left them unchanged in the first quarter of 2019 and then initiated a reduction cycle lowering the rates on three occasions by the end of October. The ECB reintroduced the quantitative easing programme in early November, which it had abolished in late 2018.

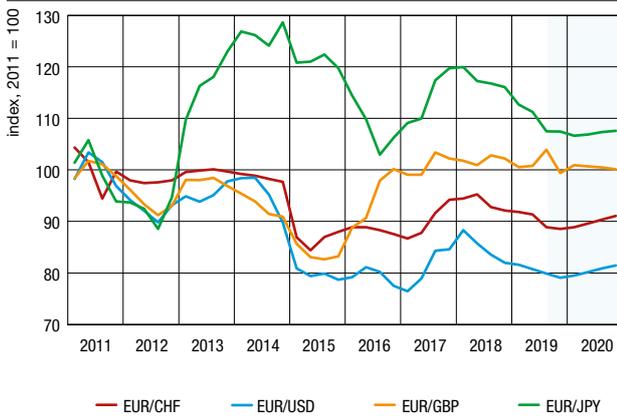
On the global foreign exchange market the American dollar continued to strengthen against the euro in the third quarter of 2019. At the end of November 2019, the exchange rate of the US dollar against the euro stood at EUR/USD 1.10, which is a decrease of 3.5% and 4.1% from the end of June-2019 and the end of 2018 respectively. This was due to increased insecurity as regards economic developments in the euro area, in particular Germany, and risks associated with the Brexit delay, while the reversal of the Fed's monetary policy in 2019 slightly mitigated the dollar's appreciation. The Swiss franc strengthened against the euro in the same period so that the exchange rate of the Swiss franc against the euro was 1.0% lower than at the end of June 2019, standing at EUR/CHF 1.10 at end-November.

Financing conditions for European emerging markets, Croatia included, have improved further in the past several months. The EMBI index, which grew in 2018 driven by high trade tensions and the culmination of the political and economic crisis in Turkey, dropped sharply in the first nine months of 2019, with the decline in the EMBI index for Croatia being much more pronounced than in other emerging markets.

Projected developments

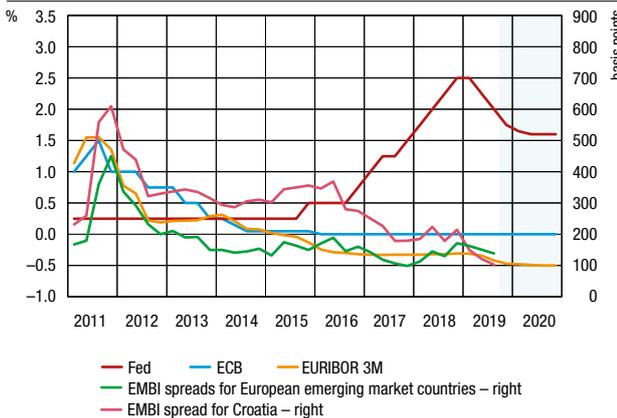
Global economic growth is expected to accelerate unevenly in 2020, after a synchronised and widespread deceleration in 2019. Economic growth in developed countries might level off from 2019 to 2020, while the increase in emerging markets might pick up noticeably in 2020 thanks to the recovery of crisis-affected markets like Iran, Argentina and Turkey and more dynamic growth in countries that recorded a sharp downturn in 2019, in particular India. Amid faster global growth and rising investment demand in emerging market economies, the rise in the volume of global trade is expected to recover in 2020 after a notable slowdown in 2019. The average exchange rate of the US dollar against the euro might remain unchanged from 2019 to 2020. Furthermore, crude oil prices are expected to fall, while the prices of other raw materials might rise slightly.

Figure 2.2 Exchange rates of individual currencies against the euro



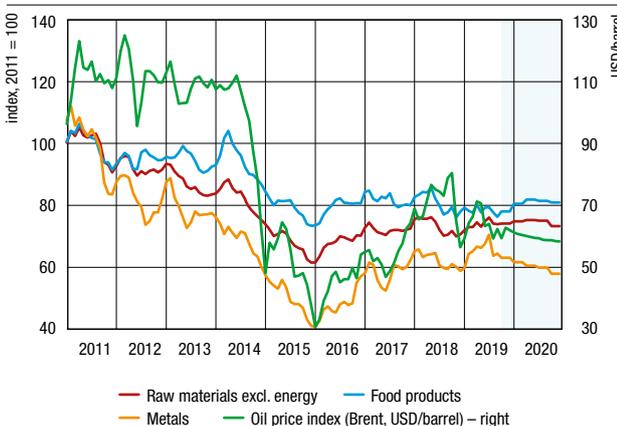
Note: A growth in the index indicates a depreciation of a currency against the euro.
Sources: Eurostat and Foreign Exchange Consensus Forecasts (November 2019).

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



Note: Data for the ECB refer to the main refinancing rate, while data for the Fed refer to the federal funds rate.
Source: Bloomberg (forecast), 18 November 2019.

Figure 2.4 Prices of raw materials on the international market



Sources: IMF (October 2019), oil prices: Bloomberg (Brent crude oil futures, 14 November 2019) and CNB estimates.

According to the expectations published in the November 2019 Foreign Exchange Consensus Forecast, the average US dollar/euro exchange rate might not change from 2019 to 2020 and stand at EUR/USD 1.12 (Figure 2.2). As regards the Swiss franc, the average exchange rate in 2020 might stand at EUR/CHF 1.11, the same as in 2019.

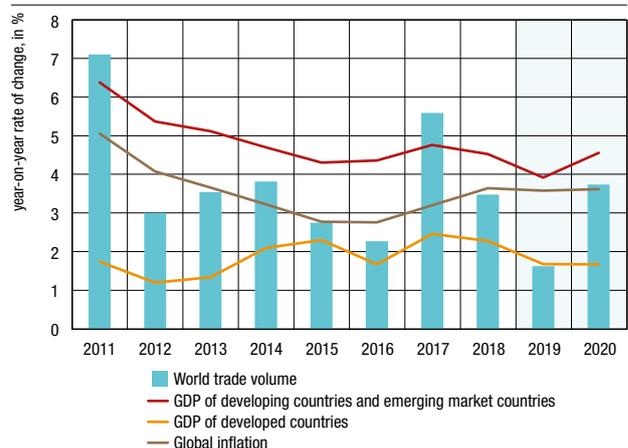
At its last meeting in October, the Fed announced that there could be a pause in any further monetary policy easing. The markets are currently expecting that the Fed would keep target interest rates unchanged through to summer 2020, with a further reduction expected towards the end of the year (Figure 2.3). At the same time, the ECB is expected to maintain its exceptionally expansionary monetary policy.

Crude oil price trends in the prompt market suggest that crude oil prices might edge lower by the end of this year and dip further in 2020 (Figure 2.4). This is largely due to the grimmer global economic outlook and the consequent slower-than-anticipated demand for crude oil. On the other hand, the average price of other raw materials might edge higher in the whole of 2019 as a result of the rise in metal prices. Prices of raw materials excluding energy are expected to continue trending up in 2020, in particular the prices of food products and beverages.

The most recent IMF projections (WEO, October 2019) suggest that global economic growth might decelerate notably in 2019, to 3.0% (from 3.6% in 2018), the lowest growth rate since the global financial crisis, and then pick up to 3.4% in 2020. The growth might remain unbalanced and exposed to uncertainties and serious negative risks. Specifically, economic growth in emerging market countries might recover, while the increase in developed countries might remain at the level seen in 2019, with a slight uptick in inflation (Figure 2.5). On the other hand, European Commission projections are much more conservative and point to a marginal acceleration in global growth, from 2.9% in 2019 to 3.0% in 2020. Financing conditions might remain favourable owing to the accommodative monetary conditions prevailing in most large economies.

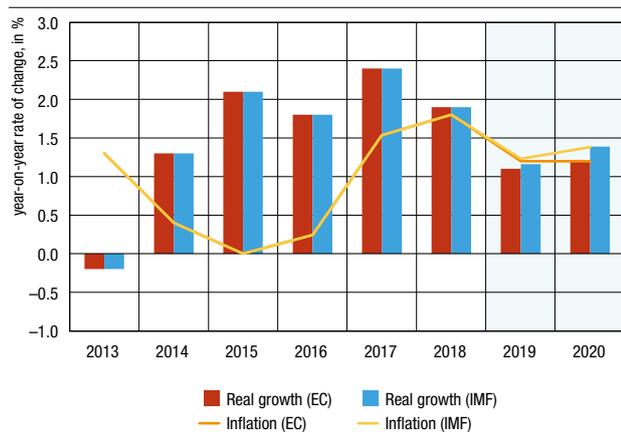
With regard to the euro area, the IMF estimates that economic growth could slow down sharply, from 1.9% in 2018 to 1.2% in 2019 and accelerate slightly to 1.4% in 2020 (Figure 2.6). More recent projections of the European Commission from October support IMF expectations for 2019 (projected growth stands at 1.1% in 2019), but are, taking into account the performance seen in the second and third quarters, somewhat

Figure 2.5 Global economic developments



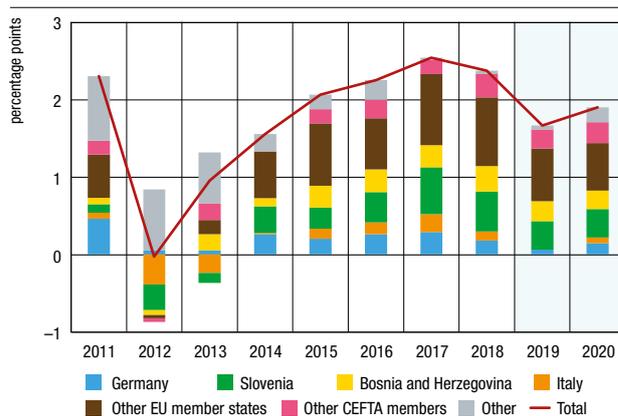
Source: IMF (WEO, October 2019).

Figure 2.6 Economic growth and inflation in the euro area



Sources: IMF (WEO, October 2019) and EC (November 2019).

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 2019).

more conservative regarding the recovery in 2020 (2020 growth stands at 1.2%). Euro area growth in 2019 might be characterised by divergent trends in the largest member states. The 2019 growth projection for Germany is only 0.5% on an annual level, whereas the Italian economy might be stagnant. By contrast, economic growth in France and Spain might continue to be relatively dynamic. Inflation in the euro area might remain below the ECB target while inflationary pressures are expected to diminish even more (according to the latest ECB projections, after 1.8% in 2018 and 1.2% expected in 2019, inflation should dip further to 1.0% in 2020).

The IMF expects that economic growth in the USA, after reaching 2.9% in 2018, the highest rate in the last few years, will slow down perceptibly, to 2.4% in 2019 and to 2.1% in 2020. The growth slowdown and convergence towards the potential growth rate are mostly expected because of the change in the current expansionary fiscal policy, structural limitations in the labour market and adverse effects of the trade conflict with China. The strongest contribution to growth should again come from the steady increase in personal consumption, whereas the contribution of foreign demand should remain negative with pronounced pressures on the real appreciation of the US dollar.

In line with the described trends in the global economy and trade, the rise in demand for Croatian export products, which

decelerated in 2019, is expected to recover marginally in 2020, but will probably remain much below the levels seen in the period from 2015 to 2018 (Figure 2.7). This is largely a reflection of the foreseen slump in demand from the main foreign trade partners in the euro area and the rest of the EU, in particular Germany and Italy. Potential spillover effects of a more expressed negative impulse of foreign demand on domestic activity, which may be accompanied by a rise in the risk premium, are analysed in detail in Box 1 Assessment of the impact of a potential sharp fall in foreign demand and the rise in risk perception on the Croatian economy.

The outlook on global economic growth in the projection period is mostly exposed to negative risks. There is still uncertainty surrounding Brexit. A possible sharper slowdown in Chinese economic growth also presents a significant risk. As regards trade negotiations between China and the USA, some progress has been made with the agreement on trade in agricultural products reached, but the more difficult part is yet to come, that is, an agreement on intellectual property rights and subsidies in industrial production. There is also a risk that the fall in industrial production and problems in the manufacturing sector in Germany might spill over much faster and more strongly to the services sector and the labour market.

Box 1 Assessment of the impact of a potential sharp fall in foreign demand and the rise in risk perception on the Croatian economy

Uncertainty surrounding the global and the European economy has increased in the period since the last CNB projection due to the risks associated with slower global growth and the growing likelihood of a recession in Croatia's main trading partners. In such conditions, it is important to assess how a potential materialisation of these risks might affect economic growth in Croatia. This box presents simulation results of two alternative scenarios based on a macroeconomic model called PACMAN. The first alternative scenario assumes a one-year recession in Croatia's main trading partners, without upward pressures on the risk premium that would raise the borrowing cost. Under the second alternative scenario, unfavourable economic movements also trigger a rise in the risk premium. Simulation results show that the

brunt of the shock under both alternative scenarios is expected in the first year, where GDP growth would be around 1.6 percentage points lower than in the baseline scenario. In the second year, alternative scenarios yield only a marginally lower growth rate than the baseline scenario. The most important channels for the transmission of external shocks under both alternative scenarios are evident in a notable slump in exports in the first year, with a mild recovery in the second year, and slightly lower growth rates of investments and personal consumption in both years.

In view of increasingly evident signs of economic slowdown, forecasts for global, euro area and EU economic growth have been revised downwards. This has raised concerns over the potential materialisation of adverse risks, i.e. a continuation or

deepening of adverse real economic developments. In this respect, a key risk for Croatia is a poorer economic performance from Italy and Germany, Croatia's main trading partners, which might trigger a spillover of negative foreign demand impulses onto domestic economic activity. Should the weak performance increase investors' risk perception in financial markets, apart from the negative shock of foreign demand for products and services made or offered in Croatia, the risk premium might also increase, which would be evident in higher CDS on Croatian government bonds. Amid high levels of debt, particularly of the public sector, higher borrowing costs triggered by the rise in the risk premium would reinforce the impact of adverse shocks on domestic economy. Taking all these risks into account, a simulation was made of macroeconomic effects of two alternative adverse scenarios.

The first alternative scenario (AS1) assumes a fall in foreign demand without a rise in the risk premium. Under this scenario, global demand falls by 1% on an annual level with the following quarterly dynamics: -0.4%, -1.2%, -1.2% and -1.1%. This scenario implies a slump in global demand of 3.5 percentage points relative to the baseline scenario. These assumptions include recession in Croatia's main trading partners that is, in terms of intensity, between the one triggered by the financial crisis of 2008 and the real economic slowdown of 2012. The main channel of external shock transmission under this scenario is a fall in export demand.

The second alternative scenario (AS2) assumes that the fall in foreign demand is coupled with a rise in the risk premium; it includes a risk premium (CDS) that is 200 basis point higher than in the baseline scenario in each quarter of the first year. In addition to the fall in exports, this scenario includes the adverse effects of the rise in the risk premium, which would be mostly evident in higher borrowing costs of the private sector, leading to a reduction in investments and, to a smaller extent, in personal consumption.

Table 1 Deviations of alternative scenarios from the baseline scenario values, in percentage points

Variable/Scenario	1st year		2nd year	
	AS1	AS2	AS1	AS2
Gross domestic product	-1.60	-1.60	-0.03	-0.06
Personal consumption	-0.10	-0.10	-0.04	-0.05
Capital investments	-0.22	-0.25	-0.72	-0.90
Exports of goods and services	-6.80	-6.80	-0.92	-0.92
Imports of goods and services	-2.11	-2.12	-1.69	-1.72

Note: Values in the table show deviations of the growth rate under hypothetical alternative scenarios relative to the baseline scenario in the CNB projection.

Assessed effects of the two alternative scenarios on the Croatian economy are derived from the macroeconomic model called PACMAN¹ (Policy Analysis Croatian Macroeconomic Model). The results obtained are presented as the difference between projected values of the main macroeconomic indicators in alternative scenarios AS1 and AS2 and their projected values in the baseline scenario (Table 1).

Simulation results suggest that, in the first year, Croatia's economic growth under both alternative scenarios would be 1.6 points lower than in the baseline scenario. In the second year, economic growth under the first and second alternative scenario would be 0.03 and 0.06 percentage points lower, respectively, than under the baseline scenario. The most important channels for the transmission of external shocks under both alternative scenarios are evident in a notable slump in exports in the first year, with a mild recovery in the second year, and slightly lower growth rates in investments and personal consumption in both years. Due to the large import component of personal consumption, investments and imports themselves, both alternative scenarios also include a slower growth rate in imports than in the baseline scenario, which offsets some of the effects of an adverse foreign demand shock on net exports.

¹ Domestic product growth forecasts for 2019 and 2020 and global GDP growth projections from the first quarter of 2019 were used to simulate the effects of alternative scenarios. The database was updated in February 2019. The first simulation period is the first quarter of 2019.

3 Aggregate supply and demand

Real economic activity increased in the third quarter by 0.8% relative to the previous three months, while in the second quarter it grew by 0.5%. The available monthly indicators for October suggest that economic growth continued in the last quarter of 2019, however at a slower rate than in the previous part of the year.

The intensification of economic activity in the third quarter resulted in a higher annual rate of economic growth, with real GDP rising by 2.9% (2.4% in the second quarter) compared with the same period of 2018. These developments were mostly a result of the growth in the exports of goods and services, and a positive contribution was also made by all domestic demand components. The imports of goods and services slowed down strongly so that the contribution of net foreign demand to total economic growth was positive in the third quarter.

The production side of the calculation of GDP shows that gross value added rose by 2.7% in the third quarter from the same period of 2018. GVA rose most in construction as well as

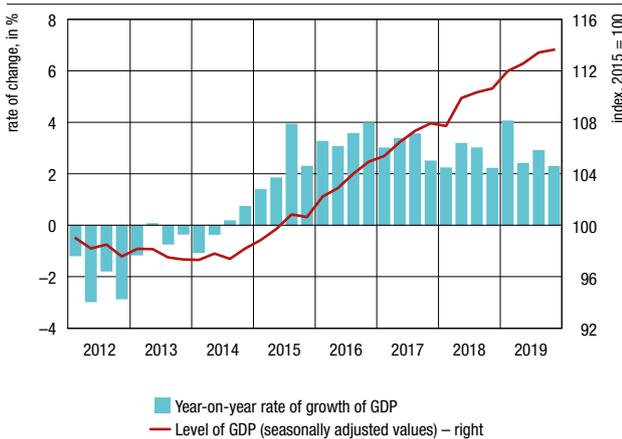
in agriculture, forestry and fishing activities.

Aggregate demand

In the third quarter of 2019, the real exports of goods and services continued to grow for the third consecutive quarter and increased by 1.2% from the previous three months. If analysed on an annual level, the growth of exports accelerated in the third quarter to 4.7% from 3.3% in the second quarter of this year. The growth is the result of favourable developments in the trade in goods. Nominal data show an exceptionally high growth in the exports of capital goods (notably of other transport equipment) in the period from July to September 2019, and a rise on a quarterly level was also noted for other MIG components, except intermediate goods.

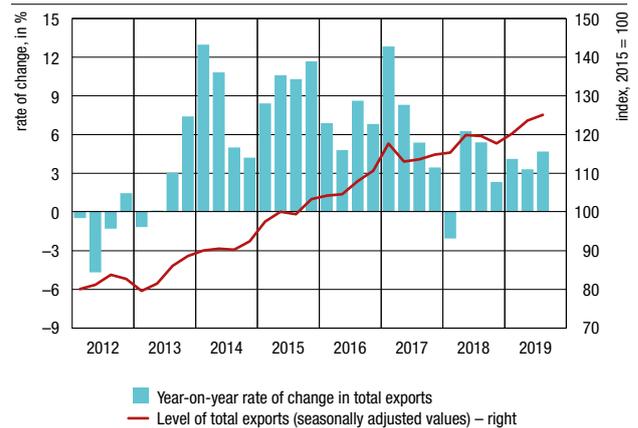
In the third quarter of 2019, personal consumption rose by 0.8% from the previous three months, thus showing that its minor decrease in the second quarter was temporary. The favourable developments reflect the effects of continued employment

Figure 3.1 Gross domestic product
real values



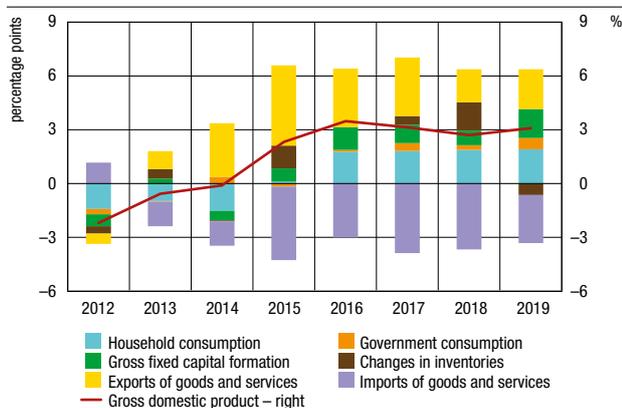
Note: The data for the fourth quarter of 2019 refers to the CNB's indicator of real activity, estimated from the data published until 29 November 2019.
Source: CBS (seasonally adjusted by the CNB).

Figure 3.3 Exports of goods and services
real values



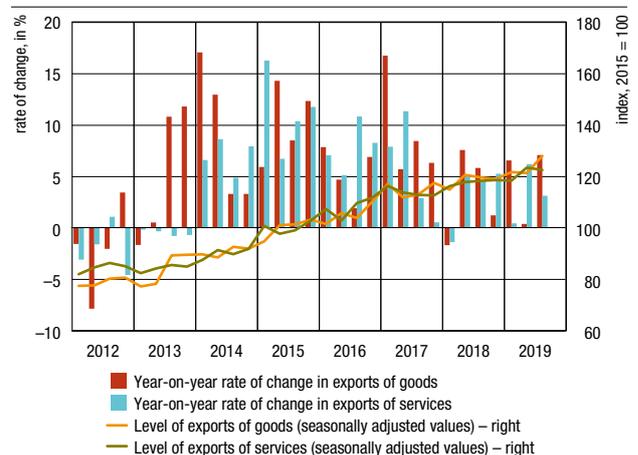
Source: CBS (seasonally adjusted by the CNB).

Figure 3.2 GDP rate of change
contributions by components



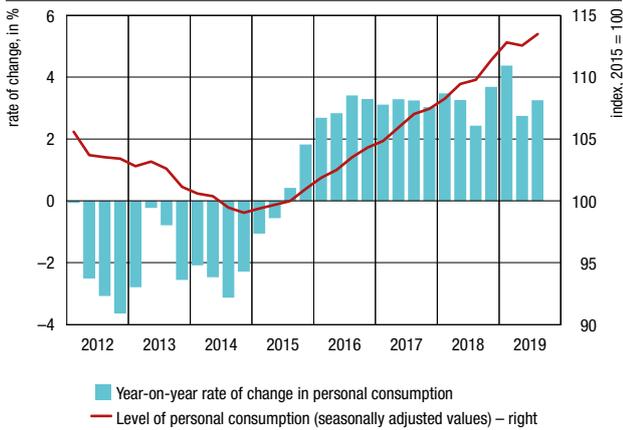
Notes: Data for 2019 refer to the first quarter of 2019.
Source: CBS.

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).

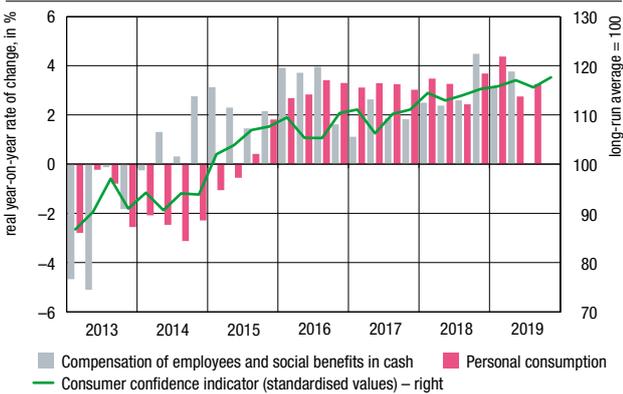
and wages growth as well as further growth of household lending, while the consumer confidence index also rose additionally. On an annual level, the growth in household consumption continued to accelerate with its growth rate standing at 3.3% (2.7% in the second quarter).

In the third quarter of 2019, investment activity continued to decrease for the second consecutive quarter, after a very sharp increase in the beginning of the year. This led to an increase in capital investments by 5.0% on an annual level. The monthly data on construction works on buildings and civil engineering works, with an annual growth rate of 7.0%, indicate that the growth in investment activity was fuelled not only by the private sector but also by the general government.

Government consumption continued in the third quarter of 2019. Thus the increase of 0.6% on a quarterly basis resulted in the increase of 2.9% on an annual level. Nominal data on government expenditures point to growth in all of the key components of government consumption.

The imports of goods and services decreased by 3.7% in the third quarter of 2019 from the previous three months, which is the largest decline recorded on a quarterly basis since 2009.

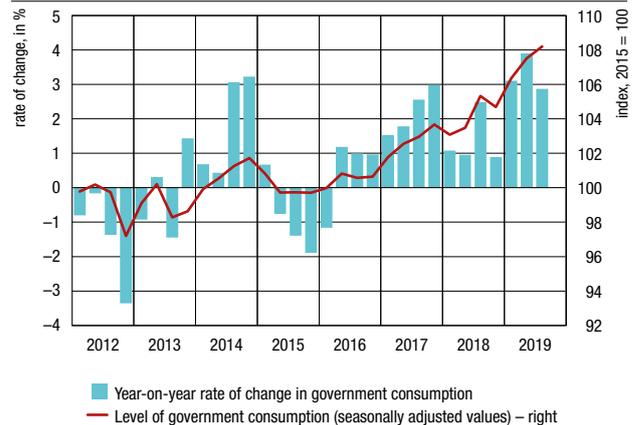
Figure 3.6 Determinants of personal consumption
real values and index



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 2019.

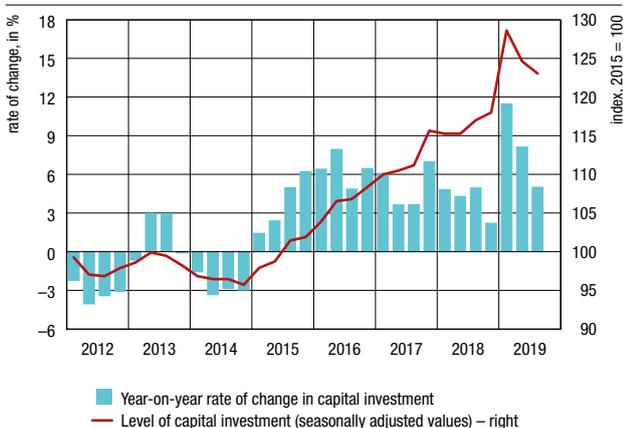
Sources: CBS, Ipsos and CNB.

Figure 3.8 Government consumption
real values



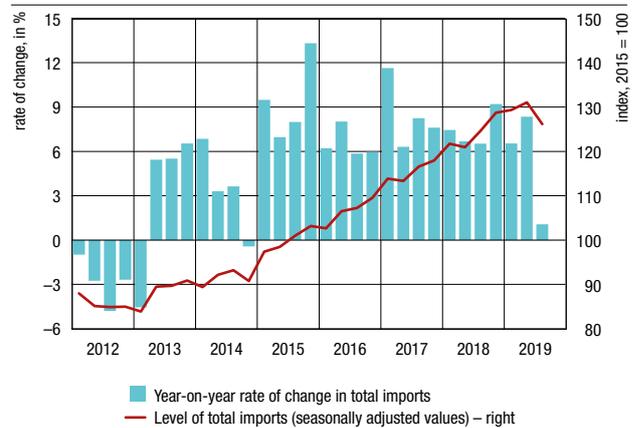
Source: CBS (seasonally adjusted by the CNB).

Figure 3.7 Gross fixed capital formation
real values



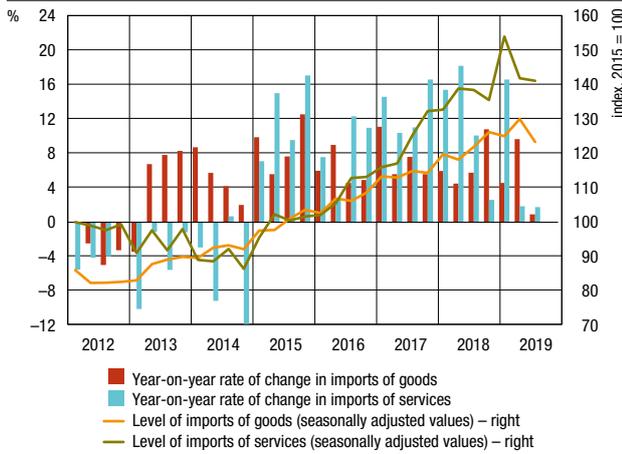
Source: CBS (seasonally adjusted by the CNB).

Figure 3.9 Imports of goods and services
real values



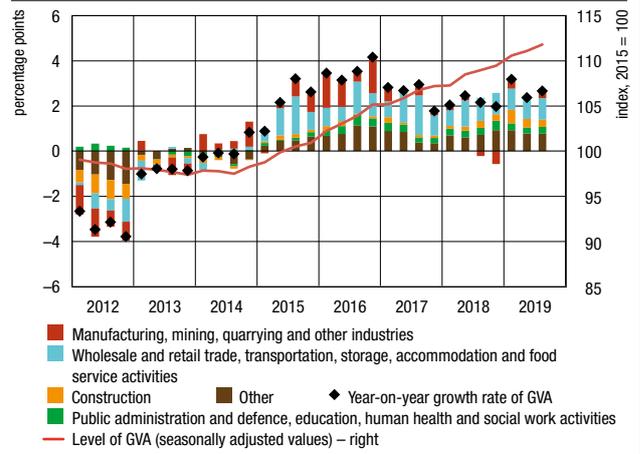
Source: CBS (seasonally adjusted by the CNB).

Figure 3.10 Real imports of goods and services



Source: CBS (seasonally adjusted by the CNB).

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



Source: CBS (seasonally adjusted by the CNB).

Observed on an annual level, total goods imports increased in the third quarter by only 1.1%. The slowdown in total imports, accompanied by the acceleration of growth in the exports of goods and services, resulted in a positive contribution of net foreign demand.

Aggregate supply

The rise in gross value added that began in 2014 continued in the third quarter of 2019, so that real GVA went up by 0.6%. GVA rose in all activities on a quarterly basis. If analysed on an annual level, GVA rose by 2.7%, with the largest growth in construction and agriculture, forestry and fishing activities. However, real GVA growth was mostly driven by service activities, due to their large share, from the group of activities comprising wholesale and retail trade, transportation and storage, accommodation and food service activities. It is worth mentioning that the eleventh consecutive quarterly increase in GVA in the third quarter of 2019 was below the GDP growth rate (although this difference was slightly lower than the average of the observed period), which means that the *taxes – subsidies* component increased faster than the GVA and the GDP rates (see Box 2 Why do net taxes on products rise faster than GDP?).

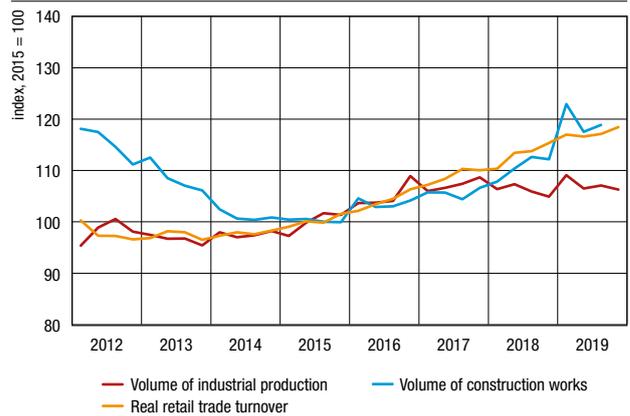
The GDP nowcasting model based on high-frequency data that are mainly available for only October shows that economic activity growth on a quarterly level slowed down strongly in the fourth quarter of 2019. Industrial production in October 2019 was down 0.7% from the result in the preceding three months. The decline on a quarterly level was recorded in all of the main industrial groupings. At the same time, real retail trade turnover increased by 1.2% from the result in the previous three months.

Consumer Confidence Survey data show that consumer optimism continued to improve in October and November, reaching a historical high. The increase in optimism is the result of the improvement of all subcomponents of the index. With regard to business confidence, the expectations of business entities in trade and services improved on a quarterly basis, while in industry they remained at the level of the previous quarter, and deteriorated in construction.

Projected developments

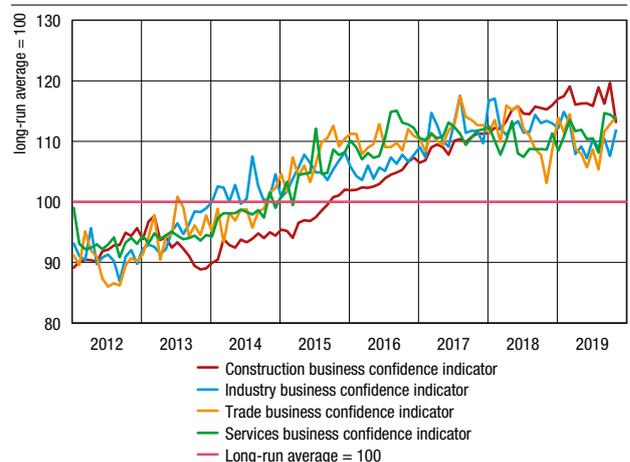
In 2019, economic activity is expected to grow, so that real GDP might increase by 3.0% over 2018, in which the growth rate stood at 2.7%. The expected acceleration of economic

Figure 3.12 Short-term economic indicators seasonally adjusted values



Notes: Quarterly data are calculated as an average of monthly data. Data on industry and trade in the fourth quarter of 2019 refer to October.
Source: CBS (seasonally adjusted by the CNB).

Figure 3.13 Business confidence indicators standardised seasonally adjusted values



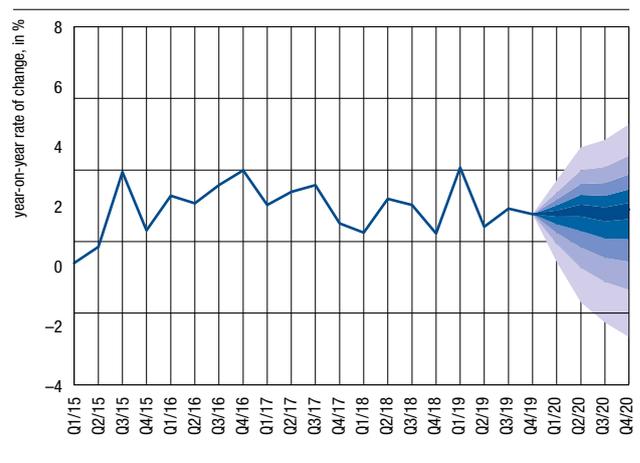
Sources: Ipsos and CNB (seasonally adjusted by the CNB).

growth is primarily reflected in the stronger growth of domestic demand while the contribution of total exports also increased.

In 2019, total exports might grow at a similar rate as in the previous year (3.7%). Growth of the exports of services is expected to be slower, in contrast to growth in goods exports, which is expected to be faster than in the previous year. The more favourable development in goods exports is the consequence of exceptionally good results of the exports of ships and pharmaceutical products in the third quarter of the current year. Of all GDP components, personal consumption, with a growth rate higher in 2019 than in the previous year (3.5% from 3.2% in 2018), might make the biggest positive contribution to real GDP growth. Acceleration in the growth of personal consumption is the result of continued favourable developments in the labour market and the growth of wages, stronger household lending and consumer optimism, which is at a record high level. In addition, the increase in capital investments might make a considerable contribution to economic growth in 2019. The results in the first three quarters suggest that the investment growth rate in 2019 might stand at 8.2%, almost twice the rate of 4.1% recorded in 2018. At the same time, investments are expected to grow in both the private and the public sector. Government consumption might rise by 3.2% this year, which is also a higher growth rate than the last year's result (1.3%). The growth rate of total imports might be noticeably lower in 2019 as a whole than in the previous year (5.3% compared to 7.5%). The deceleration is reflected in the extremely low growth of the imports of goods and services in the third quarter of this year. Thus, the negative contribution of net foreign demand to real GDP growth in 2019 might be considerably smaller than in 2018 (-0.8 percentage points relative to -1.8 percentage points in 2018).

Economic activity may increase in 2020 at a somewhat slower pace than the year before, with the real GDP growth rate expected to stand at 2.8%. The mild slowdown mirrors the smaller increase in exports and domestic demand. Although demand of Croatia's main trading partners is expected to grow strongly, the base effect, i.e. the one-off considerably higher exports of the individual categories of goods in 2019 might have an unfavourable impact on the growth rate of exports. Investment activity could continue to grow at relatively high rates, albeit somewhat lower than the year before. In contrast, personal consumption growth is expected to accelerate slightly under the effects of a continued increase in employment and wages, in particular in the public sector, as well as tax disburdening. In addition, further growth of household lending is also expected. Thus personal consumption might also make the biggest positive contribution to total economic growth in 2020. Although imports might grow at a

Figure 3.14 Projection of real GDP dynamics



Sources: CBS and CNB.

somewhat slower pace than in 2019, the negative contribution of net foreign demand to GDP growth could increase slightly in 2020.

It is estimated that the downside risks to GDP projections in the projection period are more pronounced. The most significant downside risks arise from the external environment and are related to the potential further strengthening of protectionism on a global level, the unfavourable effects of the UK's exit from the EU and the possibility of a stronger slowdown in the economic growth of the most important Croatian trading partners. Domestic risks are primarily related to the labour market, since the projection implies a continued growth in employment and a moderate increase in the labour force participation rate. Financial problems at the Fortenova Group and Uljanik and 3. maj shipyards were reduced significantly, although the enterprises are still undergoing operational restructuring. With regard to positive risks, further tax disburdening and continued favourable developments in the labour market might have a favourable effect on consumer optimism, so that the growth of personal consumption might be stronger than expected. Positive risks also arise from the possibility of a more vigorous than expected absorption of EU funds. Results in tourism in the projection period might also be better than expected, meaning that the growth rate of the exports of tourist services could be slightly higher than projected.

Box 2 Why do net taxes on products rise faster than GDP?

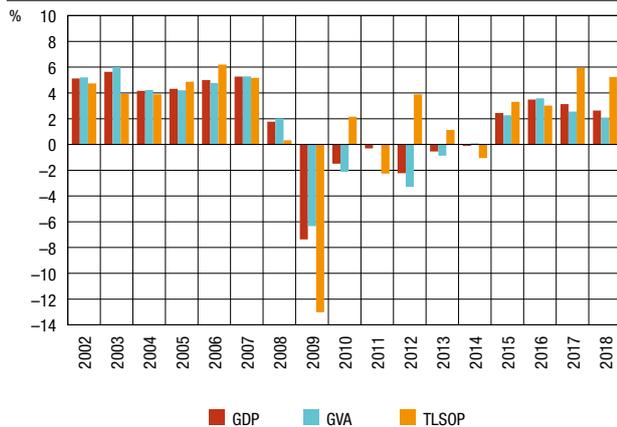
Gross domestic product (GDP) and one of its components, net taxes on products (taxes on products less subsidies on products, TLSOP)², in 2017 and 2018 rose at different rates, which points to certain changes in the structure of the economy. Thus, in the two years, the real growth rate of the TLSOP component on average stood at about 6.0%, while gross value added (GVA) increased by slightly over 2.0%. The mentioned discrepancies in the movements of these GDP components are primarily the result of the movement of the value added tax (VAT) revenues, which are at the same time under the impact of changes in the

tax base, changes in tax rates and the efficiency of tax collection. After 2014, the VAT/GDP ratio grew, as did the share of the TLSOP component in GDP, to the greatest extent as the consequence of the increase in the exports of tourist services.

The data on real annual GDP growth rates for Croatia show that GVA and the TLSOP component grew mostly at similar rates from 2002 to 2007, as well as in the post-crisis period from 2014 to 2016 (Figure 1). During the global financial crisis, the growth rates of GDP components diverged significantly, so much so that the discrepancies in growth rates were not even of the same

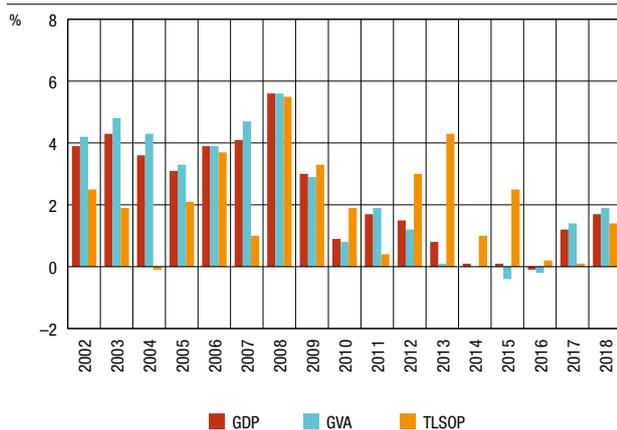
2 According to the production method, gross domestic product (GDP) equals the total gross value added (GVA) of all activities, plus the component of net taxes on products (taxes minus subsidies, TLSOP).

Figure 1 Real growth rates of GDP and its components according to the production method



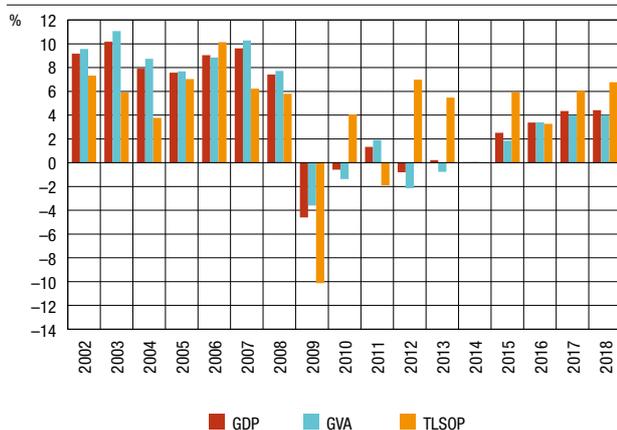
Source: Eurostat.

Figure 2 Growth rates of deflators of GDP and its components according to the production method



Source: Eurostat.

Figure 3 Nominal growth rates of GDP and its components according to the production method



Source: Eurostat.

sign. In addition, after 2016, the movements of these components diverged considerably, when the TLSOP component grew much faster than GVA, i.e. GDP. Thus the growth rate of the TLSOP component in 2017 and 2018 on average stood at about 6.0%, while GVA increased by about 2.0%.

Real developments are under the impact of the movement of deflators, which were very volatile in the observed period (Figure 2). In taking into consideration the inconsistent impact of deflators that in one year strengthen and in another annul the discrepancies between nominal and real growth rates, what follows will analyse in further detail only nominal data, which also point to the growth in the share of the TLSOP component in GDP (Figure 3).

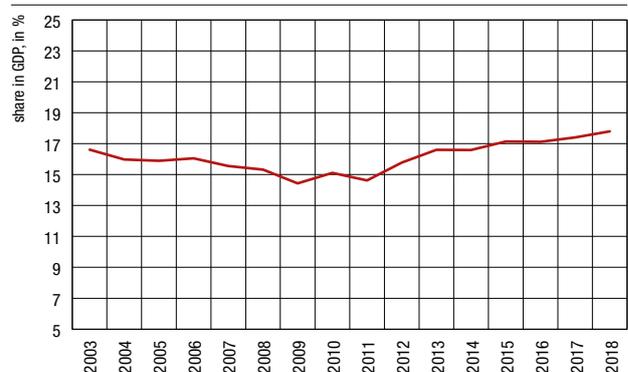
If nominal GDP data are analysed, it is evident that there are still large discrepancies in the annual growth rates (Figure 3). Moreover, in some years, for example in 2015, the discrepancies in the nominal growth rates of GDP components were more conspicuous than the discrepancies in real growth rates.

Analysis of the shares of the TLSOP and GVA components in GDP (expressed in current prices) in the period from 2003 to 2018 shows that the share of the TLSOP component in the observed period was between 14% and 18% (Figure 4). The share of the TLSOP component in GDP from 2000 to 2011 declined from 17% to 15%, but started to rise from 2012, and in 2018 stood at 18%.

If the TLSOP component structure is analysed in detail, taxes on products exceed subsidies on products by several times (Figure 5). Revenues from taxes on products grew continuously from 1995 to 2008, but fell at the beginning of the crisis, and then stagnated. Total revenues from taxes on products started to rise again from 2012.

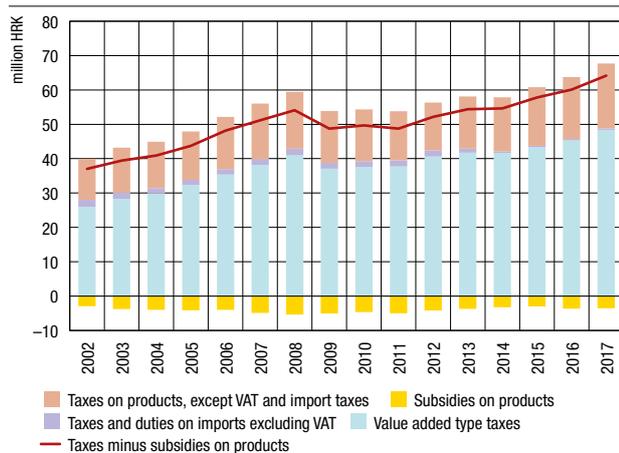
Detailed data on tax revenues for Croatia show that VAT is the most important individual tax on products, thus making the largest contribution to the oscillations in the growth of the TLSOP component (Figure 6). Thus the share of VAT in total taxes on products increased from 65% in 2002 to 71% in 2017. Taxes and duties on imports accounted for about 5% of taxes on products until Croatia's accession to the EU, after which they almost vanished because of the abolition of customs duty on imports from EU member states. The share of other taxes on products in total taxes on products was 30% in 2002, falling slightly to 28% in 2017. Excise taxes on fuels (44% in 2017), followed by excise taxes on tobacco products (24% in 2017) and motor

Figure 4 Share of the TLSOP component in GDP current prices



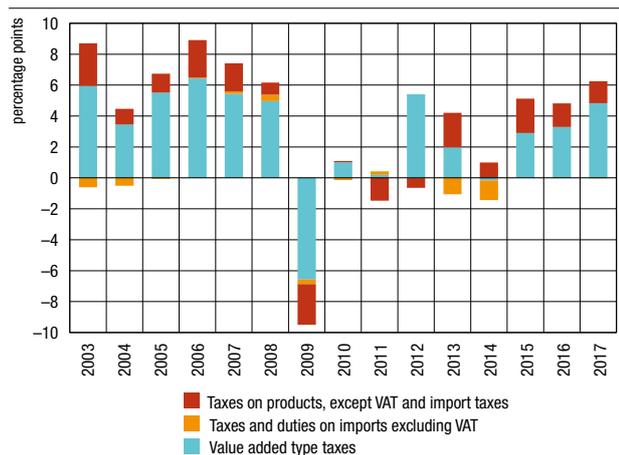
Source: Eurostat.

Figure 5 TLSOP component structure



Source: Eurostat, ESA, National Tax List.

Figure 6 Contribution to growth in annual revenues from taxes on products

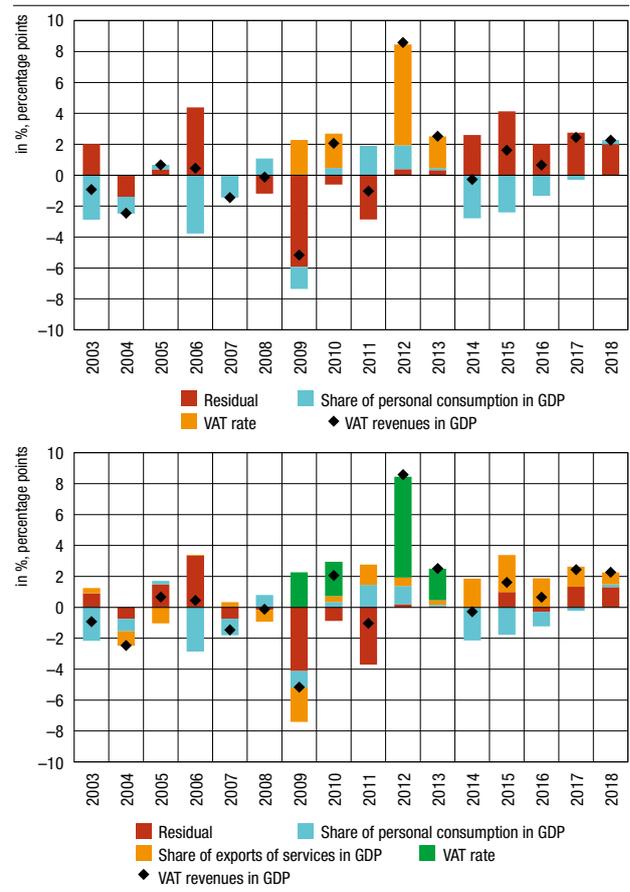


Source: ESA, National Tax List.

vehicles (6% in 2017) are dominant in the structure of other taxes on products.

In taking into consideration the importance of VAT revenues for the TLSOP component, it is necessary to analyse in more detail the movement of the share of VAT revenues in GDP. Fiscal data show that the share of VAT revenues in nominal GDP increased from 2012 (except in 2014, when it stagnated). According to Keen (2013)³, VAT revenues as a share of GDP can change for three reasons: changes in the tax base for VAT collection, changes in the tax rate and changes in the efficiency of tax collection (C-efficiency). The share of personal consumption relative to GDP is considered for the tax base, while the coefficient of the efficiency of VAT collection is calculated as the ratio of VAT revenue and the theoretical maximum VAT revenue (the multiple of the tax base and VAT rate). In such an analysis, this coefficient can also be inferred as a residual. The analysis for Croatia shows that in the recent period the increase in the share of VAT in GDP was determined by

Figures 7a and 7b Contributions to the change in the share of VAT revenues in GDP



Note: Since tax rates in 2009 and 2012 were changed in the course of the year, the effective general tax rates for 2009 and 2012 are estimated.

Sources: Eurostat and CNB calculations.

the increase in the efficiency of VAT collection, which might be the consequence of the implementation of fiscalisation in cash transactions, as well as of the increased efforts of the Government of the Republic of Croatia in preventing VAT evasion (Figure 7a). It is noteworthy that due to the unavailability of detailed data on the structure of collected VAT, only the general VAT rate was taken into consideration in changing the VAT rate in the analysis. Thus the residual, in addition to the efficiency of VAT collection, also includes the effects of the change in the intermediate VAT rates, as well as the change in the structure of personal consumption, which comprises goods and services with different intermediate VAT rates. The general VAT rate was changed twice in the observed period: in 2009 (from 22% to 23%) and in 2012 (from 23% to 25%). Since these tax changes entered into force in the course of the year (1 August 2009 and 1 March 2012), the effective tax rates for these years were estimated according to the duration of the period of collection of the individual rates in that year.

The Croatian economy is specific because of its high dependency on tourism. Tourist services account for the largest share of Croatian exports. The segment in which tourist services are realised in the domestic market is subject to VAT, which is otherwise not calculated for the exports of goods and services. Due to this specificity, the analysis is adjusted so that the exports of services are included in the tax base (Figure 7b). Such

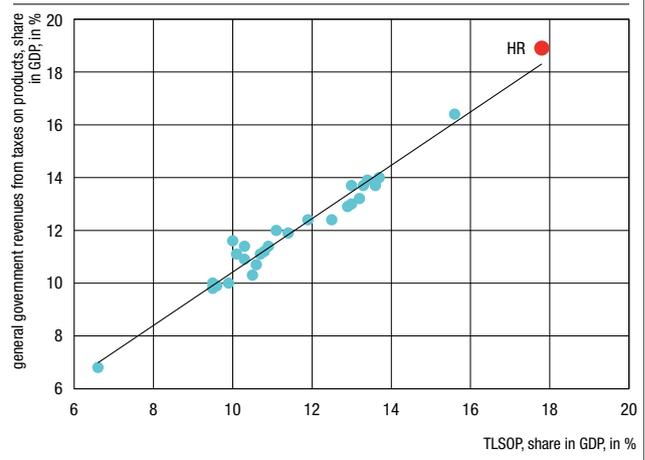
3 Keen, M. M. (2013): *The Anatomy of the VAT* (No. 13-111), International Monetary Fund.

an analysis shows that the strongest positive contribution to the increase in the share of VAT in GDP after 2014 was made by the growth of the exports of services, while the contribution of personal consumption at the beginning of the period was negative, and later neutral. The contribution of the efficiency of VAT collection remains positive, but much smaller than in the analysis that leaves out the exports of services from the tax base (therefore, the exports of services actually explain the largest share of the residual in Figure 7a).

The data for the 28 EU member states for 2018 indicate a close link between the TLSOP component and the general government revenues from taxes on products. It is also evident that among all EU member states, Croatia has the largest ratio of revenues from taxes on products relative to GDP, and consequently the largest share of the TLSOP component in GDP (Figure 8). This situation can partly be explained by the previously mentioned very high share of tourism in the economy of Croatia.

Based on the analysis conducted it can be concluded that since 2014, the TLSOP and GDP have grown at divergent rates, which is to the largest extent a reflection of the increase in revenues from taxes on products, primarily of VAT, while the level of subsidies is constant throughout the observed period. The change in VAT revenues reflects the change in the tax base, tax rates and the efficiency of tax collection. The growth in the ratio

Figure 8 Ratio between the general government revenues from taxes on products and the TLSOP component for 28 EU member states in 2018



Source: Eurostat.

of VAT revenues and GDP since 2014, including the growth of the TLSOP component in GDP, has primarily been the consequence of growth in the exports of tourist services.

4 Labour market

Employment and unemployment

The third quarter of 2019 was marked by relatively favourable developments in the labour market. The number of employed persons rose by 0.5% from the previous quarter, with construction, tourism-related service activities, information and communication and business services making a particularly positive contribution to growth. Employment growth continued with similar intensity into October 2019. (Figure 4.1).

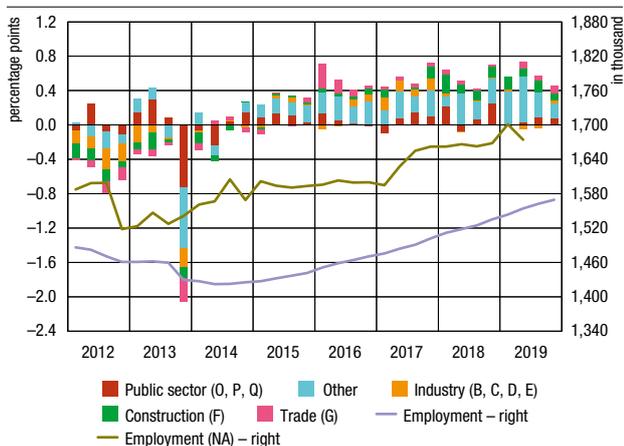
Unemployment continued to fall throughout the third quarter after the number of unemployed persons remained unchanged in the second quarter of 2019. The fall in unemployment was primarily due to new employment, followed by clearings from

the records. The fall in unemployment accelerated at the beginning of the fourth quarter primarily as a result of rising employment from the CES register. At the end of October (according to seasonally adjusted data), the number of registered unemployed persons stood at 121 thousand (Figure 4.2).

Such developments in unemployment resulted in a fall in the registered unemployment rate in the third quarter of 2019 to 7.8% of the workforce (compared to 8% in the second quarter), with this indicator falling to 7.4% in October. In the second quarter of 2019, the ILO unemployment rate stood at 6.6%, down from 6.9% in the first quarter (Figure 4.3).

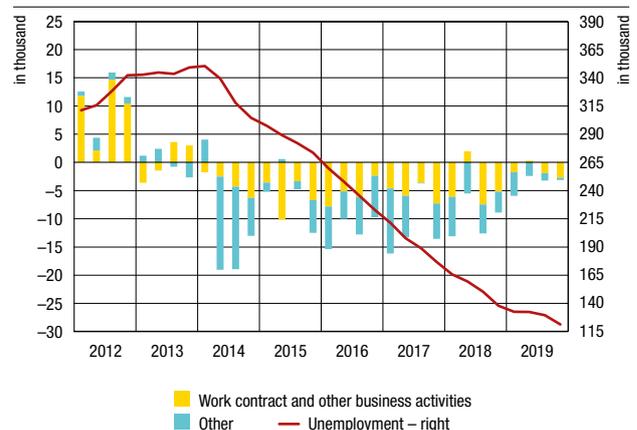
The available Labour Force Survey data for the second

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



Note: Data for the fourth quarter of 2019 refer to October.
Source: CPII (seasonally adjusted by the CNB).

Figure 4.2 Total unemployment and net unemployment inflows
seasonally adjusted data



Note: Data for the fourth quarter of 2019 refer to October.
Source: CES (seasonally adjusted by the CNB).

quarter of 2019 point to a fall in employment and participation from the beginning of the year, mostly due to a fall in the number of persons classified as employed and unemployed in the Labour Force Survey, which could suggest the usual fluctuations in the labour market (see Box 4 for more information on deviations in the level and dynamics of employed persons from different data sources). Thus the employment rate fell to 47.3% of working age population (from 48.1%) and the rate of participation (labour force in relation to working age population) fell to 50.7% (from 51.4%) (Figure 4.4).

Wages and unit labour costs

The third quarter saw a small acceleration in wage growth. The average nominal gross wage rose by 1.1% from the previous three quarters, with faster wage growth taking place in the private than in the public sector. The growth in the average nominal gross wage slowed down considerably (0.5%) in October 2019, reflecting wage stagnation in the private sector on the one

hand, and wage growth acceleration in the public sector on the other (Figure 4.5). Public sector wage growth in October was determined by the agreement reached in 2018 between the Government of the Republic of Croatia and public sector unions on the increase in the base for the calculation of wages of civil servants and government employees.

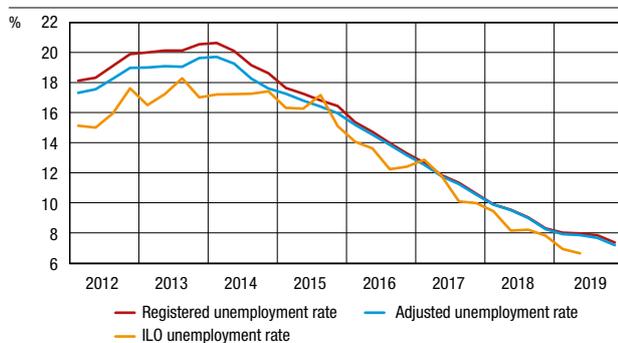
At the same time, the growth in real wages at the beginning of the fourth quarter was much less pronounced due to a rise in consumer prices in October compared with the previous three months.

Data from the national accounts for the second quarter point to a sharp increase in unit labour costs as a result of a faster growth in compensations per employee than in productivity (Figure 4.6).⁴

Projected developments

According to the available data for the first ten months, employment is expected to grow by 2.3% on the level of the whole

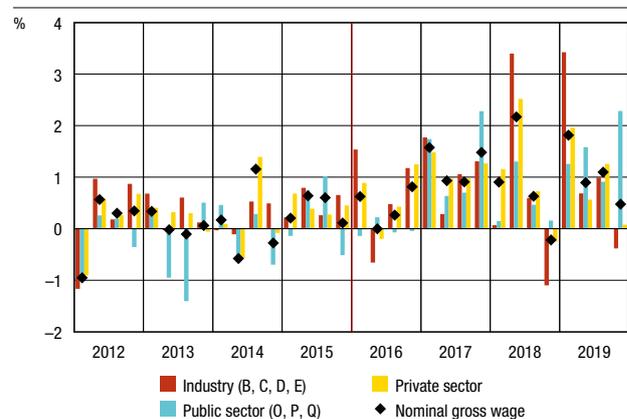
Figure 4.3 Unemployment rates
seasonally adjusted data



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 used the data on employed persons from the JOPPD form. Data for the fourth quarter of 2019 for the registered and the adjusted unemployment rate refer to October.

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

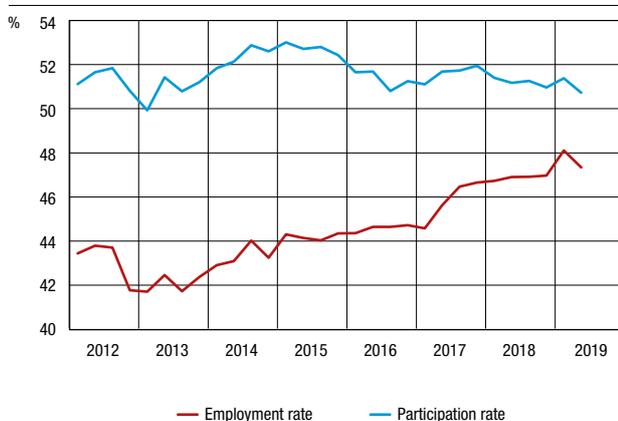
Figure 4.5 Average nominal gross wage by NCA activities
seasonally adjusted data, quarterly rate of change



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 2019 refer to October.

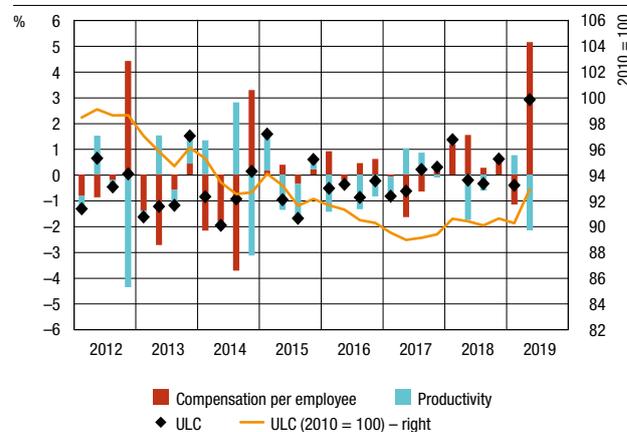
Sources: CBS and CNB calculations (seasonally adjusted by the CNB).

Figure 4.4 Labour Force Survey
seasonally adjusted series



Source: CBS (seasonally adjusted by the CNB).

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

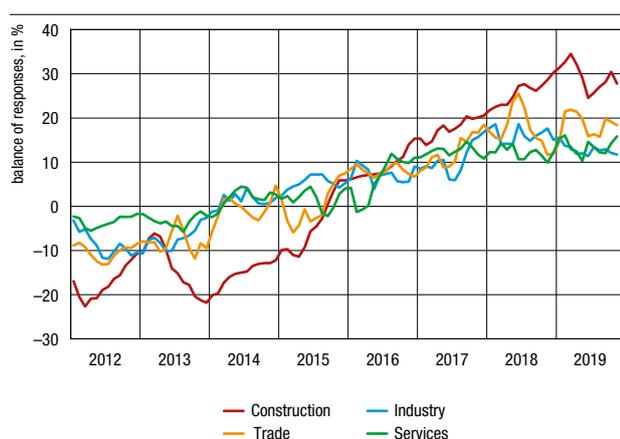


Note: Productivity growth carries a negative sign.

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

⁴ At the time of writing, the revised quarterly GDP data published by the CBS were used in the calculation of unit labour costs. The same data and the revised data on compensation per employee were not published by Eurostat. Changes in unit labour costs are expected to take place once Eurostat releases the revised data on compensation per employee from the national accounts.

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).

of 2019. The survey on business expectations also suggests favourable developments in employment. According to this survey, the number of employed persons in the next three months might rise the most in construction and trade (Figure 4.7). Unemployment is also expected to fall further mainly as a result of employment but also as a result of further, albeit slower, emigration of working age population. Thus, the ILO unemployment rate might fall to a historic low of 6.7% in 2019.

As regards labour costs, 2019 is expected to see a slowdown in the annual growth of the nominal gross wage (3.8%) due to a slower than expected wage growth in the private sector. Slower wage growth in the private sector mirrors in part the change in the structure of employed persons resulting from new employment which is stronger in sectors with a lower average wage (for more information on the effect of employee structure on developments in the average nominal gross wage, see Box 3).

Table 4.1 Projection of labour market indicators for 2019 and 2020

year-on-year rates of change

	2016	2017	2018	2019	2020
Number of employed persons – CPII	1.9	1.9	2.3	2.3	1.8
Number of employed persons – national accounts	0.3	2.2	1.8	2.3	1.8
Participation rate (ILO)	51.3	51.6	51.2	51.6	52.4
Unemployment rate (ILO)	13.1	11.2	8.4	6.7	5.9
Average nominal gross wage	1.9	3.9	4.9	3.8	5.4
ULC	-1.8	-2.0	1.3	2.5	4.3
Productivity	3.2	0.9	0.8	0.7	1.0

Note: The year-on-year rates of change in employment refer to data on persons insured with the CPII, 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, whereas year-on-year rates of change in unit labour costs and productivity refer to national accounts data. Projections of unit labour costs (and productivity) assume that the rise in employment and total employment in the national accounts will be equal to the expected increase in the number of persons insured with the CPII.

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

The increase in the amount and form of non-taxable compensations from 1 January and a further increase from 1 September 2019 will probably result in a somewhat smaller increase in gross wages⁵.

The growth in the number of employed persons is expected to slow down in 2020 (1.8%), while the ILO unemployment rate might fall to 5.9% of the labour force. As regards wages, the year 2020 is expected to see a considerable acceleration in the growth of average nominal gross wage to 5.4%, mainly attributable to a faster wage growth in the public sector following the agreement between the Government of the Republic of Croatia and government employees' unions on three wage increases of 2% each and the agreement with teachers' unions on the increase of the job complexity indices for teachers. Wage growth acceleration is also expected in the private sector, although it will be less pronounced.

Box 3 Effect of changes in employee structure on average wage in Croatia from 2009 to 2018

Croatia did not see any pronounced rise in wages until 2017 and 2018, despite favourable macroeconomic developments and rising pressures on the labour supply side in the past few years. However, although wages have recovered, their growth remained below expectations, which can partly be explained by a change in the structure of employees. Namely, rising employment in activities with a relatively lower average wage led to a slower growth in the average wage in the economy than that which would have been achieved had there been no changes in the structure. Therefore, in this box first the weighted average nominal gross wage in the period from 2009 to 2018 is constructed, and then the total annual change in the wage is divided into composition effect and price effect. The estimated impact of the composition effect, although not very pronounced, was positive during the crisis and turned negative afterwards.

In the last several years Croatia has witnessed a faster growth in wages as a result of the economic recovery and an increasing labour shortage associated with negative demographic trends and net emigration of population following the country's

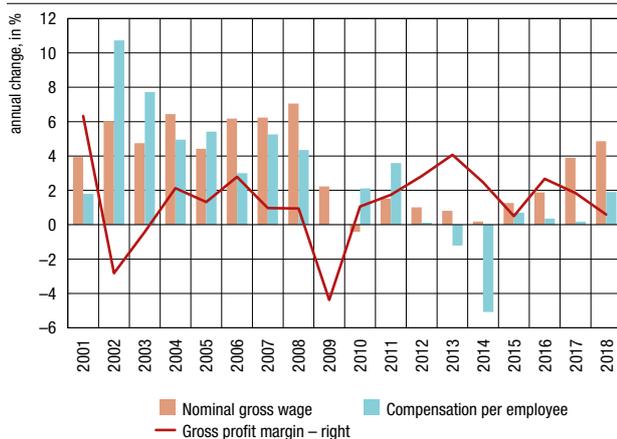
accession to the EU. Between 2015 and 2018, gross wages in Croatia rose by 3% on average (Figure 1). As regards compensations per employee that show individual costs per employee based on national accounts data the coverage of which is greater than the gross wage, they grew by 0.8% annually on average after the crisis.

A change in the structure of employees due to a more pronounced employment in lower paid activities may slow down the growth in the average wage in the entire economy. For instance, faster employment growth in construction, which is characterised by a lower average wage than other activities as well as by a bigger share of foreign workforce, results in a slower growth in the average wage in the entire economy.

From 2015–2018, employment rose the most in the accommodation and food service activities (I) (32.3%), where wages in 2015 stood at approximately 80% of the average wage (Figure 2). Construction (F), administrative and support service activities (N), other service activities (S) and information and communication activities (J) saw a considerable growth in employment

⁵ Such a Government decision is expected to encourage employers to increase non-taxable compensations such as meal bonuses or transportation allowances, which are not a part of the gross wage. Therefore, even though employee income will rise, the increase will not be reflected in gross (and net) wage.

Figure 1 Annual growth rates of the nominal gross wage 2001-2018



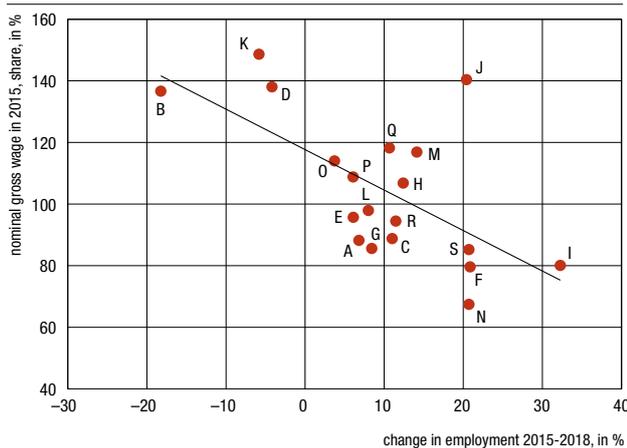
Sources: Eurostat, CBS and CNB calculations.

Figure 3a Average wage on the level of the economy



Sources: CBS and CNB calculations.

Figure 2 Cumulative change in employment by NCA activities from 2015 to 2018 (%) and share of wage by NCA activities in the total average nominal gross wage in 2015 (%)



Note: Classification of activities by NCA 2007: A – Agriculture, forestry and fishing; B – Mining and quarrying; C – Manufacturing; D – Supply of electricity, gas, steam and air conditioning; E – Water supply, wastewater disposal, waste management and environmental improvement activities; F – Construction; G – Wholesale and retail trade; repair of motor vehicles and motorcycles; H – Transportation and storage; I – Accommodation and food service activities; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities; O – Public administration and defence, compulsory social security; P – Education; Q – Human health and social work activities; R – Arts, entertainment and recreation; S – Other service activities; T – Activities of households as employers; undifferentiated goods – and services – producing activities of households for own use; U – Activities of extraterritorial organisations and bodies.

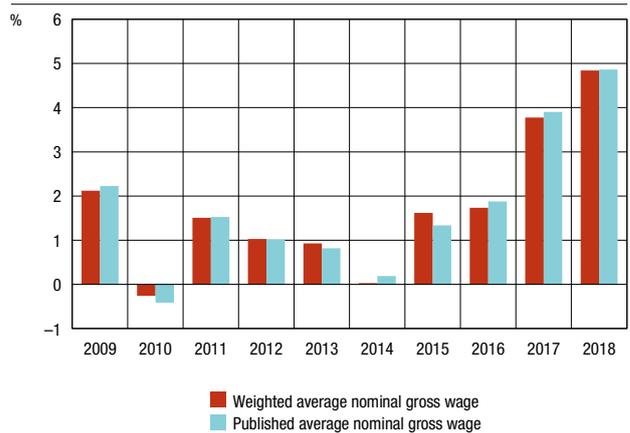
Source: CBS.

(approximately 20%). All these activities are characterised by relatively low average wages (from 67% to 85% of the average wage on the entire economy level), with the exception of the IT sector (140% of average wage).

To find out the extent to which the total change in average wage mirrors the change in the wage and the extent to which it is the result of changes in the structure of employed persons, the wage has to be divided into price effect and composition effect, i.e. the average wage has to be shown as the weighted average of wages in individual sectors, with the weights being the number of employed persons in individual sectors.

By contrast, the CBS calculates the average wage by dividing the total payments by the number of employed persons. An

Figure 3b Annual rates of change in the average wage



Sources: CBS and CNB calculations.

average calculated in this way may in certain cases differ from the weighted average wage by activity (used in this analysis) due to specific circumstances, such as parallel employment with several employers, transfer of employees from one sector to another within a month, etc. However, this difference should not be substantial. As shown in Figure 3a, until 2015 there was almost no difference in the average wage calculated using either of the two methods, with the exception of 2009, after which the weighted wage steadily kept being lower than the published one. Throughout the entire observed period the difference averaged HRK 30 or 0.3% of the average wage in 2018. Due to the difference in the calculation of average wages, the annual rates of change in wages also differ slightly (Figure 3b).

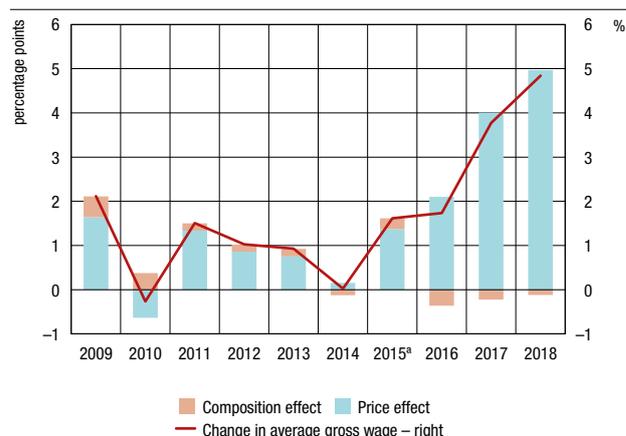
Since developments in the average wage mirror the combined effects of changes in wage and employee structure, the change in the average wage can give a misleading picture of upward pressures on wages. Therefore, the annual change in the weighted average nominal gross wage is divided below into the price effect, i.e. the calculation of the increase in the average wage under the assumption the current year employee structure is maintained, and the effect of change in employee structure,

calculating the contribution of change in employee structure to the average wage, keeping average wages in individual activities unchanged at the level of the previous year.⁶ This can show us the extent to which the total change in wages reflects the change in average wages by activities, under the assumption of unchanged structure, and to what extent it is the result of change in employee structure.

During the crisis, the composition effect increased the average wage, since employment fell the most in segments with lower wages, while during the period of recovery it moved in the opposite direction. Namely, during the crisis, the biggest fall in employment was seen in mining and quarrying, construction and trade, with the average wages in the latter two activities being much lower than the average. In addition, most commonly, young people and persons hired for a fixed term whose employment contracts were not renewed or were subject to a hiring freeze, lost their jobs during the crisis. These categories of employees are expected to have somewhat lower average wages than those with many years of work experience and permanent employment contracts and since this composition effect could not be controlled in this analysis, the estimates shown probably underestimate it.⁷ By contrast, during the period of recovery, employment rose the most in accommodation and food service activities and construction, activities characterised by relatively lower average wages. However, data show that after the crisis employment also rose considerably in information and communication activities, which are characterised by higher average wages.

Numerical decomposition of the average nominal gross wage from 2009 to 2018 shows that, though small, the composition effect was positive during the crisis and turned negative afterwards. The relatively small composition effect can partly be explained by structural changes in the number of employed persons by activities. Rising employment in construction, which is characterised by relatively lower average wages, contributed to a reduction in total average wage growth rate, while the increase in the number of employed persons in information and communication mitigated somewhat the negative composition effect.

Figure 4 Decomposition of changes in the average wage



* Change in data collection methodology.
Sources: CBS and CNB calculations.

Between 2009 and 2014, the composition effect (0.5 p.p.) was most pronounced in 2009, at the very beginning of the period. The growth in average nominal gross wage in 2009, under the assumption of no changes in the structure of employed persons, would thus be lower (1.6% instead of 2.2%). By contrast, from 2015, the composition effect was negative, peaking in 2016 (0.4 p.p.) when, without changes in the structure of employees, wage growth would have stood at 2.1% instead of the achieved 1.7%.

And finally it should be noted that the results of the analysis conducted should be interpreted with caution because decomposition of changes in the average wage into the price and composition effect was made on somewhat aggregated data, which prevented exclusion of the effects of all employee characteristics that affect wages, with the result that the estimates show the probable lower limit of these effects.

Box 4 Different data on the number of employed persons in Croatia

There are different sources of data on employment available in Croatia. The availability of different sources of data on the number of employed persons may enhance the quality of analysis on developments in this segment of the labour market. However, the difficulty in the analysis of developments in the number of employed persons in Croatia is compounded by considerable deviations in the level of and developments in the number of employed persons according to different data sources. Such deviations aggravate the task of analysts and confuse data users. This problem is not limited to employment but also affects related indicators such as labour productivity and unit labour costs.

There are several different sources of data available in Croatia on the number of employed persons. The Croatian Bureau of Statistics (CBS) data on the number of employed persons in legal persons and the Croatian Pension Insurance Institute

(CPII) data on the number of persons insured with the Institute are the main administrative sources of data and are available on a monthly level. The CBS is also the source of quarterly data on the number of employed persons based on the national accounts statistics published on the Eurostat website and the results of the Labour Force Survey. Table 1 (at the end of the Box) captures the main methodological characteristics of different sources of data on the number of employed persons. Quarterly data are characterised by a much bigger time lag of data availability, a limiting factor in the analysis of current developments in the labour market.

The level of employment according to the Labour Force Survey is only slightly lower than that according to the national accounts statistics. This is not surprising given that the estimate of the number of employed persons in the framework of national

⁶ A similar decomposition method was often used for variables (time series) in the national accounts, such as final consumption of households to goods and services. However, the classical method used for wage decomposition in literature is the Blinder-Oaxaca decomposition. But, the Blinder-Oaxaca decomposition requires individual data on employee wages and demographic characteristics (gender, education, age, type of employment), in contrast with CBS data on wages from the JOPPD form which do not contain such information. Also, the CNB only has the aggregate data published on CBS official sites available.

⁷ Unemployment of young people in Croatia was among the highest in the EU, almost every other person aged 15 to 24 being unemployed in 2013. For information on employers' crisis adjustment, see Kunovac, M. and Pufnik, A. (2015): *Features of the Labour Market and Wage Setting in Croatia: Firms Survey Results*, CNB Surveys, 27.

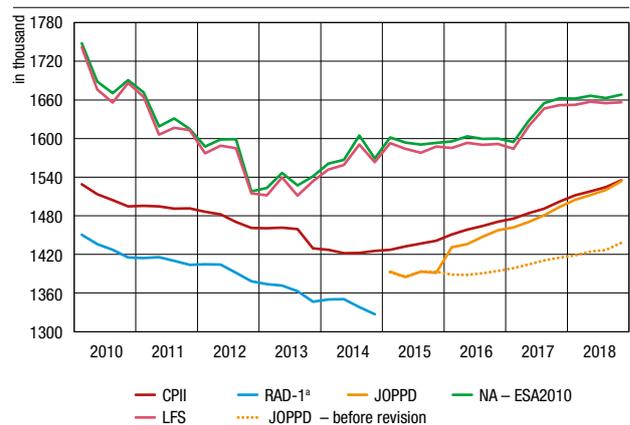
accounts is based primarily on the Labour Force Survey.⁸ From 2010 to 2018, employment in the framework of the national accounts was on average 10 thousand persons higher than that estimated under the Survey (Table 1). However, administrative sources show a considerably lower level of employment than the national accounts. Between 2010 and 2018, total employment according to the national accounts was on average approximately 140 thousand higher than that according to CPII, or almost 200 thousand higher than employment according to RAD-1, or the JOPPD form⁹ since 2015 (Figure 1).¹⁰

The much bigger number of employed persons according to the statistics published in the framework of the national accounts than that drawing on administrative sources is not surprising, given that employed persons include all individuals over 15 years of age who have worked at least one hour in the reference week. However, account should be taken of the fact that the Survey does not collect data on the number of employed persons directly, but collects directly only data on employment and unemployment rates, extrapolating total employment according to independent estimates of the working age population, which means that the quality of data on the number of employed persons according to the national accounts depends on the quality of demographic statistics.¹¹

The considerable increase in emigration that followed Croatia's accession to the European Union was only partly and with a delay captured by the official statistics, so it is probable that official demographic data on the working age population are somewhat overestimated.¹² It is probable that the working age population decreased much faster over the years than suggested by the official statistics. A new census might result in a break in the time series, or large one-off changes in all labour market indices for the calculation of which the working age population is used. Therefore, if demographic statistics overestimate the size of the population then the employment rate according to the Labour Force Survey that is derived from these statistics is also overestimated.

The CPII publishes the number of persons registered with it; this approximates the number of persons employed in legal persons, persons employed in crafts, and of the self-employed in the reference month.¹³ By contrast, the monthly CBS data include only persons employed in legal persons and are based on the JOPPD form introduced in 2016. Before that, the CBS published data on persons employed in legal persons based on the RAD-1 monthly survey, which included 70% of persons employed in legal persons in each of the NCA sections. Thus compiled, data would be revised annually based on the RAD-1G annual survey, which provided a full coverage of employed persons. But from the standpoint of data users this was problematic

Figure 1 Employment according to various sources of data from 2010 to 2018



^a Data on persons employed in legal persons were revised based on a full coverage RAD-1G annual survey and the dynamics of the RAD-1 monthly survey.

Sources: CBS, Eurostat and CPII.

as data revisions tended to be large and marked by great fluctuations in their extent.¹⁴ The transition to the JOPPD form was meant to achieve a full coverage of employed persons on a monthly level that would avoid the need for revisions. However, thus compiled, data on persons employed in legal persons continued to be revised, usually once a year, due to the inclusion of the JOPPD forms submitted at the end of the month. The adjustments for subsequently collected forms notwithstanding, revisions remained substantial.¹⁵

In September 2019, the CBS released revised data on the number of persons employed in legal persons from the JOPPD form for the period from January 2016 to July 2019. Under this revision, the total number of employees in legal persons rose on average by 80 thousand. According to the CBS, data were revised due to a growing deviation in the number of employed persons under data compiled from the JOPPD form compared to data from the CPII. The main reason for the difference lies in a wider coverage, in compliance with the Contributions Act, of employed persons, primarily younger persons, who numbered slightly below 100 thousand in 2018 according to CPII data. According to the CBS, until then, employed persons did not include full time employees under the age of 30 for whom employers were exempted from paying contributions on wages for up to five years. In addition, under the revision, the total number of employed persons included posted workers who account for 0.8% of the total number of employed persons in legal persons,

8 The difference between the number of employed persons under the Survey and the national accounts arises from conceptual differences as well as integration with other accounts, in the case of the national accounts. Conceptual differences are the result of employment coverage depending on geographical coverage. The bulk of the difference involves net cross-border workers that the Survey is adjusted for. Namely, the Survey gives preference to the national concept (number of employed residents), while the national accounts give preference to the domestic concept (persons employed in residual production units).

9 RAD-1 is the abbreviation for the Monthly report on employment and wages and JOPPD is the abbreviation for the Report on income, income tax and surtax as well as contributions for mandatory insurances.

10 The total number of employed persons according to CBS data includes persons employed in legal persons according to RAD1/JOPPD, and data on employed persons in crafts and trades and freelancers and individual farmers from CPII records on active insured persons.

11 The Labour Force Survey is based on a sample of households and provides information on the share of employed persons (employees, self-employed and supporting family members), unemployed and inactive persons in the sample of households. The nominal number of employed, unemployed and inactive persons is calculated using the estimate of the number of working age individuals provided by demographic statistics and census data. The census being decennial, the last, 2011, census provides the measured number of working age population, and estimates of the working age population for other years are based on data on the age structure of the population, number of births and deaths and the number of immigrants and emigrants (in 2001, the data from the Labour Force Survey and the census were not aligned. The census showed 168 thousand more working age individuals).

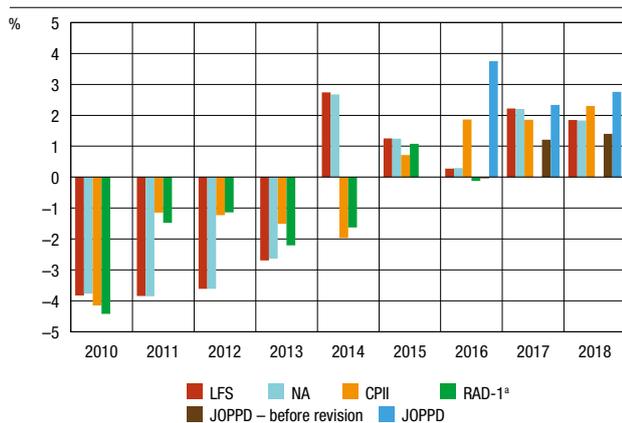
12 See Draženović, I., Kunovac, M. and Pripuzić, D. (2018): *Dynamics and determinants of emigration: the case of Croatia and the experience of new EU member states*, Public Sector Economics, 42 (4), pp. 415-447.

13 The total number of insured persons also includes persons with prolonged insurance who are not considered employed persons but are relatively stable in numbers.

14 The average revision of the number of persons employed in legal persons from 2010 to 2015 stood at 17 thousand, with the largest revision of almost 30 thousand being recorded for 2015.

15 For instance, under the April 2018 revision, the number of employed persons in legal persons increased by 40 thousand.

Figure 2 Annual rates of change in employment from different sources 2010-2018



^a Data on employed persons were revised based on a full coverage RAD-1G annual survey and the dynamics of the RAD-1 monthly survey.
Sources: CBS, Eurostat and CPII.

as well as some other categories whose share in the total is negligible.

The described methodological differences in the definition of employment and sources of data on employment may largely explain the historical differences in the number of employees according to CBS and CPII data. Figure 1 shows the gradual convergence of data on employment based on administrative sources. As stated previously, the difference first narrowed considerably after the CBS transition to the new source of data (JOPPD form). However, due to the growing number of young persons for whom employers were exempted from paying contributions on wages and who were not included in employed persons by the CBS, the difference started to widen gradually. Under the last CBS data revision from September 2019, this difference vanished almost completely.

Different data sources do not show only a different number of employed persons but also a different development in the number of employed persons over time (Figure 2). Until transition to the JOPPD form, the dynamics of employed persons according to the CPII was similar to the dynamics presented by the CBS. Thus, the average annual rates of change in the

Table 1 Main characteristics of different sources of data on the number of employed persons in Croatia

Data on employed persons	Source	Reference period	Time lag of series availability	Methodology	Coverage	Main disadvantages of the methodology
Number of persons employed by legal persons	DZS	Monthly data (relate to the entire reference period)	25 days after the end of the month	JOPPD form	All persons employed for a fixed period of time or an unspecified period of time, irrespective of number of working hours and ownership of the legal person. Includes trainees, persons on parental and sick leave and persons absent from work for any reason until termination of employment.	Considerable correction of data one year after their publication due to the inclusion of subsequently submitted JOPPD forms makes them unsuitable for an analysis of current developments in employment. Survey coverage is limited to legal persons only.
		Monthly data (relate to the last day of the month)	30 days after the end of the month	RAD-1 (out of use since 2016)		Survey coverage is limited to legal persons only. The sample covers 70% of employed persons. Considerable data corrections 1 year after publication based on RAD-1G forms (in March of the following year) make them unsuitable for an analysis of current developments in employment.
		Annual data – as at 31 March	in April next year	RAD-1G		As at 31 March. Survey coverage limited to legal persons.
Number of persons insured with the Croatian Pension Insurance Institute	CPII	Monthly data (relate to the last day of the month)	6-8 days after the end of the month	Pension Insurance Act (OG 157/1993)	Includes all natural persons subject to compulsory pension insurance based on solidarity between generations by virtue of work activity (employment, performing of activity and other).	Possible untimely notification of the change in the status of compulsory pension insurance of a user in the register. By definition, it shows the number of persons insured with the CPII and can be used only as an approximation of the number of employed persons.
Number of employed persons according to the Labour Force Survey	CBS	Quarterly data	14 weeks after the end of the reference quarter	European system of national and regional accounts	All persons above the age of 15, irrespective of their formal status, who have worked at least one hour in the reference week and have been paid for their work in money or kind.	Released with a considerable time lag.
Number of employed persons according to the national accounts			11 to 13 weeks after the end of the reference quarter	Defined according to the International Labour Organisation and Eurostat	Obtained by integration of data from the Labour Force Survey, the census, registered number of employed persons, income tax register, business expectation surveys, etc. Thus obtained estimate of the number of employed persons is then integrated in the national accounts using a simultaneous and consistent estimate of employment with other national account variables, such as the GDP and compensation of employees.	Released with a considerable time lag. Mainly follows the LFS.

Sources: CBS, Eurostat and CPII.

number of employed persons according to the CPII and CBS data based on RAD-1G surveys were very similar from 2010 to 2015 (and stood at -1.5% and -1.6% , respectively). However, after the introduction of the JOPPD form, their dynamics started to differ visibly. While employment according to CPII data grew from 2015, unrevised JOPPD data did not show an increase in the number of employed persons until 2017, despite recovery in economic activity from the end of 2014. However, after data revision in September 2019, employment according to JOPPD data grew much faster than that according to CPII data. From 2016 to 2018, employment according to JOPPD data grew by an average rate of 3% , in contrast with 2% according to CPII data.

The analysis of the annual rates of change in the number of employed persons from 2010 to 2018 suggests considerable deviations throughout almost the entire observed period. Data from the Labour Force Survey and employment statistics published in the framework of national accounts pointed to a more pronounced fall in employment from 2010 to 2013 than suggested by administrative sources. However, in 2014, the survey and administrative data showed completely different developments in the number of employed persons. Survey data for 2014 thus point to a significant rise in employment of 2.8% (national accounts 2.7%), while CPII and CBS data point to a fall in employment. This discrepancy might be connected to a methodological change in the sample of the Labour Force Survey and a discontinuation of the rotation sample scheme and inclusion of completely new individuals in the sample. After that, the annual rates

of change in the number of employed persons from survey and administrative sources converged again in 2015, only to diverge again in 2016. In 2017, employment according to the Labour Force Survey rose at a similar rate as employment according to CPII data (1.7% and 1.9% , respectively) and revised CBS data (2.3%). According to the latest available data, for 2018, employment rose the most according to revised CBS data (2.8%), followed by CPII and Labour Force Survey data, which showed a slightly slower growth, 2.3% and 1.8% , respectively.

A detailed analysis of different employment indicators shows that each of the existing sources of data has advantages and disadvantages and that their respective use should be determined by methodology and purpose. For instance, the Survey and the national accounts data are better suited for international comparisons but less so for an analysis of current developments in the number of employed persons. Account should also be taken of the fact that the Labour Force Survey employment rate is a derived indicator that depends on the quality of other statistics. By contrast, data on the number of insured persons are better suited for an analysis of current developments. In the light of the convergence brought about by the last CBS revision of the administrative number of employees and the number of insured persons, the differences between these two sources of data will probably continue to narrow in the future, which should lead to smaller deviations in the number of employed persons and dynamics of developments in the number of employed persons.

5 Inflation

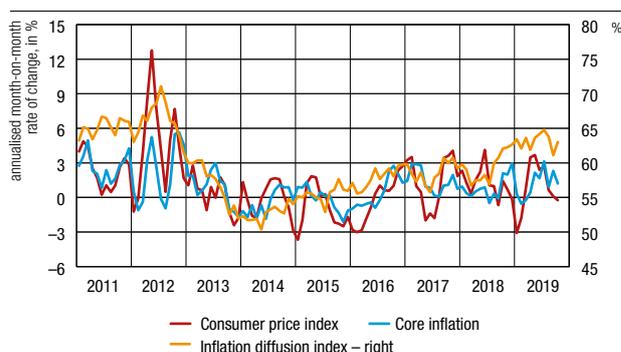
The average annual consumer price inflation decreased to 0.7% in the first ten months of 2019 from 1.6% in the same period last year, primarily due to a cut in the VAT rate on some products, made early in the year. In addition, inflationary pressures eased in the observed period as a result of a drop in global crude oil prices and a slowdown in inflation in the euro area.

Domestic inflationary pressures were relatively mild in 2019, although slightly stronger than in the previous year, which mainly refers to the acceleration in the growth of personal consumption and unit labour costs as well as of industrial producer prices (excluding energy). Cost pressures have not yet spilled over significantly to consumer prices, having partly been alleviated by a drop in profit margins (Figure 5.4). International analyses suggested that wage spillover effects on prices were also limited in other EU member states.¹⁶ Wage spillover effects on prices have proved to be less pronounced in conditions of low inflation and low inflationary expectations, strong market competition and solid profitability of corporates, which then prefer cutting profit margins to risking losing market shares due to increases in their products' prices.

The inflation diffusion index shows that the share of products that increased in price in the total number of products was 63% in the period from July to October 2019, which slightly exceeds the long-term average of 62% .

The annual consumer price inflation rate accelerated from 0.7% in the second quarter of 2019 to 0.9% in the third quarter. As shown by the latest available data, inflation was 0.6% in October, the same as in June (Table 5.1). As regards the CPI structure (Figure 5.3), the contribution of energy (refined petroleum products, solid fuels and gas) and processed food products

Figure 5.1 Indicators of current inflation trends



Notes: The month-on-month rate of change is calculated from the quarterly moving average of seasonally adjusted consumer price indices. The inflation diffusion index is measured by a 6-month moving average. The inflation diffusion index shows the share of the number of products that increased in price in a given month in the total number of products and is based on the monthly rates of change derived from the seasonally adjusted components of the HICP.

Sources: CBS and CNB calculations.

(bread and cereals and milk, cheese and eggs) decreased in the last four months.

In contrast, the contribution of unprocessed food products to overall inflation increased considerably over this period and the contribution of industrial products and services increased to a smaller extent. The annual rate of change in the prices of unprocessed food products rose from -4.7% in June to -2.2% in October, primarily due to an increase in the annual rate of

16 See IMF (2019): *Wage Growth and Inflation in Europe: A Puzzle?*, Regional Economic Outlook Europe (Chapter 2): Europe, November.

Table 5.1 Price indicators

year-on-year rate of change

	6/2018	9/2018	12/2018	3/2019	6/2019	9/2019	10/2019
Consumer price index and its components							
Total index	2.4	1.4	0.8	0.9	0.6	0.8	0.6
Energy	7.9	5.3	0.9	4.0	1.4	0.2	-0.4
Unprocessed food	3.8	-0.1	-0.6	-5.7	-4.7	-2.7	-2.2
Processed food	1.5	0.9	1.9	2.6	2.6	2.6	2.0
Non-food industrial goods without energy	0.5	-0.3	0.1	-0.4	-0.3	0.4	0.0
Services	1.0	1.4	1.2	1.2	1.3	1.2	1.6
Other price indicators							
Core inflation	0.7	0.5	1.0	0.9	1.1	1.6	1.3
Index of industrial producer prices on the domestic market	3.4	3.4	0.5	2.3	0.4	-0.3	-0.5
Index of industrial producer prices on the domestic market (excl. energy)	-0.1	-0.2	-0.3	0.1	1.0	0.8	0.9
Harmonised index of consumer prices	2.2	1.6	1.0	1.1	0.5	0.6	0.6
Harmonised index of consumer prices at constant tax rates	2.1	1.5	0.8	1.7	1.1	1.1	1.2

Note: Processed food includes alcoholic beverages and tobacco.

Source: CBS.

change of fruit prices, caused by poor weather conditions. The annual rate of change in the prices of meat, including pork, also increased, which can be attributed to disturbance in the global market, that is, the growth of demand from China, reflecting a marked drop in the country's pork production caused by swine fever. Consequently, pork prices in the EU agricultural product market increased by about 35% at the end of October relative to the same period in the previous year.¹⁷

The annual increase in the prices of services accelerated from 1.3% in June to 1.6% in October, predominantly as a result of an acceleration in the annual growth of the prices of hairdressing and beauty salon services (probably attributable to cost pressures, that is, wage increases) and telephone services. The annual rate of change in industrial product prices grew slightly over the mentioned period, up from -0.3% in June to 0% in October. This was primarily due to the increased contribution of clothing and footwear prices, boosted mainly because their seasonal growth in September 2019 was stronger than that in the same month last year.

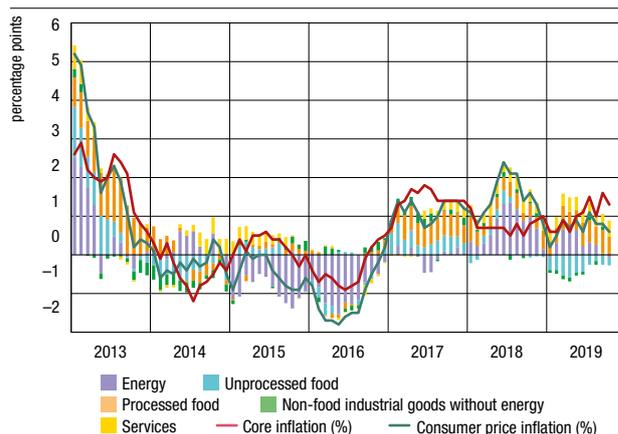
Core inflation (which excludes agricultural product prices, energy prices and administered prices) accelerated from 1.1% in June 2019 to 1.3% in October 2019, with the main contributions coming from the prices of clothing and footwear, meat, non-durable household goods, hairdressing and beauty salon services and telephone services.

The annual HICP inflation rate in the euro area decreased from 1.3% in June 2019 to 0.7% in October 2019 (Figure 5.3). The decrease resulted from trends in energy prices, whose contribution to inflation decreased from 0.2 percentage points in June to -0.3 percentage points in October, the main cause being a decline in the annual rate of change in the prices of refined petroleum products, natural gas and electricity. The contributions of other main HICP components remained approximately the same in October as in June. The largest positive contribution to annual inflation in the euro area in October 2019 came from services (0.7 percentage points) and processed food products (0.3 percentage points).

Core inflation in the euro area (which excludes the prices of energy, food, alcoholic beverages and tobacco) fluctuated around a low 1% in 2018, the trend continuing in 2019: it stood at 1.1% in October, remaining unchanged from June.

17 EU Meat Market Observatory: Pigmeat Dashboard, 31 October 2019.

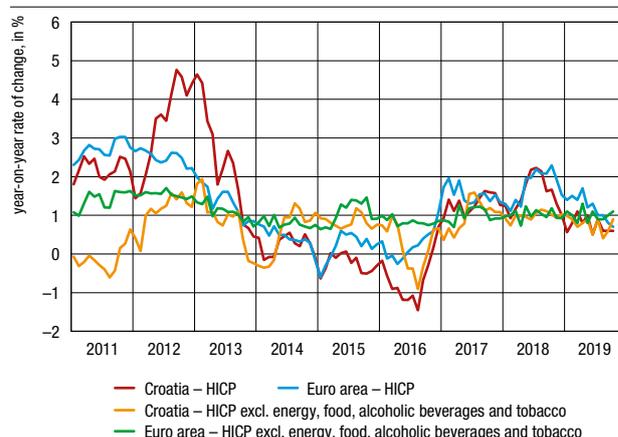
Figure 5.2 Year-on-year inflation rate and contributions of components to consumer price inflation



Note: Core inflation does not include agricultural product prices, energy prices and administered prices.

Sources: CBS and CNB calculations.

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



Sources: CBS and Eurostat.

Accordingly, wage spillover effects onto prices in the euro area have not been significant.¹⁸

The annual HICP inflation rate in Croatia went up from 0.5% in June to 0.6% in October, standing only slightly below the euro area inflation rate. The increased contribution of unprocessed food products and services to overall inflation was partly offset by the decreased contribution of energy and processed food products. Core inflation in Croatia, measured by the HICP excluding energy, food, alcoholic beverages and tobacco prices, picked up from 0.5% in June to 0.9% in October, mainly because of the accelerated annual growth in the prices of services. Core inflation in Croatia was in October 0.2 percentage points lower than that in the euro area.

Projected developments

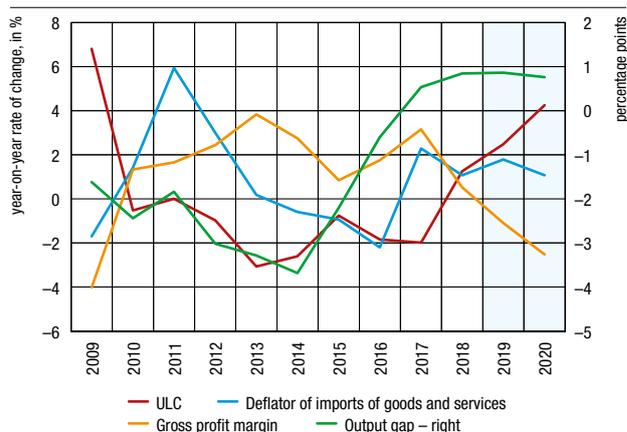
The average annual consumer price inflation rate decelerated from 1.5% in 2018 to an estimated 0.8% in 2019 as a result of an anticipated decrease in the average annual growth rate of energy prices, which were down from 4.4% in 2018 to 1.9% in 2019, (mainly due to a lower contribution to inflation from refined petroleum product prices) and of food prices, down from 1.0% in 2018 to -0.3% in 2019, primarily due to the reduction of the VAT rate on certain food products early in the year. In contrast, the average annual rate of growth of the CPI excluding food and energy is estimated to accelerate slightly from 0.9% in 2018 to 1.0% in 2019. The acceleration was partly weakened by a decrease in pharmaceutical product prices early in the year, caused by a cut in the VAT rate on these products, and a marked decrease in the (administered) prices of textbooks in September.

Inflation is expected to jump above 1% due to a positive base effect stemming from a sizeable decrease in Brent crude oil prices in late 2018, while developments in crude oil prices on the spot market point to a further modest fall in December 2019.

The projected consumer price inflation acceleration from 0.8% in 2019 to 1.4% in 2020 could mainly be the result of an increase in the average annual rate of change in food prices from -0.3% in 2019 to 2.0%, predominantly due to the base effect, that is, the fading of the effect of the VAT cut on the annual rate of change in some food product prices. The increase in food prices could to a smaller extent be influenced by an anticipated increase in the prices of food raw materials in the world market in 2020 (2.5% in kuna terms) and the announced introduction of compensation for the return of milk packaging of 50 lipa per packaging. The average annual rate of growth of the CPI excluding food and energy is also expected to accelerate from 1.0% in 2019 to 1.5% in 2020. The acceleration is expected to result mainly from administrative measures, that is, the announced increase in excise duties on cigarettes and alcoholic beverages and the calculation of excises on non-alcoholic beverages based on the share of sugar added. Also relevant could be the impact on price developments from domestic inflationary pressures, that is, from the substantial expected growth of personal consumption and accelerated growth of unit labour costs. The total effect of tax changes on the average annual consumer price inflation rate in 2020 is estimated at approximately 0.3 percentage points.

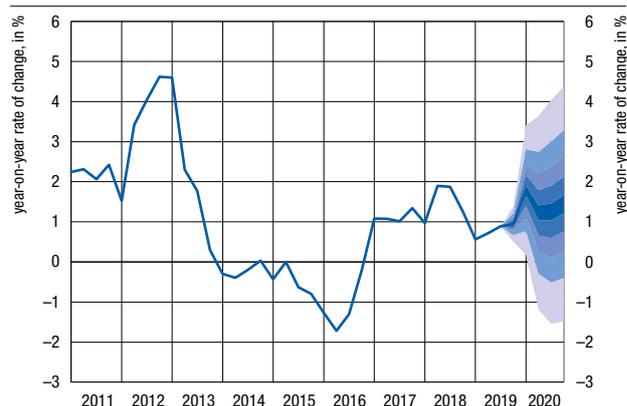
By contrast, the average annual growth rate of energy prices is projected to continue to decelerate in 2020, dropping from 1.9% in 2019 to 0.2% in 2020. The slowdown is expected to result primarily from the base effect, i.e., the waning of the effect of the price increase in natural gas and solid fuels in 2019. In addition, the average price of Brent crude oil on the global

Figure 5.4 Domestic and foreign determinants of inflation



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.

Figure 5.5 Projection of consumer price inflation



Sources: CBS and CNB calculations.

market is expected to decrease by about 7% (in kuna terms) in 2020.

Imported inflationary pressures are expected to remain mainly subdued in 2020, taking into account, for instance, the expected fall in the global prices of crude oil, a slight increase in the prices of other raw materials and low inflation in Croatia's major trade partners. For example, consumer price inflation in the euro area is expected to hover around 1.0%¹⁹ in 2020, while the growth of producer prices in Germany and Italy in 2020 is projected at 1.0% and 0.6% respectively.²⁰

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 to potentially stronger growth in oil prices caused by escalating geopolitical tensions and possible disruptions in crude oil supply. In addition, unexpected weather adversities could boost agricultural product prices, and certain administered prices could also

¹⁸ In addition, analyses have shown that changes in the HICP calculation methodology, especially those related to package tour prices in Germany, led to a decrease in euro area inflation in 2019.

¹⁹ ECB, September 2019.

²⁰ Consensus Forecasts, November 2019.

increase in 2020. Furthermore, the spillover effect on consumer prices resulting from the increase of excises on certain products and from unit labour costs could be more pronounced in 2020 than currently projected.

On the other hand, risks that could cause inflation to be

lower than projected include a potential decrease in the prices of crude oil and other raw materials (in the event of a possible slump in global economic growth and/or larger than expected increase in oil production) and a weaker spillover effect of increased excises on certain products on retail prices.

6 Current and capital account

The current and capital account surplus grew markedly in the third quarter of 2019 over the same period in 2018. Favourable trends were mostly due to the rise in net services exports spurred by an increase in tourism revenues. In addition, the overall balance in the accounts of secondary income and capital transactions improved due to increased use of EU funds and the primary income deficit narrowed due larger net revenues from compensation of persons temporarily employed abroad. At the same time, the foreign trade deficit fell slightly. Hence, observing cumulative values over the past year, the surplus in the current and capital account stood at 4.3% of GDP in the third quarter of 2019, a substantial improvement from the 3.3% of GDP reported for 2018 (Figure 6.1).

Foreign trade and competitiveness

The foreign trade dynamics intensified in 2019 compared with the previous year's performance, notably as regards exports. According to the balance of payments data, the year-on-year rate of growth of goods exports stood at 6.5% in the first nine months of 2019, compared with the 5.3% recorded in the same period of 2018. At the same time, goods imports accelerated, albeit at a much lower intensity, growing at a year-on-year rate of 7.4% in the first nine months of 2019 from 7.1% in the same period of 2018. Accordingly, the annual growth of the trade deficit was slower than in the first nine months of 2018 (8.7% vs 9.5%) and, observing cumulative values over the past year, stood at -19.2% of GDP, a deterioration of 0.6 percentage points from 2018.

If developments only in the third quarter of 2019 are observed, the growth of total goods exports (by 6.4% year-on-year according to the CBS data²¹) was mostly the result of larger exports of other transport equipment, mostly ships to Malta and the Marshall Islands and, to a lesser extent, of exports of medical and pharmaceutical products to Israel and the USA. In contrast, a significant decrease was observed in exports of scientific and

Figure 6.1 Current and capital account balance and its structure

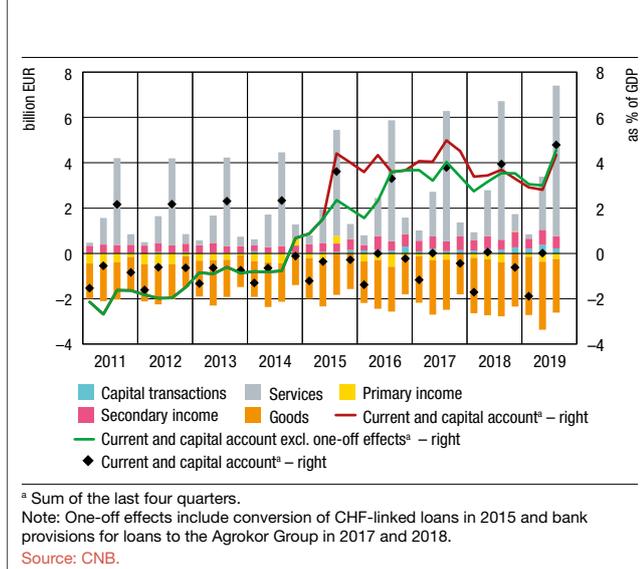


Figure 6.2 Exports of goods
year-on-year rate of change and contributions

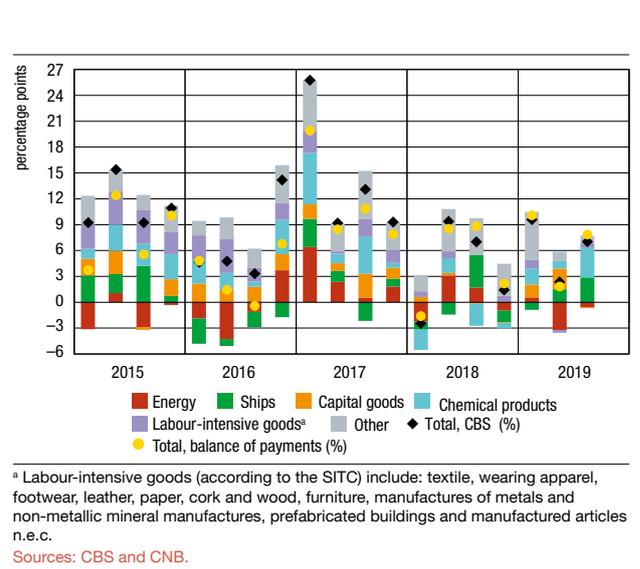
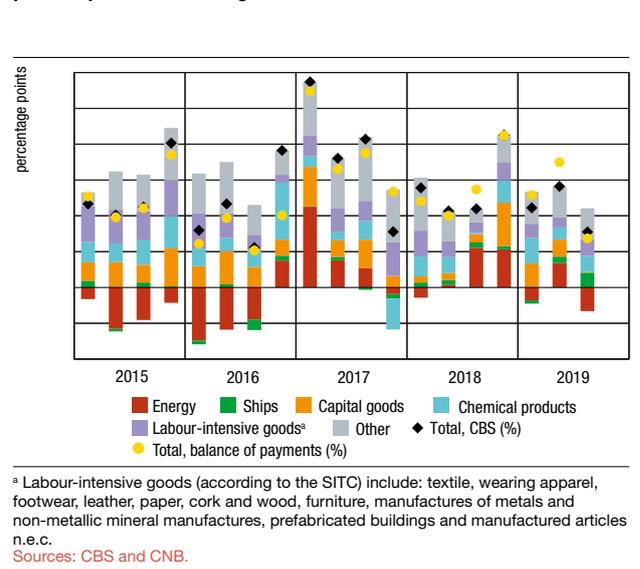


Figure 6.3 Imports of goods
year-on-year rate of change and contributions



21 The coverage of data on the foreign trade in goods published by the CBS 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).

control instruments and optical products to South Korea. Exports of energy products, especially natural and manufactured gas to Italy and oil and refined petroleum products to Malta, Slovenia and Algeria, also trended downwards (Figure 6.2).

As regards goods imports, their annual growth of 3.4% in the third quarter of 2019 (Figure 6.3) was mostly the result of larger imports of other transport equipment, i.e. ships, from Liberia and road vehicles from Germany. An increase was also seen in imports of medical and pharmaceutical products from Germany, other chemical products from Italy and the Netherlands, and food products, notably from Germany, Greece and Slovenia. In contrast to other goods, imports of energy products shrank noticeably, primarily due to lower imports of oil and refined petroleum products from Iraq, Canada and Norway.

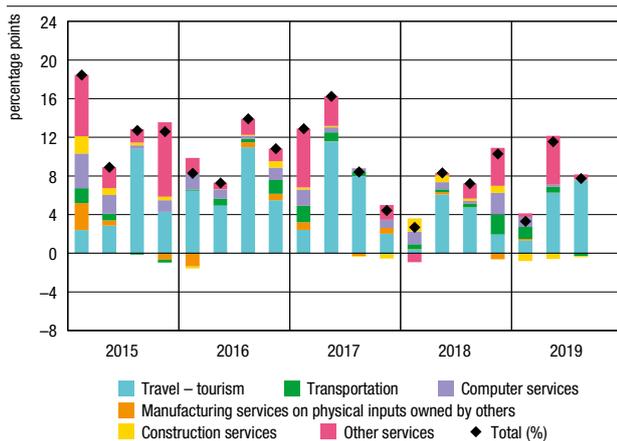
Import and export flows show that the widening of the trade deficit in goods in the third quarter of 2019 was strongest in the trade of general industrial machinery and equipment, road vehicles, scientific and control instruments, optical products, textile industry products and food products. Nevertheless, unfavourable developments were offset by, among other things, lower net imports of medical and pharmaceutical products and by a greater

decrease in imports of energy products, notably oil and refined petroleum products (due to both the fall in prices and the growth in exported and the decrease in imported quantities). As a result, the indicator of net imports of oil and refined petroleum products improved in relative terms and, according to cumulative values over the last four quarters, stood at -2.0% of GDP at the end of September 2019 compared with -2.2% of GDP in 2018.

Unlike trade in goods, the foreign trade balance in services continued to improve in the third quarter of 2019 due to the accelerated annual growth in tourism revenues (9.1%) in the same period in 2018 (5.6%) (Figure 6.4). On the other hand, the accelerated growth in tourism revenues was accompanied by a pronounced slowdown in the growth of tourist consumption of residents abroad (2.2% vs 6.0%); hence, the annual growth rate of net exports of travel services was noticeably higher in the June-September period of 2019 than in the same period of 2018 (9.5% vs 5.6%).

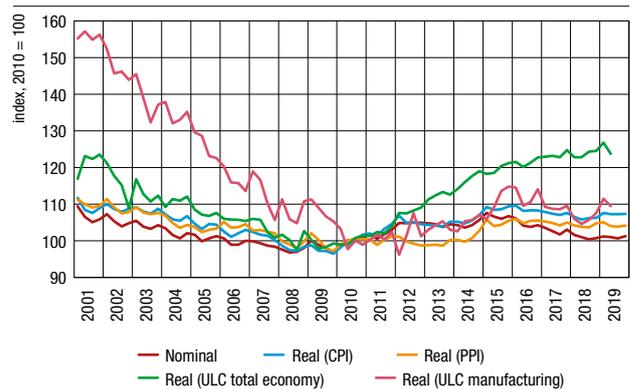
The reported growth in tourism revenues was mainly driven by the rise in average consumption while foreign tourist arrivals rose only slightly. The CBS data on volume indicators for tourism point to an increase of 2.2% in the number of foreign tourist

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



Source: CNB.

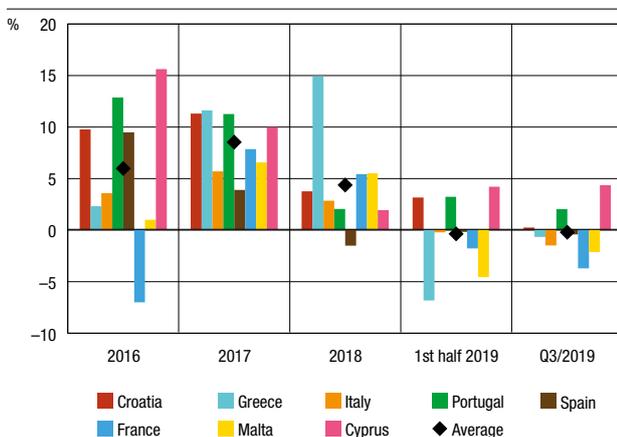
Figure 6.6 Nominal and real effective exchange rates of the kuna



Notes: A fall in the index indicates an effective appreciation of the kuna. In the fourth quarter of 2019, 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 6.5 Year-on-year rate of change in the number of nights stayed by foreign tourists



Note: Data for the third quarter of 2019 for Spain refers to July and August.

Source: Eurostat.

arrivals in the third quarter, while the number of nights stayed by foreign tourists in commercial accommodation facilities grew by only 0.2% year-on-year. Following a decline in nights stayed in July, notably by tourists from Germany, Poland and the Czech Republic, this indicator improved in August and September due mostly to guests from Slovenia, Hungary and Ukraine. Weaker results in the peak tourist season were observed in the majority of Mediterranean countries, with the number of foreign tourists nights lower in France, Malta, Italy, Greece and Spain in the third quarter of 2019 than in the same period in 2018 (Figure 6.5).

After improving in the first quarter of 2019, the overall price and cost competitiveness of Croatian exports slightly deteriorated in the rest of the year. The major contributors to the appreciation of the real effective kuna exchange rates were faster growth in domestic prices and costs than in prices and costs of Croatia's main trading partners.

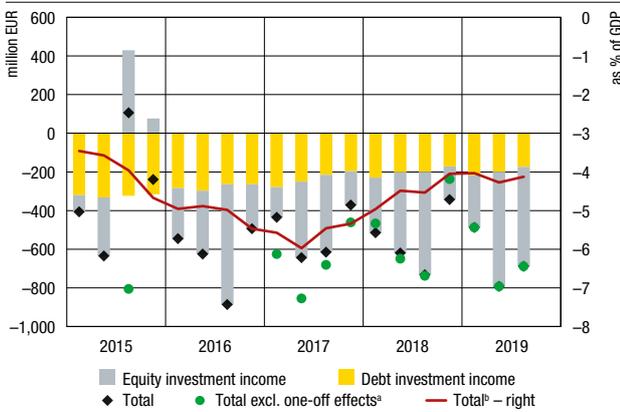
Income and transactions with the EU

The investment income deficit went down slightly in the third quarter of 2019 from the same period in 2018 (Figure 6.7) due

to lower interest expenses on external debt and a decrease in the deficit on equity investment income. The lower deficit on equity investment income resulted from somewhat higher portfolio investment income, which was offset by growing net direct investment expenditures caused by better business performance of domestic enterprises owned by non-residents, notably in the manufacture of basic pharmaceutical products and pharmaceutical preparations and trade.

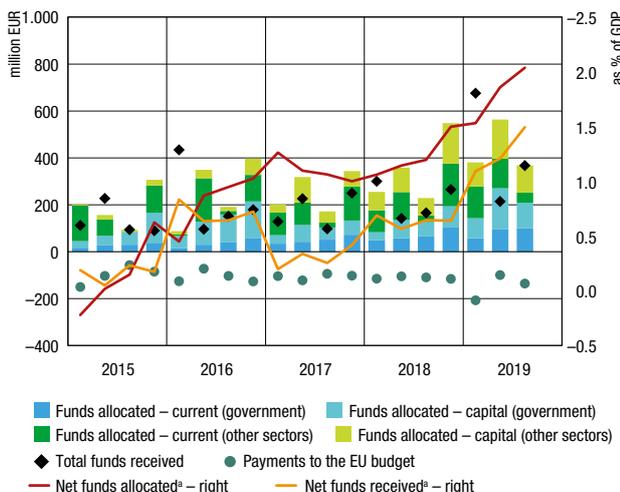
Total net revenues arising from transactions with the EU budget showed a sizeable increase in the third quarter of 2019. A larger share of EU funds related to capital than to current revenues, with the government sector receiving more funds than other domestic sectors. The positive balance in transactions with the EU budget, i.e. the surplus of funds utilised from EU funds over the payments to the EU budget, reported as the sum of the

Figure 6.7 Investment income



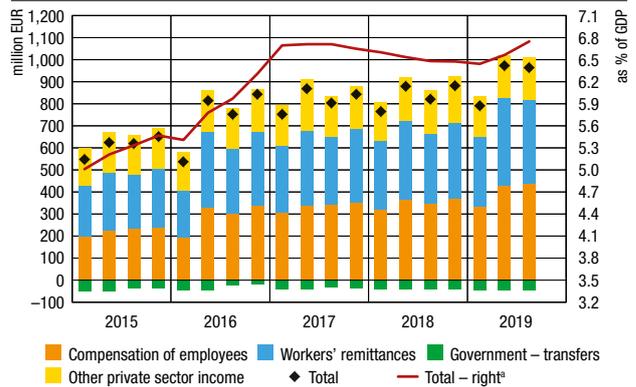
^a One-off effects include conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017 and 2018.
^b Sum of the last four quarters, excluding one-off effects.
 Source: CNB.

Figure 6.8 Transactions with the EU budget



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

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.

last four quarters, grew from 1.8% of GDP at the end of 2018 to 2.5% of GDP in September 2019 (Figure 6.8). The third quarter of 2019 also witnessed strong growth in other income, which excludes income from equity and debt investment and transactions with the EU budget, brought about by a rise in compensation of employees working abroad and personal transfers (Figure 6.9).

Projected developments

The current and capital account balance is expected to deteriorate in the last quarter of 2019 from the same period in 2018, due notably to the widening of the foreign trade deficit spurred by faster growth in goods imports than in goods exports. In the whole of 2019, the current and capital account could run a surplus of 3.9% of GDP, which is a better performance than in 2018. More precisely, unfavourable trends in goods trade were able to be offset by a rise in net exports of services, reinforced absorption of EU funds and stronger net income from personal remittances.

The estimated growth of the goods trade deficit in 2019 arises from faster growth in imports than in exports (according to the balance of payments data), similar to the performances in the preceding part of the year. This notwithstanding, the growth of goods exports, could surpass last year's performance, taking into account the relatively favourable export results in the first nine months of 2019 reported in conditions of the slowdown in global trade flows and real imports in the main trading partners. In parallel, the intensification of personal consumption and investment activity contributes to the relatively high estimated growth rate of goods imports. In contrast to the goods trade, the international trade in services is expected to see the continuation of positive trends, largely owing to travel services.

The higher absorption of EU funds has a strong positive impact on the current and capital account balance, meaning that the positive balance in transactions with the EU budget could rise from 1.8% of GDP in 2018 to 2.6% of GDP in 2019. Further increase is also expected in net income from personal remittances, although to a lesser extent than from transactions with the EU budget. In contrast, the current and capital account balance is negatively affected by higher profits of domestic enterprises and banks in non-resident ownership.

In 2020, the surplus in the current and capital account might shrink to 3.2% of GDP, as a result of the widening of the foreign

trade deficit. Despite the assumption that trends in global trade and foreign demand of the main trading partners will be more favourable in 2020 than in 2019, goods exports are not expected to pick up. Specifically, the results for the base 2019 year are in part related to a sharp increase in exports of individual categories of goods, such as ships, medical and pharmaceutical products (following a sharp decline in 2018) and road vehicles, which are not expected to continue growing at elevated rates in 2020. At the same time, imports could once again grow at faster rates than exports, although the import dynamics is expected to slow down in an environment of sluggish growth in investments.

Further growth of net services exports in 2020 could be the main factor contributing to the moderation of negative trends in the current and capital account balance. This is to a large extent related to a further rise in tourism revenues, albeit slower than in the previous year, which among other things is the result of a high base, heightened competition in the global tourism market and domestic structural constraints (such as available accommodation facilities). In addition, the growth in resident tourists' consumption expenditures abroad is expected to slow down.

An additional increase in net income from personal

remittances, though to a much lesser extent, could contribute positively to the current and capital account balance. After strong absorption of EU funds in 2019, the positive balance in transactions with the EU budget (as % of GDP) could in 2020 remain at its 2019 level, in spite of a mild increase in absolute terms. The same goes for the deficit arising from direct equity investment income.

As regards risks to the projected current and capital account balance, negative risks prevail. The main risk arises from a sizeable slowdown in foreign demand of the main trading partners, which would have an adverse impact on the growth dynamics of Croatian exports of goods and services on the back of deterioration of economic conditions in Croatia's main trading partners (notably Germany and Italy), the negative effects of Brexit on economic developments in other EU member states and an adverse impact of trade protectionism on global growth. Moreover, the continued strengthening of competition in the Mediterranean tourism market could additionally hamper the growth in tourism revenues. However, the growth of imports could slow down in the case of a pronounced weakening of domestic investment activity and personal consumption.

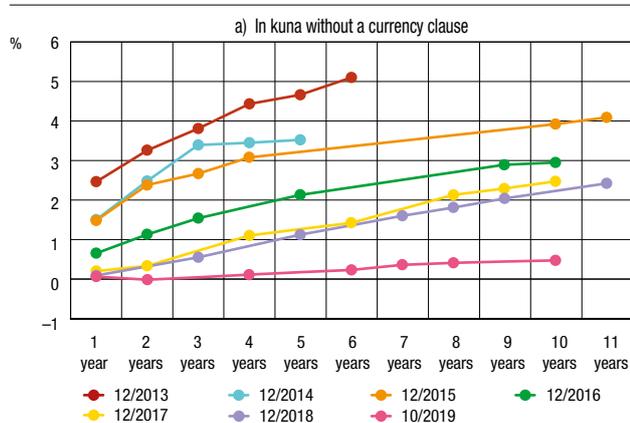
7 Private sector financing

Domestic sectors' financing conditions continued to improve in the second half of 2019, with government borrowing costs at record lows. The interest rate on one-year kuna T-bills dropped on the domestic market from 0.09% in December 2018 to 0.06% in November 2019. In August 2019, euro T-bills of the same maturity were for the first time auctioned at a negative interest rate of -0.05%, a level at which the interest rate remained in October as well. The yield curve on Croatian government bonds also suggests that longer-term government financing conditions improved significantly from the end of 2018 (Figures 7.1.a and 7.1.b). Furthermore, in November, the government issued two bonds on the domestic capital market under the most favourable borrowing conditions thus far: a HRK 3.5bn five-year kuna bond with a yield of 0.36% and a HRK 7.5bn fifteen-year kuna bond with a currency clause in euro and a yield of 1.2%. Funds raised by new bond issues were, for the most part,

used to refinance the existing issue of a fifteen-year bond worth EUR 1bn that matured in late November.

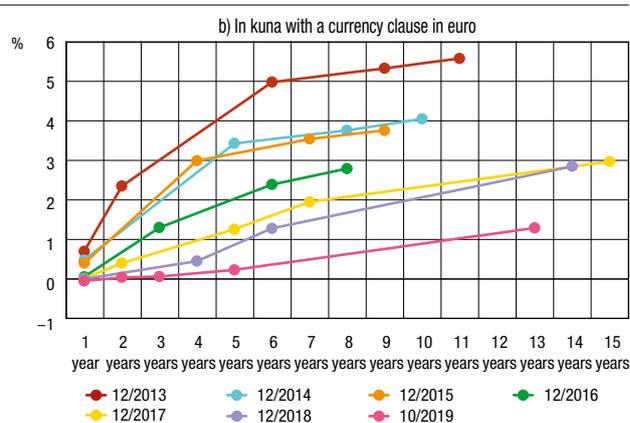
The government's foreign borrowing cost, estimated by the sum of the EMBI for Croatia and the yield on the German government bond, continued to decline in the second half of 2019 (Figure 7.3). At the end of November, it stood at 0.7%, down by around 1.8 percentage points from the end of 2018, to which the decrease in the EMBI for Croatia contributed with 1.2 percentage points. The credit default swap (CDS) for Croatia dropped, standing at 76 basis points at the end of November 2019, down from 96 basis points at the end of 2018. Croatia's credit rating and outlook did not change in the second half of 2019 after Standard & Poor's and Fitch upgraded Croatia's credit rating from BB+ to BBB- in the first half of the year (raising the country's credit rating to investment grade after a several-year long period of sub-investment grade ratings) and after Moody's

Figure 7.1 Yield-to-maturity on RC bonds



Notes: The dots show the achieved yields, while other values have been interpolated. Data for a 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 a 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.

changed the country’s outlook from stable to positive, maintaining the credit rating two notches below investment grade, at Ba2.

Corporate financing costs continued to decrease. Average interest rates on short-term corporate borrowing from banks in kuna without a currency clause and on long-term corporate borrowing in kuna with a currency clause were 0.3 and 0.2 percentage points lower, respectively, in the July-October period than the average of the first six months of 2019, standing at 3.0% and 2.8% in October (Figures 7.2 and 7.3). Favourable developments were also reflected in the decrease in interest rates relative to loan amount (Figure 7.4). Interest rates on loans above HRK 7.5 million were considerably lower and more volatile, as such loans are usually used by a smaller number of larger enterprises having more collateral and better access to various forms of alternative financing.

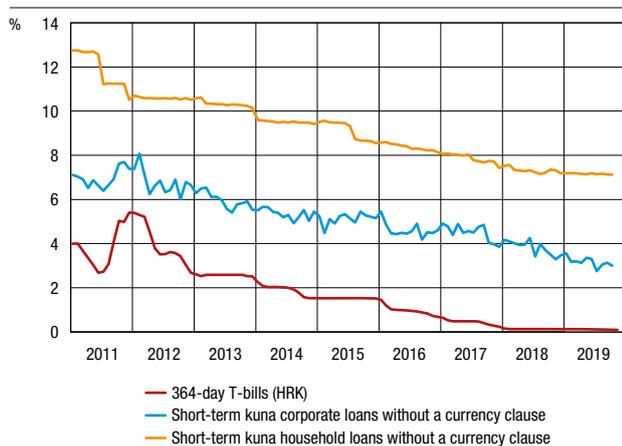
Household borrowing costs also mainly continued their downward trend. The average interest rate on long-term housing loans with a currency clause was 0.3 percentage points lower

in the July-October period than the average of the first half of 2019, standing at 2.7% in October (Figure 7.3). At the same time, the average interest rate on long-term consumer and other loans with a currency clause dropped by 0.2 percentage points, standing at 5.2% in October. The cost of short-term kuna borrowing remained at approximately the same level (Figure 7.2) in the observed period.

Lower funding costs of the Croatian banking system contributed further to the continued decrease in the financing costs of the private sector. EURIBOR remained in negative territory (Figure 2.3), while the national reference rate (NRR)²² continued to decline steadily (Figure 7.5).

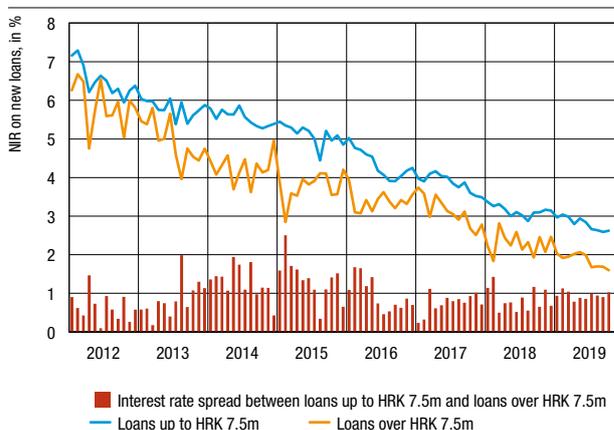
As regards interest rate structure, the share of loans granted at a fixed interest rate continued to grow noticeably amid low interest rates in both the household and the corporate sector, having increased by 6.2 and 12.6 percentage points respectively over the past two years. Due to intensified kuna lending, the share of loans linked to the NRR also increased in the household

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



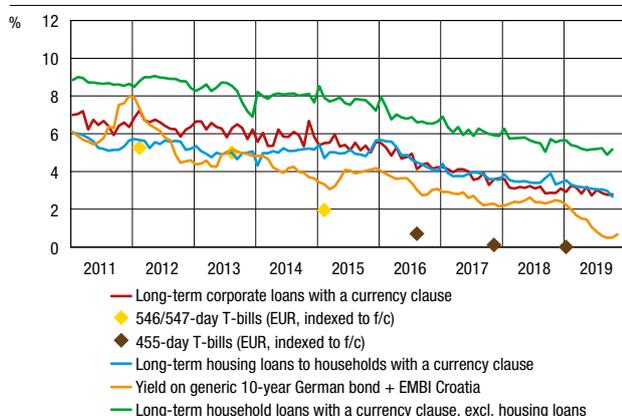
Sources: MoF and CNB.

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



Source: CNB.

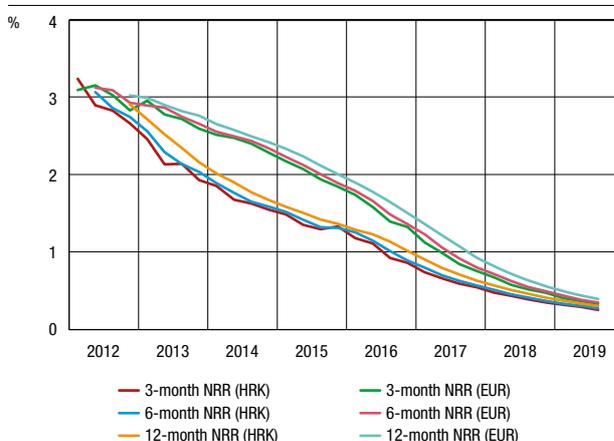
Figure 7.3 Long-term financing costs in kuna with a currency clause and in foreign currency



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

Sources: MoF, Bloomberg and CNB.

Figure 7.5 National reference rate (NRR)

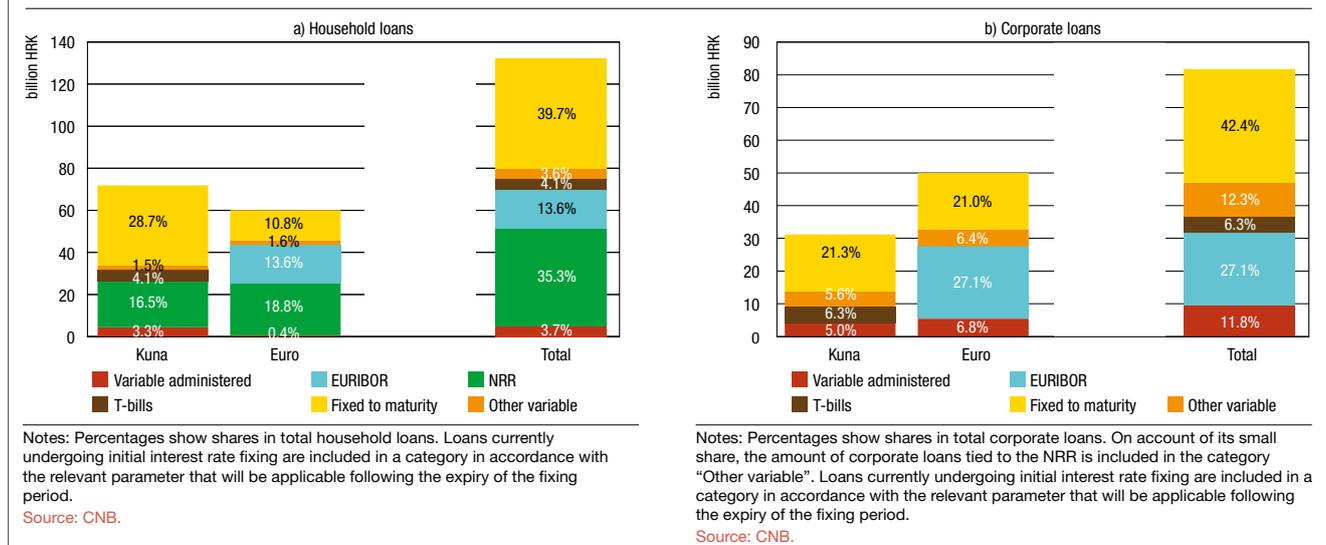


Note: The rates shown refer to the rates for all natural and legal persons.

Source: HUB.

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

Figure 7.6 Structure of interest rates, October 2019



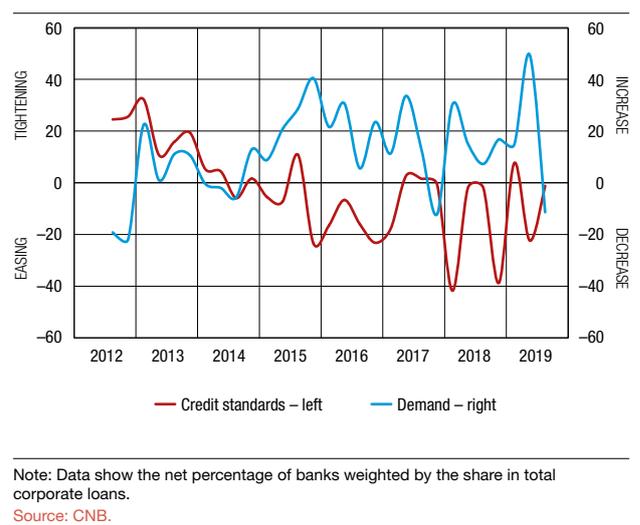
sector. At the end of October 2019, loans with fixed-to-maturity interest rates were the predominant category in total household loans (39.7% in Figure 7.6.a), followed by loans linked to the NRR and EURIBOR. Loans granted at an interest rate that is fixed over a period shorter than maturity account for 17.5% of household loans, of which around two thirds are loans with interest rates fixed for a period longer than three years. In corporate loans, loans with interest rates that are fixed to maturity also constitute the largest share (42.4% in Figure 7.6.b), followed by loans linked to the EURIBOR, in line with the currency structure dominated by the euro.

According to the bank lending survey for the third quarter of 2019, credit standards for corporate loans eased further, albeit to a smaller extent than in the second quarter (Figure 7.7). The several-year long trend of credit standard easing for corporate loans thus continued. The easing of credit standards for corporate loans in the third quarter was mainly affected by positive expectations related to overall economic trends and the favourable conditions in the banking market (competition between banks and bank liquidity). On the other hand, corporate demand for loans dropped in the third quarter of 2019, reversing a several-year long trend of a continuous increase in demand. The decrease was most noticeable in short-term loans and loans to large enterprises. The most significant negative contribution to the demand for loans came from the use of alternative sources of funding, usually more easily accessible to large enterprises. For more on the constraints of private firms in obtaining funding, see Box 5 Corporate access to sources of financing.

In the household sector, credit standards continued to tighten in the third quarter of 2019 (Figure 7.8). As in the second quarter, the tightening of standards was more noticeable in relation to consumer and other loans, which is a result of compliance with the Recommendation on actions in granting non-housing consumer loans by which the credit institutions are recommended, among other things, to be more cautious when granting new general-purpose cash loans, particularly those with longer maturities. The demand for consumer and other loans continued to decline even more noticeably than in the second quarter, while the demand for housing loans continued to rise driven by growing consumer confidence and improved real estate market prospects.

The total debt of non-financial corporations decreased in the third quarter of 2019. This was primarily a result of a decline in

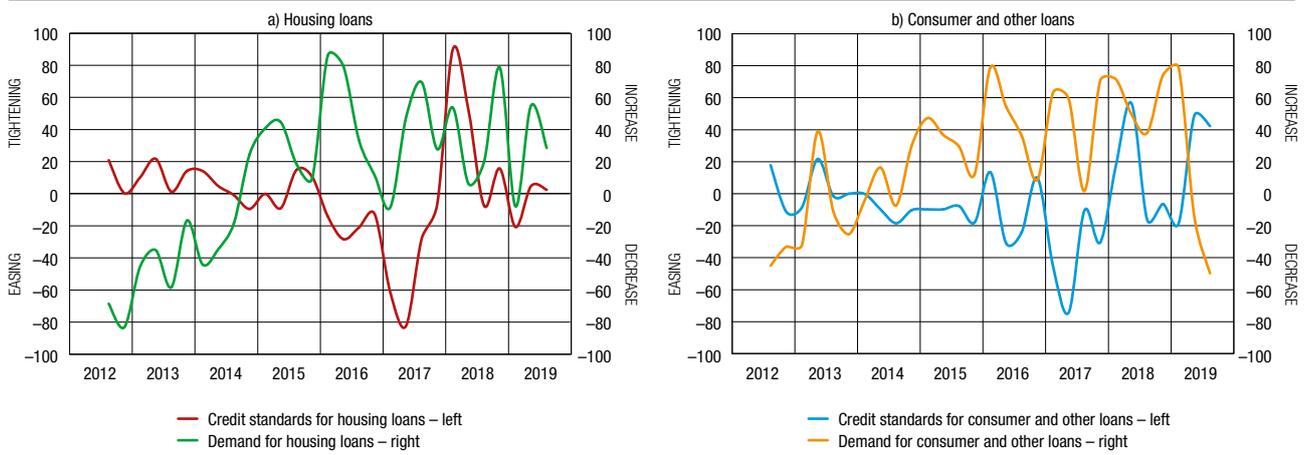
Figure 7.7 Credit standards and corporate demand for loans



the external debt of corporations, but corporate debt to domestic creditors decreased noticeably as well (Figure 7.9). The annual rate of change of total debt moved into negative territory at the end of the third quarter, standing at -1.1% (transaction based). The annual drop in total debt was driven by the deleveraging of private corporations, particularly in Croatia, which also reflects the one-off effects of activated government guarantees for loans to particular shipyards and the decrease in claims on the Agrokor Group, while public corporations increased their external debt, which was mitigated to a certain extent by the reduced domestic debt.

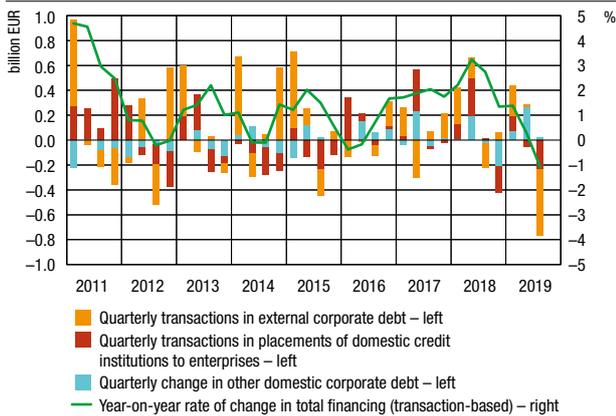
Domestic credit institutions' placements to non-financial corporations dropped by HRK 0.9bn (-1.1%) in the first ten months of 2019 (transaction-based, Figure 7.10). Observed on an annual basis, corporate placements saw an annual decline of -2.5% at the end of October. In addition to slower lending activity, the trend was largely affected by one-off effects (activation of government guarantees for loans to particular shipyards and the decrease of claims on the Agrokor Group as a result of the operational implementation of the settlement) which pushed the annual rate of change in corporate placements into negative

Figure 7.8 Credit standards and household demand for loans



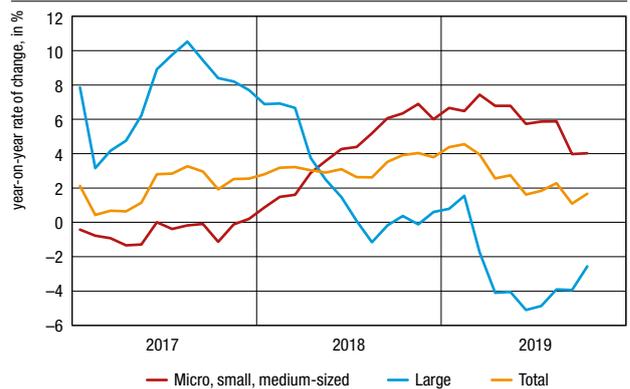
Note: Data show the net percentage of banks weighted by the share in total household loans.
Source: CNB.

Figure 7.9 Corporate financing



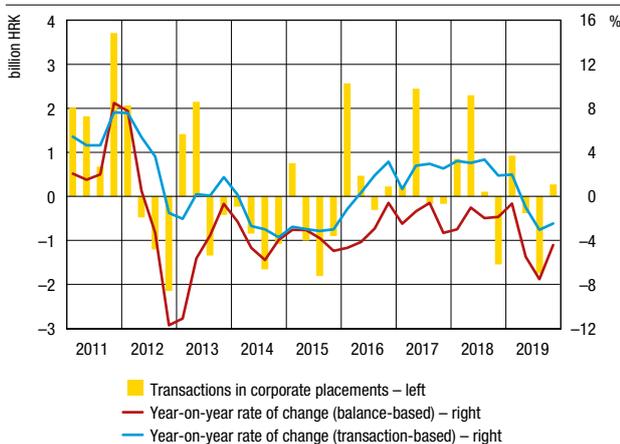
Notes: Other domestic financing includes borrowing from domestic leasing companies and the CBRD. Foreign debt excludes the effect of debt-equity swaps. All changes were calculated according to transactions (except for other domestic debt).
Sources: HANFA, CNB and CNB calculations.

Figure 7.11 Growth of corporate placements by size transaction-based



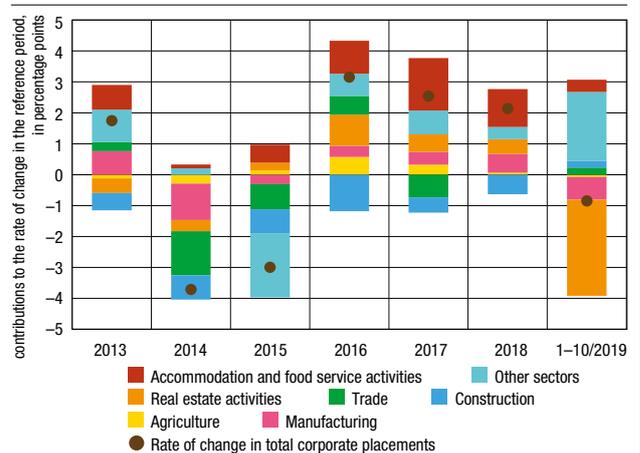
Note: The data were adjusted for the assessment of the effect of activated government guarantees for loans to particular shipyards and the decrease in the claims on the Agrokor Group linked to the operational implementation of the settlement.
Source: CNB.

Figure 7.10 Corporate domestic placements of credit institutions



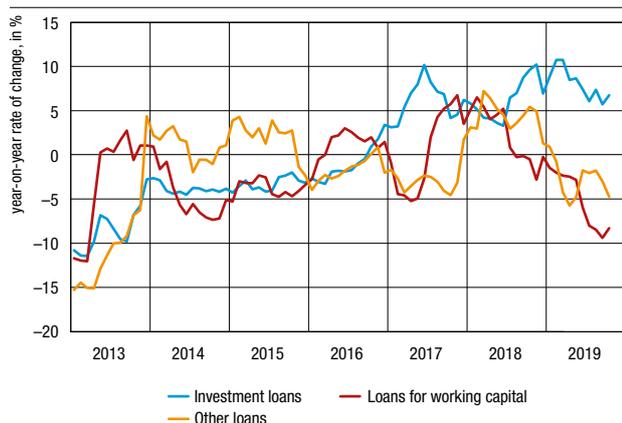
Note: Data for the fourth quarter of 2019 refer to October.
Source: CNB.

Figure 7.12 Growth of corporate placements by activity transaction-based



Source: CNB.

Figure 7.13 Growth of corporate loans by purpose transaction-based



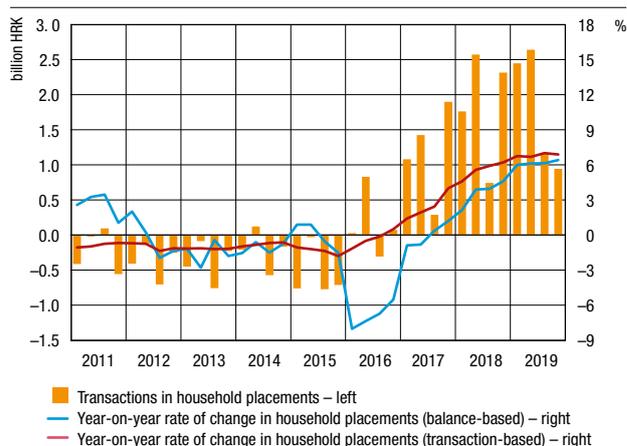
Source: CNB.

territory. If the aforementioned one-off effects are excluded, corporate placements slowed down as a result of a decrease in loans to large corporations, while borrowing to micro, small and medium-sized enterprises grew (Figure 7.11). As for the nominal stock, the annual drop in corporate placements was -4.4% on an annual basis and was significantly lower than the transaction-based growth, mainly as a result of the sale of non-performing corporate placements.

Broken down by activities (Figure 7.12), accommodation and food service activities continued to contribute positively to the rise in corporate placements, but their contribution has been steadily decreasing over the past two years. Moderate positive contributions to the growth in placements came from trade as well as from construction, which saw favourable developments after a several-year long deleveraging period. On the other hand, in contrast to the previous years, manufacturing contributed negatively to the rise in placements, which was partly a result of activated government guarantees for loans to shipyards. A negative contribution came from real estate activities as well, although this was exclusively a result of a change in the activity of one large corporation.²³ If corporate loans are observed by purpose, slower lending activity is attributable to the annual decline in loans for working capital and other loans, while investment loans continued to grow on an annual basis, although at a slower pace than at the end of 2018 (Figure 7.13).

The recovery in household lending which began at the end of 2016 was accompanied by the steady pick-up in the annual growth, which stabilised at around 7% (transaction-based, Figure 7.14) in the second half of 2019. The drop in the costs of financing, rising employment and strong consumer confidence also continued to affect lending to households favourably. Observed by loan structure, general-purpose cash loans (Figure 7.15) remained the main trigger of growth; however, their annual growth decelerated slightly after February and ended October at 11.8% (transaction-based). This was, among other things, a result of the CNB's Recommendation on actions in granting non-housing consumer loans mentioned earlier. On the other hand, in the second half of the year housing loans picked up

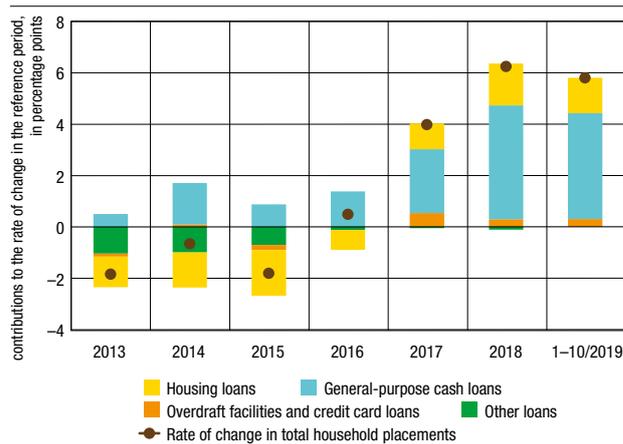
Figure 7.14 Household placements



Note: Data for the fourth quarter of 2019 refer to October.

Source: CNB.

Figure 7.15 Growth of household placements by loan type transaction-based



Source: CNB.

on an annual basis and reached 5.1% in October (transaction-based). This was partly due to the continued implementation of the government housing loan subsidy programme.

Projected developments

Total placements (excluding to the government) could see an annual rise of 3.1% (transaction-based) in 2019, compared with 4.4% in 2018. The slower rise in total placements may be attributed to the decline in placements to corporations and other financial institutions, while lending to households could be more vigorous than at the end of 2018. As for the nominal stock, the rise in total placements in 2019 is expected to remain lower than the transaction-based growth due to the effect of the sale of non-performing placements. The risks to the realisation of the projected credit growth dynamics are estimated as balanced.

²³ In October, a large corporation switched from Section L Real estate activities to Section E Water supply; sewerage, waste management and remediation activities. This is why a sharp decrease in placements was recorded in Real estate activities, and a substantial rise was seen in Other sectors, which include water supply.

Box 5 Corporate access to sources of financing

Analysis results do not point to any significant difficulties in firms' access to sources of finance, as over the past three years financial constraints have not deviated significantly from the constraints seen in the period before the financial crisis. In the period from 2016 to 2018, the share of absolutely constrained firms was 8%, while 49% of firms were relatively constrained and 43% of firms were unconstrained. After the crisis broke out in 2008, financial constraints tightened, peaking in 2010, while in 2013, immediately before the recovery of economic activity, constraints began to ease considerably. The tightening of financial constraints was most severe in construction, followed by trade and manufacturing, while in other activities, the rise in constraints was less noticeable.

Financial constraints, i.e. difficulties of firms in accessing sources of finance at an acceptable cost, may be an impediment to productive investments, which negatively affects long-term economic growth and employment. Since there is no special item in corporate financial statements that would point to problems related to access to financing, in the literature firm-level financial indicators are used, among other parameters, to assess financial constraints.

In this box, the interrelations of five financial indicators²⁴ at

firm level are used: investments, financing gap, changes in financial debt, changes in owner's equity and interest payments on financial debt.²⁵ To calculate financial indicators, we used the data obtained from the database of annual financial statements maintained by the Financial Agency (Fina) for the period between 2002 and 2018, whereby we covered only private-sector non-financial corporations that had employees over a period of at least two years and financial debt. This resulted in an average annual coverage of 25 thousand firms accounting, on average, for around 65% of employed persons and revenues from sales of private firms.

Based on 11 combinations of financial indicators, firms are classified into one of the following three groups: (i) absolutely constrained firms, (ii) relatively constrained firms and (iii) unconstrained firms (Table 1). Generally, absolutely constrained firms are those that do not have access to financing, relatively constrained firms have access only to costly sources of financing, while unconstrained firms are able to finance themselves on the market at low cost, or do not require any additional funds.

Before the crisis, from 2003 to 2007, the shares of firms according to the degree of financial constraints in the total number of firms were stable (Figure 1). The share of absolutely

Table 1 Classification of financial constraints²⁶

Financing conditions	% observations	Investments	Financing gap	Change in financial debt	Change in owner's equity	Interest payments on debt
Unconstrained firms (U)						
1	1.7	<0	<0	>0	>0	
2	4.1	<0	<0	<=0	>0	
3	19.4	>=0	<0	>0		
4	15.9	>0	>=0	>0		<=median
Relatively constrained firms (R)						
5	32.5	>=0	<0	<=0		
6	5.4	>=0	>=0	<=0	>0	
7	0.9	<0	<0	>0	<=0	
8	7.8	>=0	>=0	>0		>=median
Absolutely constrained firms (A)						
9	7.7	>=0	>=0	<=0	<=0	
10	2.3	<0	>=0			
11	2.2	<0	<0	<=0	<=0	

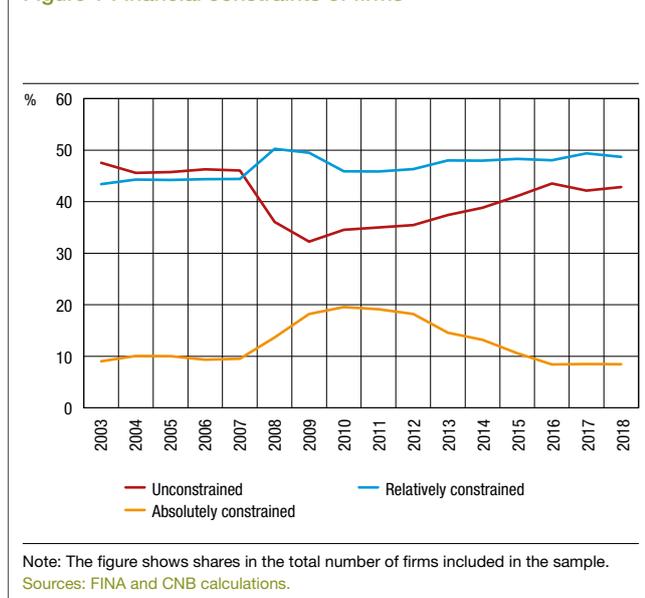
Sources: FINA and CNB calculations.

24 This methodology is frequently used in the literature, although there are variations in the number of financial indicators, the interrelations used to determine the degree of financial constraints and the classification of interrelations. See, for example, Pál, R. and A. Ferrando (2006): *Financing constraints and firms' cash policy in the euro area*, ECB Working Paper No 642; Ferrando, A., M. Iudice, C. Altomonte, S. Blank, M.-H. Felt, P. Meinen, K. Neugebauer, and I. Siedschlag (2015): *Assessing the financial and financing conditions of firms in Europe: the financial module in CompNet*, ECB Working Paper No 1836; Ferrando, A. and A. Ruggieri (2018): *Financial constraints and productivity: Evidence from euro area companies*, International Journal of Finance & Economics No 23.

25 Investments are defined as a change in long-term tangible assets increased by depreciation, while the financing gap indicates the difference between investments and cash flow approximated as the sum of profit or loss for the period and depreciation. A negative financing gap reflects a firm that is able to finance investments entirely from its own cash flow, while a positive financing gap suggests that the firm needs external funds to finance investments. Financial debt, also used as one of the indicators, includes debt to banks and debt deriving from securities. Furthermore, the indicator reflecting the firm's total operations is the change in the owner's equity or capital. Accounting profit or loss generated by the firm is the most significant source of capital variance, but the change in the owner's equity is a result of other factors as well, such as the acquisition of new external equity financing. The final indicator used, interest payments on debt, is approximated by the ratio of interest expenses to average financial debt.

26 A smaller part of unconstrained firms refers to business entities increasing their owner's equity (indicated by number 2 in Table 1) or equity and debt (1) amid disinvestments and a negative financing gap. On the other hand, the majority of unconstrained firms are those with positive investments, i.e. those that borrow despite having sufficient own funds (3) and those that obtain funds needed at an interest rate lower than the median interest rate, with the median interest rate calculated for each year (4). The majority of relatively constrained firms are those that do not increase their debt if they have sufficient own funds to finance investments (5), while firms obtaining funds required for investments at an interest rate higher than the median interest rate in a given year constitute the second largest group. Other relatively constrained firms are those that do not increase their debt, but rather increase their owner's equity to finance investments due to shortage of funds (6) and those that do not increase the owner's equity, but increase debt amid disinvestments (7). As for absolutely constrained firms, firms with disinvestments and a positive financing gap (10) have the tightest constraints, as this suggests a negative cash flow. Other absolutely constrained firms do not increase their financial debt or their owner's equity (9 and 11).

Figure 1 Financial constraints of firms



constrained firms was around 10%, while the share of unconstrained firms (46%) was only slightly higher than the share of relatively constrained firms (44%). Following the onset of the crisis in 2008, constraints began to tighten and the share of absolutely constrained firms doubled, while the share of unconstrained firms shrank considerably. In the years of recovery that ensued after the crisis, financial constraints eased noticeably, and as of 2016, the shares of all groups stabilised again at pre-crisis levels. Hence, in the 2016-2018 period, the share of

Table 2 Transition matrix

Current year	Following year			%
Entire period (2003-2018)				
	U	R	A	Total
U	33.8	51.9	14.3	100
R	28.6	58.9	12.5	100
A	21.3	35.7	43.0	100
Pre-crisis period (2003-2007)				
	U	R	A	Total
U	40.8	47.8	11.4	100
R	33.5	57.1	9.4	100
A	30.6	33.4	36.0	100
Crisis period (2008-2014)				
	U	R	A	Total
U	30.9	51.5	17.6	100
R	25.3	58.6	16.1	100
A	17.6	33.9	48.5	100
Post-crisis period (2015-2018)				
	U	R	A	Total
U	34.4	56.0	9.6	100
R	30.3	60.8	8.9	100
A	19.2	40.1	40.6	100

Note: The figure shows average annual shares (%) of firms according to financial constraints over two consecutive years within the indicated periods. U – unconstrained, R – relatively constrained, A – absolutely constrained firms.

Sources: FINA and CNB calculations.

absolutely constrained firms was around 8%, while the share of unconstrained firms (43%) was somewhat lower than the share of relatively constrained firms (49%).

Financial constraints of firms are relatively stable as, on average, 45% of firms remain in the group they were initially classified into over a period of two consecutive years, regardless of the observed period (Table 2). When the entire period sample is viewed, 33.8% of unconstrained firms did not switch to a different category in the following year, compared with 58.9% of relatively constrained firms. As regards transition across groups, for example, an average of 17.6% of unconstrained firms became absolutely constrained annually during the crisis, compared with 9.6% in the post-crisis period.

Financial constraints according to activity

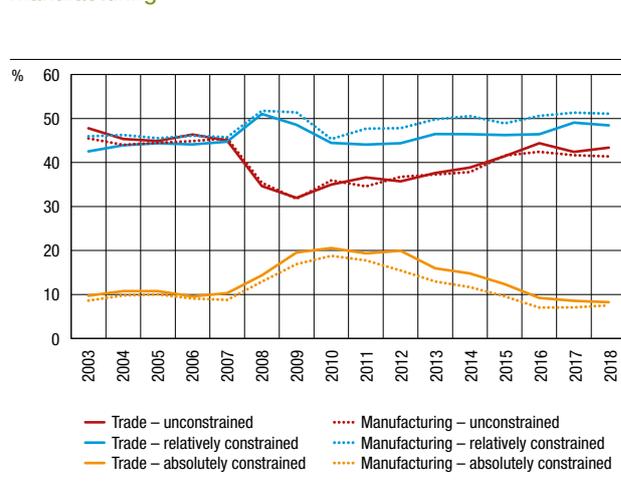
Trade and manufacturing are the two predominant activities²⁷ in the analysed sample. The trends in financial constraints in the aforementioned two activities are very similar in the observed period between 2003 and 2018 (Figure 2), with a slightly higher share of absolutely constrained firms and a lower share of relatively constrained firms in trade, while the shares of unconstrained firms are almost the same in both activities.

In contrast to trade and manufacturing, financial constraints in construction are noticeably more volatile (Figure 3). Before the crisis, unconstrained firms constituted the largest share, while during the crisis, the share of absolutely constrained firms tripled from around 9% in 2007 to almost 27% in 2011. As economic activity recovered and demand for real estate picked up again, the share of absolutely constrained firms returned to pre-crisis levels and unconstrained firms again accounted for the largest share. Such developments reflect the strong cyclicity of construction and the strong connection with investments, which are the most volatile component of the gross domestic product.

The majority of firms in other activities are firms engaged in professional, scientific and technical activities, accommodation and food service activities and transportation and storage activities.

The developments in financial constraints in firms engaged in other activities are similar to overall developments, with mostly more favourable degrees of constraint (Figure 4). During the

Figure 2 Financial constraints of firms in trade and manufacturing

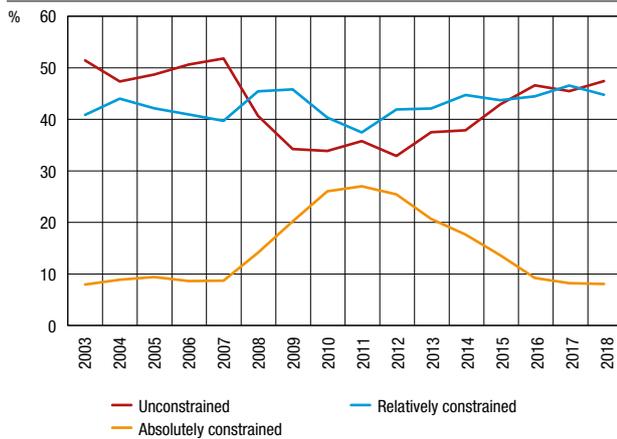


Note: The figure shows shares in the total number of firms engaged in the relevant activity.

Sources: FINA and CNB calculations.

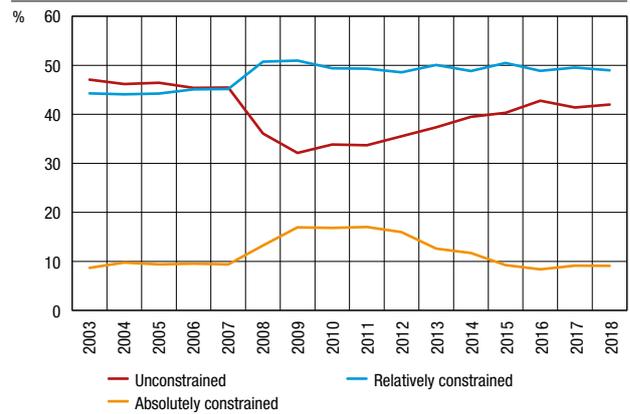
27 The activities refer to NCA 2007 single-letter section codes, with abbreviated names of individual categories of activities; e.g. Trade refers to section G – Wholesale and retail trade; repair of motor vehicles and motorcycles.

Figure 3 Financial constraints of construction firms



Note: The figure shows shares in the total number of construction firms.
Sources: FINA and CNB calculations.

Figure 4 Financial constraints of firms in other activities



Notes: The figure shows shares in the total number of firms engaged in other activities. Other activities include all activities except trade, manufacturing and construction.
Sources: FINA and CNB calculations.

crisis, the increase in the share of absolutely constrained firms was less noticeable than in the three predominant activities.

Furthermore, over the past several years, the share stabilised at a somewhat more favourable level than in the pre-crisis years.

8 Foreign capital flows

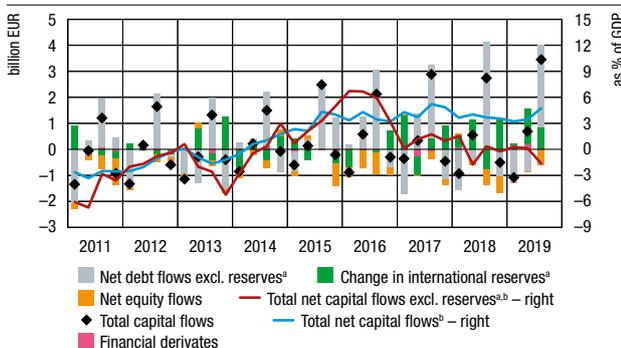
In the third quarter of 2019, the increase in the current and capital account surplus was accompanied by a noticeable net capital outflow in the financial account (Figure 8.1). Net foreign liabilities, excluding changes in reserves and CNB liabilities, decreased by EUR 2.6bn as a result of a drop in the net debt liabilities of all domestic sectors, particularly banks. In contrast, net equity liabilities increased. At the same time, the net foreign position of the central bank improved further.

The net inflow of equity investments of EUR 0.5bn recorded in the third quarter of 2019 is primarily attributable to the reinvested earnings of domestic enterprises owned by non-residents (particularly in financial intermediation, accommodation and trade), which increased slightly from the same period in 2018.

There was a noticeable increase in new direct equity investments in Croatia on an annual basis that were, in addition to investments in real estate, also recorded in manufacturing to a considerable extent, particularly in the automobile industry and the manufacture of food products (Figure 8.2). At the same time, portfolio investments of domestic institutional investors in foreign shares and equity holdings grew on the assets side.

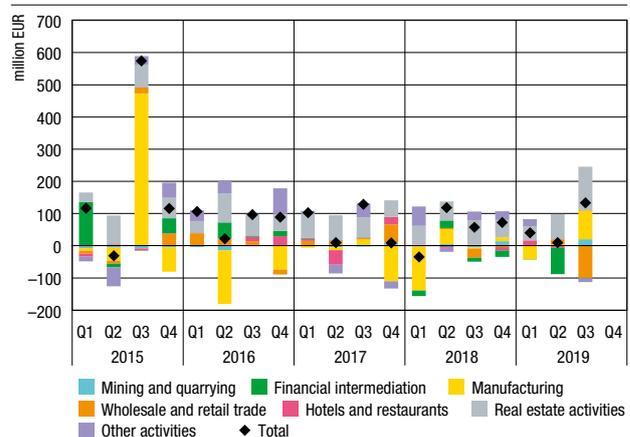
A sharp decrease in net debt liabilities in the third quarter of 2019 (of EUR 3.2bn, excluding the change in international reserves and CNB liabilities) was brought about by an increase in foreign assets accompanied by a strong decrease in domestic sectors' foreign liabilities. Credit institutions improved their net foreign position the most (Figure 8.3), although to a smaller

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



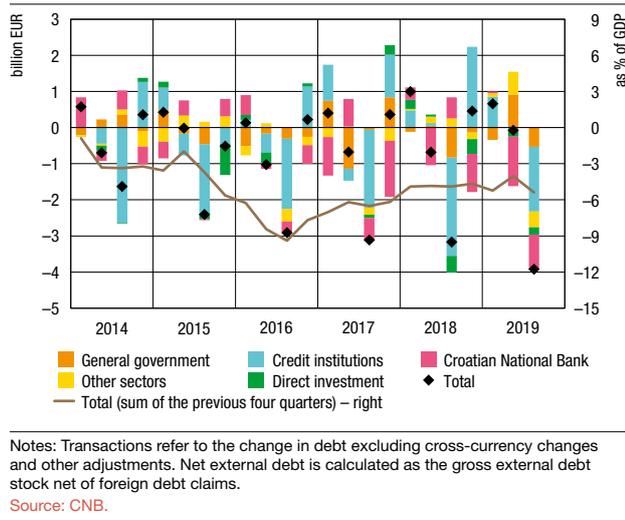
^a Changes in gross international reserves net of CNB liabilities.
^b Sum of the previous four quarters.
Notes: Net flows mean the difference between changes in assets and liabilities. Equity flows comprise changes in foreign direct equity investments, reinvested earnings and portfolio equity investment,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

Figure 8.2 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

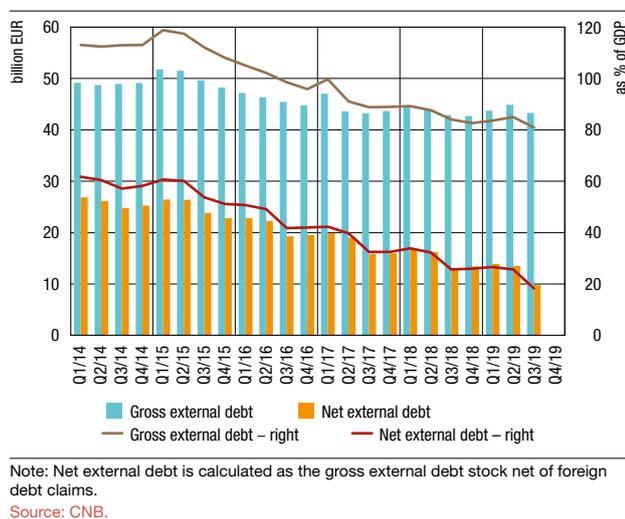


extent than in the same period the year before. Other domestic sectors improved their net foreign positions considerably as well, most notably private non-financial corporations, which deleveraged in relation to affiliated creditors and other creditors. Net liabilities of the government sector also declined. At the same time, the central bank's net foreign position improved, reflecting the rise in international reserves resulting from the purchase of foreign exchange in foreign exchange interventions, and, to a smaller extent, the increase in government deposits.

Relative indicators of external debt improved further (Figure 8.4). The gross external debt ended September 2019 at EUR 43.3bn, or 81.0% of GDP, having dropped by 1.7 percentage points from the end of 2018 as a result of an increase in nominal GDP. However, gross debt grew in absolute terms due to the unfavourable effects of cross-currency changes and other adjustments. Since foreign assets increased considerably at the same time, the improvement of the relative indicator of net external debt was even more pronounced. Net external debt stood at EUR 9.8bn (18.4% of GDP) at the end of September 2019, down by 7.6 percentage points from the end of 2018.

The significant decrease in net external debt contributed to

Figure 8.4 Stock of gross and net external debt



the considerable improvement in the net international investment position (Figure 8.5), which stood at -49.7% of GDP at the end of September 2019, compared with -57.9% of GDP at the end of 2018. Such developments were due to the further decline in net debt liabilities of domestic sectors, with a particularly noticeable positive contribution of the improved net foreign position of the central bank and, to a smaller extent, of credit institutions.

Projected developments

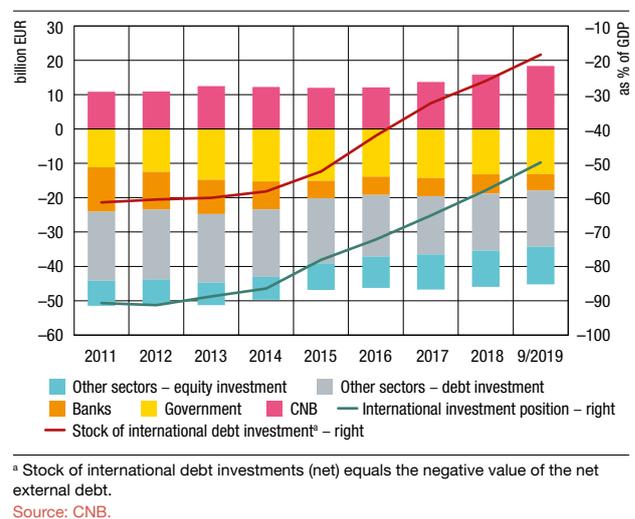
The balance of payments financial account could see an even faster net capital outflow in the whole of 2019 than in the previous year, reflecting the continued decrease in the net foreign debt liabilities of domestic sectors and a significant rise in international reserves. At the same time, the net inflow of equity investments could be smaller than in 2018.

The net inflow of equity investments in 2019 as a whole is expected to be lower than in the preceding year primarily due to the weaker growth in liabilities and the concurrent stronger growth in foreign assets. The weaker growth in liabilities associated with equity investments is a result of there having been lower reinvested earnings than in 2018, taking into account the results recorded so far. Specifically, the data for the first nine months of 2019 show that the profitability of foreign-owned banks and enterprises grew, but the growth was coupled with an even stronger increase in dividend payments, leading to a decline in reinvested earnings. On the other hand, excluding debt to equity swaps, a somewhat stronger inflow of new equity investments than in the year before is expected in Croatia, with investments, as in the past several years, primarily anticipated in the non-tradable goods and services sector. At the same time, the anticipated increase in foreign assets is primarily linked to portfolio equity investments abroad, in line with the developments seen in the first three quarters of 2019.

As for net debt liabilities, 2019 could see continued deleveraging of domestic sectors vis-a-vis foreign creditors and an improvement of the relative indicators of external debt. The ratio of gross debt to GDP could, therefore, fall to around 76% by the end of the year, partly owing to the favourable effect of the increase in nominal GDP. Relative indicators of net external debt and the international investment position are also expected to improve further.

Net capital outflow could slow down in 2020. A higher net

Figure 8.5 International investment position (net) by sectors



inflow of equity investments is expected as a result of higher reinvested earnings on the liabilities side and direct equity investments in Croatia. Net debt liabilities of the domestic sectors could decrease further, accompanied by a continued improvement of relative indicators of external debt. Gross external debt could drop to around 71% of GDP by the end of 2020. International reserves are expected to continue their increase.

Risks associated with the projection of capital flows are mostly related to a possible deterioration in the investment climate. At the same time, risks related to a possible deterioration of financing conditions are smaller. Despite the gradual decline in the relative indicators of external debt, due to previously accumulated high foreign liabilities the risks to Croatia's external position remain elevated.

9 Monetary policy

In the second half of 2019, the CNB continued to pursue an expansionary monetary policy and maintain the relatively stable kuna/euro exchange rate. In response to appreciation pressures on the exchange rate, the central bank intervened in February and August by purchasing a total of EUR 1.1bn from banks. The CNB purchased from the Ministry of Finance EUR 224.9m net from the beginning of 2019 to the beginning of December. In all its foreign exchange transactions, the central bank created HRK

9.7bn of reserve money (Figure 9.1).

As regards kuna operations, the CNB continued to conduct regular weekly operations at a fixed repo rate of 0.3%. However, amid very high levels of kuna liquidity surplus, banks have shown no interest in funds available through this monetary policy instrument since December 2017. In the second half of 2019, no additional funds were created by structural operations, so that their balance decreased slightly, to HRK 1.9bn at the end of November, on account of a partial early repayment by banks.

Surplus kuna liquidity of the monetary system continued to increase in the second half of 2019, reaching HRK 34.0bn in November (Figure 9.2). In developments in the first eleven months of 2019, the average surplus kuna liquidity rose to HRK 32.2bn, up by almost 30% from the average surplus in 2018, which was mostly the result of reserve money creation by the purchase of foreign exchange from banks. The consequence of very high liquidity was a very modest turnover in the domestic interbank overnight market, observed only in April and May of 2019. Moreover, with only five transactions carried out in those two months, the average interest rate does not mirror the market situation well.

The exchange rate of the kuna against the euro stood at EUR/HRK 7.44 at the end of November 2019, up by 0.3% from the end of November 2018, while the average exchange rate in the first eleven months of 2019 was EUR/HRK 7.41 or almost the same as in the same period of the previous year (Figure 9.3). Appreciation pressures on the exchange rate, associated with the current account surplus, capital inflows from EU funds and reduced euroisation, were eased by foreign exchange interventions of the CNB. The exchange rate of the kuna against the US dollar

Figure 9.1 Flows of reserve money (M0) creation

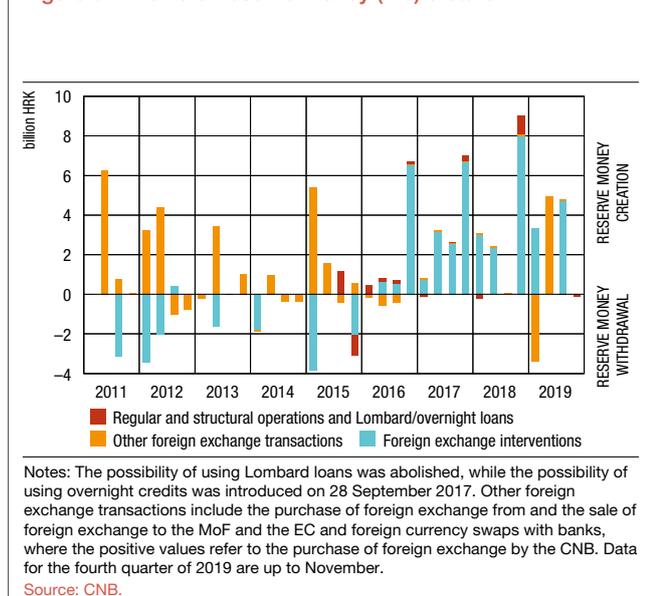


Figure 9.2 Bank liquidity and overnight interbank interest rate

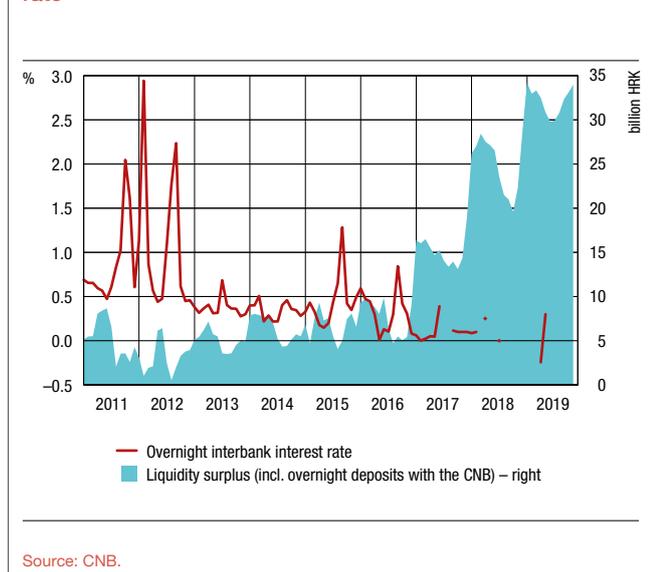


Figure 9.3 Nominal exchange rates of the kuna against selected currencies

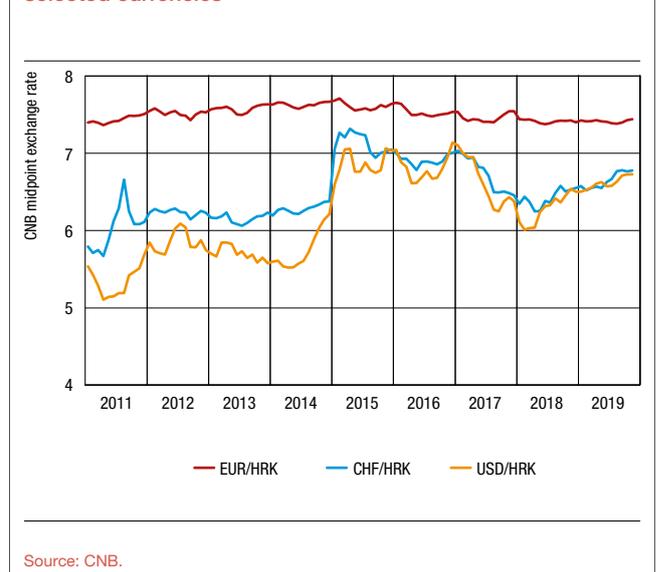
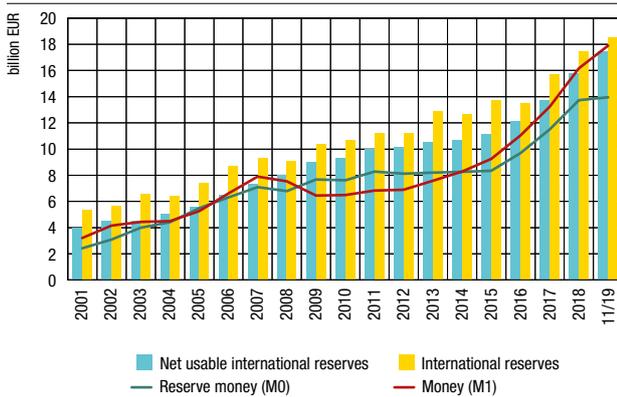


Figure 9.4 International reserves of the CNB and monetary aggregates



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).

Source: CNB.

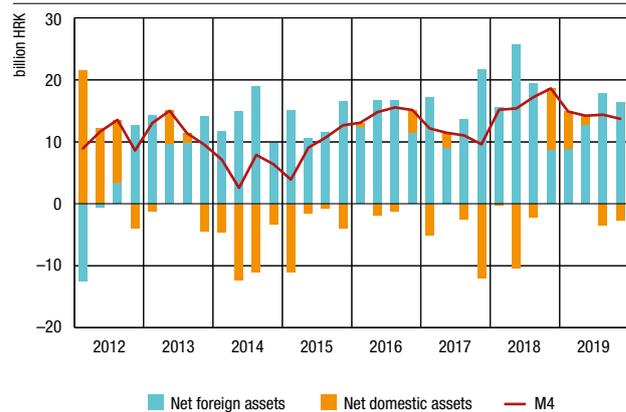
and the Swiss franc was higher in late November of 2019 than at the end of November 2018, reflecting the weakening of the euro against these two currencies on global financial markets.

Gross international reserves stood at EUR 18.5bn at the end of November 2019 (Figure 9.4), up by EUR 1.1bn (6.2%) from the end of 2018. Net usable international reserves also went up in the same period, by EUR 1.6bn, amounting to EUR 17.4bn at the end of November. The growth in gross and net reserves was mostly due to purchases of foreign currency from banks and government and, to a lesser extent, the 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).

Although still remarkable, the annual growth of total liquid assets (M4) continued to slow down mildly in October 2019 from the end of 2018 (Figure 9.5). The growth of M4 continued to result from the positive dynamics of net foreign assets of the monetary system, with a slight annual decline being observed in net domestic assets.

The first ten months of 2019 saw the continuation of the strong upward trend in real monetary aggregates (Figure 9.6). The annual rate of the real growth in total liquid assets (M4) stood at 3.0% at end-October, while real money (M1) and reserve money (M0) grew annually by 17.4% and 22.1% respectively. The several-years-long upward trend in M1 was mostly driven by the rise in kuna funds in transaction 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.

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

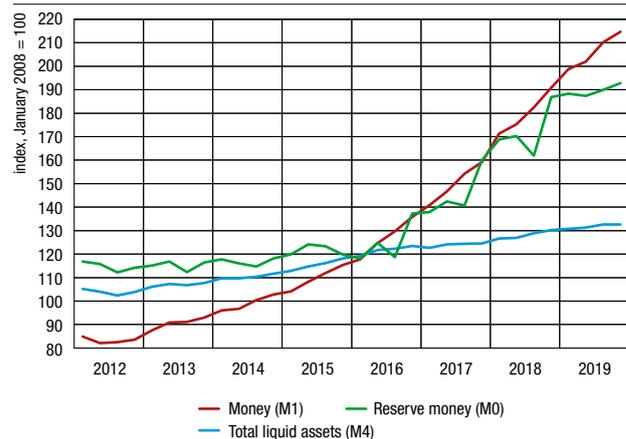


Notes: Absolute changes exclude the exchange rate effect. Data for the fourth quarter of 2019 are up to October.

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 2019 refer to the end of October.

Source: CNB.

Monetary policy will keep its expansionary character and work towards the maintenance of the stable kuna/euro exchange rate. In the conditions of low inflation, propitious balance of payments and modest growth of placements, the central bank will continue to support the high liquidity of the monetary system and thus contribute to further improvement of financing conditions.

10 Public finance

According to the available quarterly data on the execution of the consolidated general government budget (ESA 2010), the budget recorded a surplus of HRK 0.2bn in the first half of 2019, a slight improvement from the same period in 2018, which saw a deficit of HRK 0.1bn. The positive general government budget balance in the first half of 2019 primarily reflects favourable developments in the second quarter, which showed a surplus of HRK 2.5bn, while the first quarter saw a budget deficit of HRK 2.2bn. According to MoF data, favourable developments in public finance will continue in the third quarter of 2019 as well.

In early November of 2019, the Croatian government adopted amendments to the state budget and financial plans of budgetary users to cut the expected deficit of the general government budget to 0.1% of GDP in 2019, from 0.3% GDP in the original budget. The budget revision reflects favourable developments in tax revenues, notably VAT revenues, and excise and profit tax revenues backed by improved macroeconomic trends. The

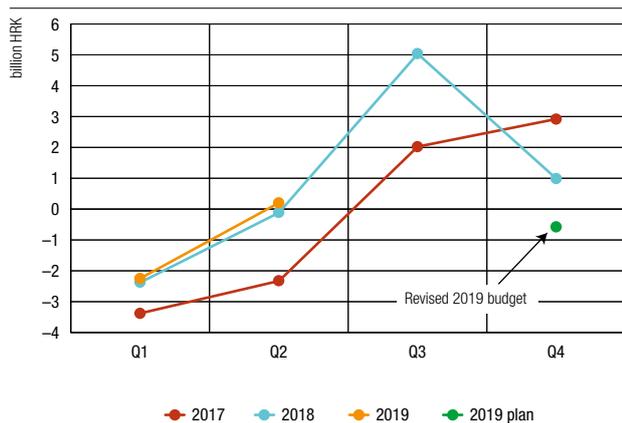
budget proposal suggests that the general government might run a surplus of 0.2% of GDP in 2020.

Total revenues of the consolidated general government grew by 7.5% on an annual basis in the first half of 2019. Indirect taxes, especially VAT, and other revenues and direct taxes made the largest positive contribution to the growth in total revenues. The trends in ‘other revenues’, which include subsidies, income from equity and other current transfers, most likely reflect the increased use of EU funds, and, to a degree, the base effect of their poorer performance in the same period of 2018. The contribution of direct taxes to total revenue growth came mostly from income tax revenues spurred by a noticeable growth in the wage bill attributable to the favourable labour market situation. Social contribution revenues also contributed to total revenue growth, although at somewhat slower pace. Moreover, this category of revenues experienced a twofold impact – a positive one due to favourable developments in employment and wages and a negative one due to changes to the social contributions system.

The expenditure side of the consolidated general government budget saw a substantial increase of 7.2% in total expenditure in the first half of 2019 from the same period in 2018. The increase was for the most part the result of the growth in the category of ‘other expenditures’, which chiefly reflects increased payments to the EU budget and the base effect. General government investments also contributed to the growth of total expenditures, as did compensation of employees, intermediate consumption and social benefits. In contrast, interest expenditures decreased slightly from the same period in 2018, reflecting the continuation of relatively favourable financial conditions in the capital market. Expenditures for subsidies fell on account of the differences in the payment dynamics across the year.

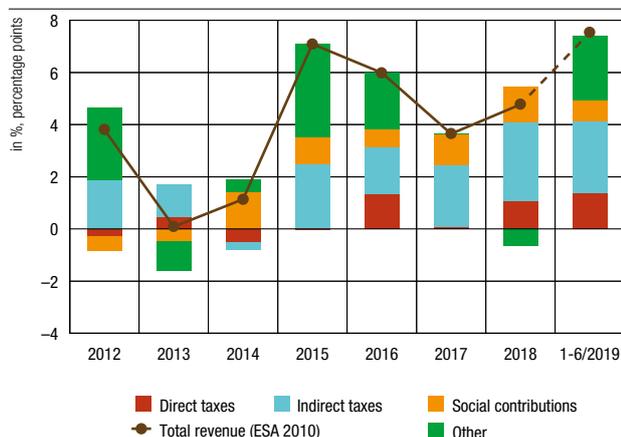
The available Ministry of Finance data on the consolidated general government (cash basis, GFS 2001) in the third quarter of 2019 indicate a notably faster annual growth in revenues (10.7%) than in expenditures (6.2%). Tax revenues, notably VAT revenues, made the largest positive contribution to total revenue growth. An analysis of the expenditure side of the budget shows that the major contributors to total expenditure growth were social benefits, compensation of employees and other expenditures, including expenditures for the use of goods and services,

Figure 10.1 General government cumulative balance by quarters
ESA 2010



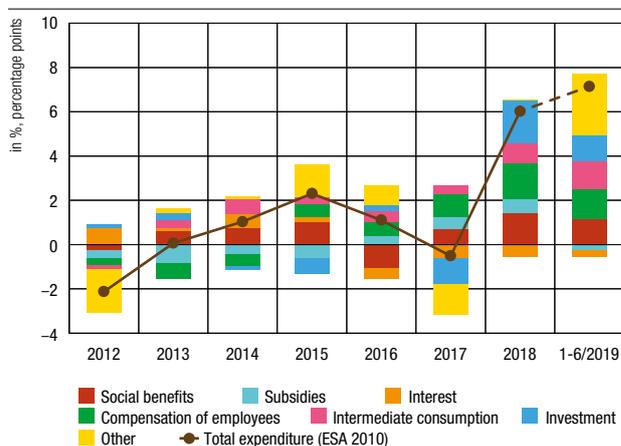
Sources: Eurostat and MoF (CNB calculations).

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



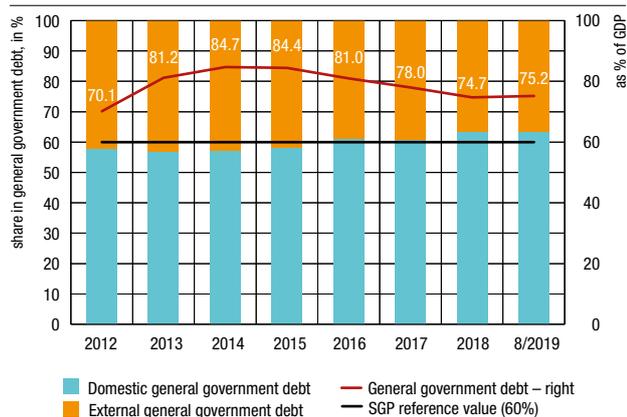
Source: Eurostat (CNB calculations).

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



Source: Eurostat (CNB calculations).

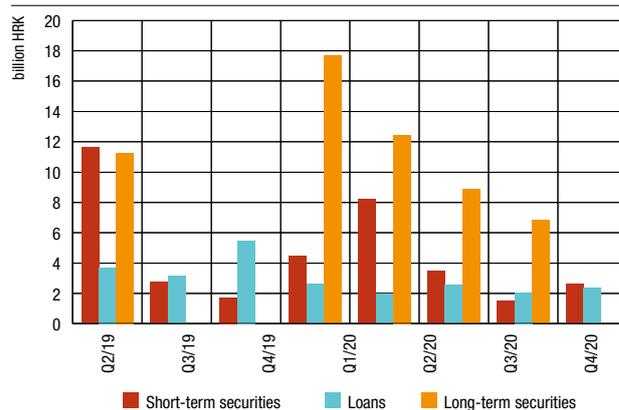
Figure 10.4 General government debt end-period stock



Note: Nominal GDP for the last four available quarters was used for the calculation of the relative indicator at the end of August 2019.

Sources: MoF and CNB.

Figure 10.5 General government debt maturity



Note: Projection of the repayment of short-term and long-term securities is based on the balances as at 30 November 2019 and projection of the repayment of loans on the balance as at 30 September 2019.

Sources: MoF and CNB.

subsidies and grants. In contrast, interest expenditures contributed to a decrease in total expenditures. Such developments resulted in a consolidated general government surplus of HRK 6.0bn in the third quarter of 2019, which was substantially higher than the surplus of HRK 4.0bn in the same period in 2018.

Consolidated general government debt totalled HRK 297.9bn at the end of August 2019, up almost HRK 11.8bn on the end of 2018, despite the favourable effect of the appreciation of the exchange rate of the kuna against the euro in the observed period. The increase in debt reflects the issue of a foreign bond, worth EUR 1.5bn in June, used to repay the foreign bond in the same amount that fell due in November. Notwithstanding favourable effects of economic growth, the relative indicator of public debt, the public debt-to-GDP ratio, increased from 74.7% at the end of 2018 to 75.2% of GDP in August 2019. The reclassification of a larger number of statistical units (mostly port authorities)

into the general government sector led to a moderate increase in the public debt level.

In June 2019, the government issued a foreign bond worth EUR 1.5bn with a yield of 1.324% in order to refinance a 15-year international bond worth EUR 1bn which matured in November 2019. In addition, in November it issued two domestic bonds worth a total of HRK 11bn with a yield of 0.36% (HRK 3.5bn) and 1.1% respectively. It should be noted that Croatia issued eurobonds in June and domestic bonds in November at historically low rates in the international and domestic capital markets due to very favourable terms of finance in the financial markets, a decrease in macroeconomic imbalances and the regaining of the investment grade rating. Moreover, negative interest rates were recorded for the first time on euro T-bills issued in the domestic market.

11 Deviations from the previous projection

The projection of real global developments for 2019 is less favourable than expected in the July cycle of the projection. The estimated global growth rate for 2019 was reduced by 0.3 percentage points and it currently stands at only 3.0%. This was mainly driven by worsening expectations of economic growth in emerging market countries, notably India, the largest South American economies and China. In addition, due to economic growth slowing down in the second quarter, the expected growth of the euro area in 2019 was revised downwards by 0.1 percentage point. At the same time, as the US economy recorded better than expected results in the first half of the year, especially in the first quarter, the growth estimate for 2019 was revised upwards by a modest 0.1 percentage point. With regard to monetary policy, the Fed's anticipated policy for 2019 changed significantly relative to the previous projection when it was expected that its target interest rates will remain unchanged. However, the Fed went through three cutting cycles, making the expected interest rate lower at the end of 2019 than in the previous projection forecast. In contrast to the previous projection, the ECB is not expected to raise its key interest rates in the rest of the projection period.

The expected Croatian economic growth rate for 2019 has remained almost the same as in the July projection; the real GDP might grow by 3.0% (vs the previously projected 3.1%). The most important correction was made in exports of goods and services, which could grow at a rate of 3.7% (vs the previously projected 2.7%) due to larger exports of goods and services in the third quarter of 2019 than projected. Furthermore, the expected growth rate in government consumption has also been revised upwards due to better than expected performance in the second and third quarters. The capital investment growth rate has also been revised slightly upwards, mostly reflecting much better performances in both the private and the public sectors in the second quarter. These trends are evidenced by the nominal data on imports of capital goods and the data on the annual growth of construction works on buildings and civil engineering works. In contrast, personal consumption could grow at a lower rate than projected in July 2019, its real growth rate reaching 3.5% (vs the previously projected 4.2%). The correction downwards is the consequence of lower results in the third quarter, accompanied by favourable trends in the labour market and household lending. Following the official revision of national

Table 11.1 Basic assumptions, deviations from the previous projection

	2019		
	Previous projection (7/2019)	Current projection	Deviation
GDP (real rate of change, in %)			
Rest of the world	3.3	3.0	-0.3
Euro area	1.3	1.2	-0.1
USA	2.3	2.4	0.1
Developing countries and emerging market countries	4.4	3.9	-0.4
Central and Eastern European countries	0.8	1.8	1.0
Main trading partners of the Republic of Croatia	1.8	1.7	-0.2
Prices			
Euro area HICP ^a	1.3	1.2	-0.1
Oil prices (USD/barrel) ^b	64.8	63.7	-1.1
Key interest rates			
EURIBOR 3M (end of year) ^c	-0.31	-0.47	-0.2
ECB main refinancing rate ^c	0.00	0.00	0.0
US federal funds target rate ^c	2.50	1.75	-0.8

^a ECB, September 2019. ^b Bloomberg, Brent crude oil futures. ^c Bloomberg.

Source: IMF (WEO, October 2019).

Table 11.2 Domestic indicators, deviations from the previous projection

	2019			2020		
	Previous projection (12/2018)	Outturn	Deviation	Previous projection (7/2018)	Current projection	Deviation
National accounts (real rate of change, in %)						
GDP	3.1	3.0	-0.1	2.7	2.8	0.2
Personal consumption	4.2	3.5	-0.8	3.7	3.7	0.0
Government consumption	2.7	3.2	0.5	2.4	2.8	0.3
Gross fixed capital formation	8.0	8.2	0.2	6.5	7.1	0.5
Exports of goods and services	2.7	3.7	1.0	2.8	3.3	0.4
Imports of goods and services	5.8	5.3	-0.6	5.3	5.3	0.0
Labour market						
Number of employed persons (average rate of change, in %)	1.9	2.3	0.4	1.2	1.8	0.6
Registered unemployment rate	8.6	7.7	-0.8	7.8	7.0	-0.9
ILO unemployment rate	7.2	6.7	-0.5	6.5	5.9	-0.6
Prices						
Consumer price index (rate of change, in %)	0.7	0.8	0.04	1.1	1.4	0.3
External sector						
Current account balance (as % of GDP)	1.3	1.9	0.6	0.4	1.2	0.8
Current and capital account balance (as % of GDP)	3.1	3.9	0.8	2.2	3.2	1.0
Gross external debt (as % of GDP)	69.5	75.7	6.2	65.3	70.6	5.3
Monetary developments (rate of change, in %)						
Total liquid assets – M4	2.9	4.0	1.1	4.2	4.5	0.3
Total liquid assets – M4 ^a	3.4	4.6	1.2	4.3	4.6	0.3
Credit institution placements	3.9	2.0	-1.9	3.9	3.6	-0.2
Credit institution placements ^b	4.3	3.1	-1.3	4.3	4.0	-0.3

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

Source: CNB.

accounts data, which was published by the CBS in November 2019, it seems that lower real growth rate of household consumption in the third quarter is actually the result of the personal consumption deflator which was much larger after the revision than had been projected. Finally, it is expected that imports of goods and services could grow at a lower rate in 2019 than previously projected (5.3% vs 5.8%), with the correction reflecting a lower-than-expected performance in the third quarter of 2019 and a lower projected growth rate of personal consumption. It is therefore expected that the negative contribution of net foreign demand to economic growth will be significantly smaller than projected in July 2019 (–0.8 percentage points vs –1.5 percentage points).

The average annual consumer price inflation rate for 2019 is estimated at 0.8%, which is 0.04 percentage points higher than in the projection for July 2019 and mainly the result of a slightly higher expected average annual growth rate of energy prices (1.9% vs 1.5% from the previous projection) backed by less pronounced decrease in the prices of refined petroleum products in the June-October period of 2019 than was expected in the previous projection. The average annual consumer price growth rate for 2020 is projected at 1.4%, which is 0.3 percentage points higher than in the previous projection. This was largely due to the Government's giving up the decrease in the general VAT rate by 1 percentage point at the beginning of 2020 (from 25% to 24%).

As for foreign economic relations, it should be taken into account that the July and the current projection are not entirely comparable because the current projection is based on the balance of payments and external debt data, which entail significant effects of the revisions of historical data²⁸. The more favourable estimate of the overall current and capital account developments than in the previous projection more than offset the negative effect of methodological changes and revisions of historical data. The surplus in the current and capital account in 2019 might

be 0.8 percentage points higher than expected in the previous projection. Viewed by individual sub-accounts, it is expected that a much higher surplus will be recorded in the accounts of secondary income and capital transactions owing to the positive effect of the revision of historical data on personal transfers and the noticeably more favourable estimate of the dynamics of payments from EU funds to end beneficiaries. In addition, the estimated primary income deficit is lower than in the previous projection due above all to more favourable balances in previous years spurred by the upward revision of revenues from compensation of employees, which could grow faster than expected. In contrast, a lower surplus is expected in the foreign trade in services. The more favourable estimate of the dynamics of tourism revenues in 2019 than in the previous projection largely alleviated the unfavourable effects of the decrease in the base in previous years. Moreover, the foreign trade deficit might also surpass the July projection. As regards the external debt, the relative indicators worsened due to the revision of historical data which is also reflected in the projected developments.

The projection for 2019 growth in credit institutions' placements (excluding the government) has been revised downwards from previous expectations. Placements might grow by 3.1% in 2019, compared with the previously projected 4.3% (transaction-based). The marginal pick-up in lending activity is mostly the outcome of slower lending to non-financial corporations and other financial institutions, coupled with a stronger than expected lending to households. As for the nominal change in placements, the projection for 2019 foresees a growth of 2.0%, which is significantly lower than the transaction-based growth, mostly due to the sale of non-performing placements.

The projected growth of total liquid assets (M4) for 2019 is higher than was expected in the previous projection (4.6% vs 3.4% from the previous projection, transaction-based). This is attributable to better performance of money (M1), notably demand deposits and quasi-money.

28 Changes in the data include, inter alia, the change in the methodology for the calculation of tourism revenues, the revision of historical data and the inclusion of the estimates of imports of used cars of natural person after EU accession, informal portion of worker remittances, short-term trade credits maturing in up to 6 months etc.

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	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Croatian National Bank (December 2019)	3.0	2.8	3.5	3.7	8.2	7.1	3.7	3.3	5.3	5.3	-	-	1.4	1.4
Eastern Europe Consensus Forecasts (November 2019)	2.9	2.5	3.3	2.8	7.8	5.0	-	-	-	-	1.2	1.5	0.8	1.4
European Bank for Reconstruction and Development (November 2019)	3.0	2.5	-	-	-	-	-	-	-	-	-	-	-	-
European Commission (November 2019)	2.9	2.6	3.6	3.1	8.8	7.5	3.2	2.7	6.3	5.3	-	-	0.9	1.4
International Monetary Fund (October 2019)	3.0	2.7	-	-	-	-	-	-	-	-	-	-	0.7	1.1
Raiffeisen Research ^a (October 2019)	2.8	2.5	-	-	-	-	5.5	4.7	7.0	5.5	1.5	2.0	1.3	1.7
Ministry of Finance (July 2019)	2.8	2.5	3.8	3.5	8.3	5.5	2.7	2.8	6.8	5.4	-	-	1.4	1.8
World Bank (June 2019)	2.5	2.5	-	-	-	-	-	-	-	-	-	-	-	-
Addiko Bank Economic Research ^a (May 2019)	2.5	2.8	3.0	2.8	6.3	6.0	5.6	3.9	4.1	7.6	2.4	2.7	1.2	1.2

^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 2020-2022.

Sources: Publications of the respective institutions.

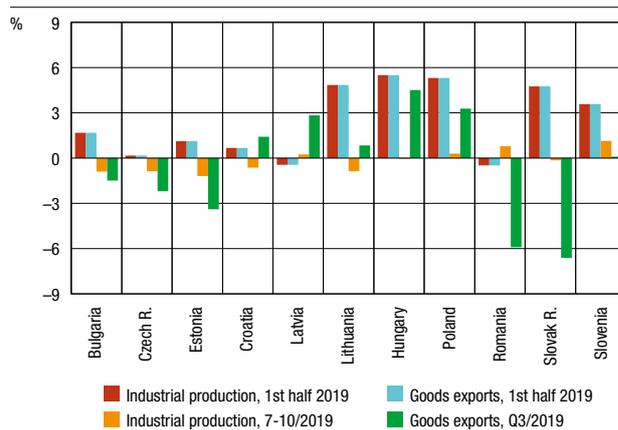
13 Annex B: Comparison of Croatia and selected countries

Table 13.1 Gross domestic product

	Year-on-year rate of change, original data			Quarter-on-quarter rate of change, seasonally adjusted data			
	2016	2017	2018	Q4/18	Q1/19	Q2/19	Q3/19
Bulgaria	3.8	3.5	3.1	0.9	1.1	0.9	
Czech R.	2.5	4.4	3.0	0.9	0.6	0.6	0.4
Estonia	2.6	5.7	4.8	1.2	1.0	0.8	1.0
Croatia	3.5	3.1	2.7	0.3	1.2	0.5	0.8
Latvia	1.8	3.8	4.6	0.7	-0.3	0.8	0.7
Lithuania	2.6	4.2	3.6	1.3	1.2	0.9	0.2
Hungary	2.2	4.3	5.1	1.1	1.4	1.1	1.1
Poland	3.1	4.9	5.1	0.4	1.5	0.8	1.3
Romania	4.8	7.1	4.0	0.8	1.0	0.8	0.6
Slovak R.	2.1	3.0	4.0	-	-	-	-
Slovenia	3.1	4.8	4.1	0.6	0.6	0.0	0.8
Average^a	2.9	4.4	4.0	0.8	0.9	0.7	0.8

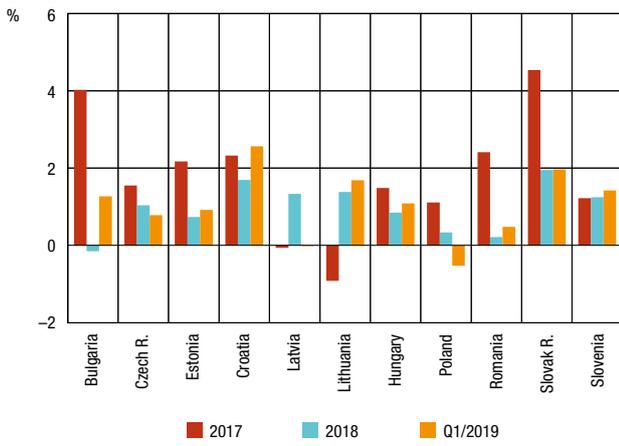
^a Simple average.

Sources: Eurostat, EC, CBS and CNB.

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


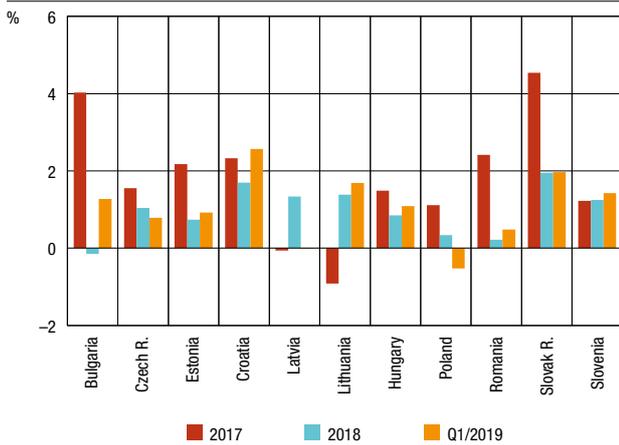
Sources: Eurostat and CBS.

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



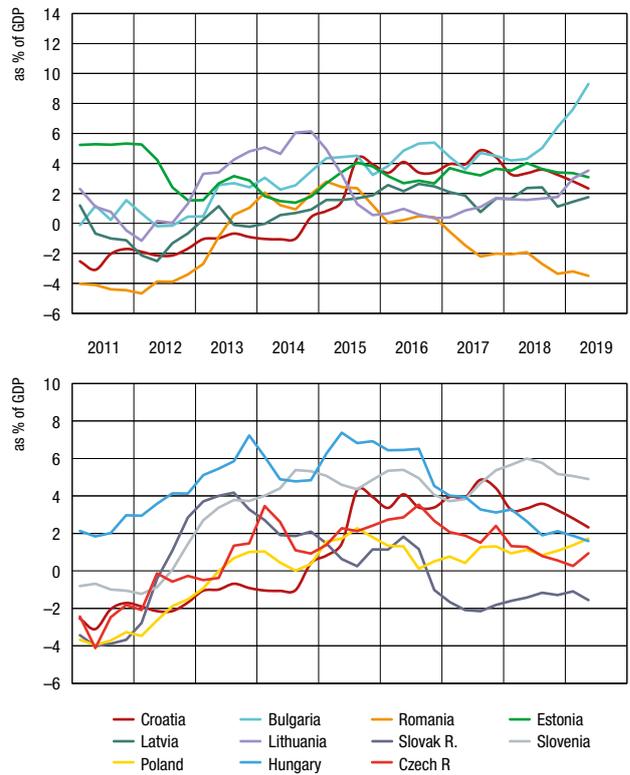
Source: Eurostat.

Figure 13.3 Labour Force Survey unemployment rate



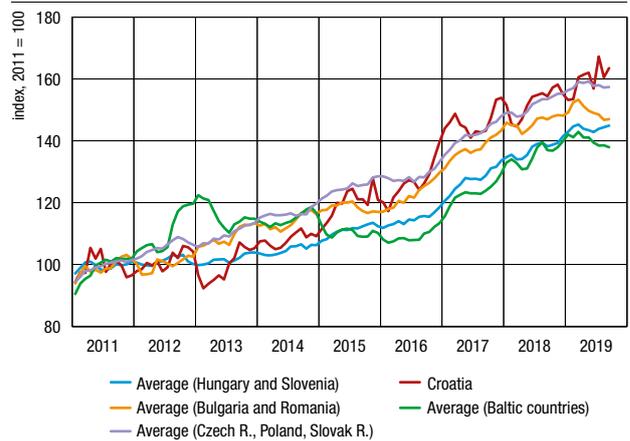
Source: Eurostat.

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



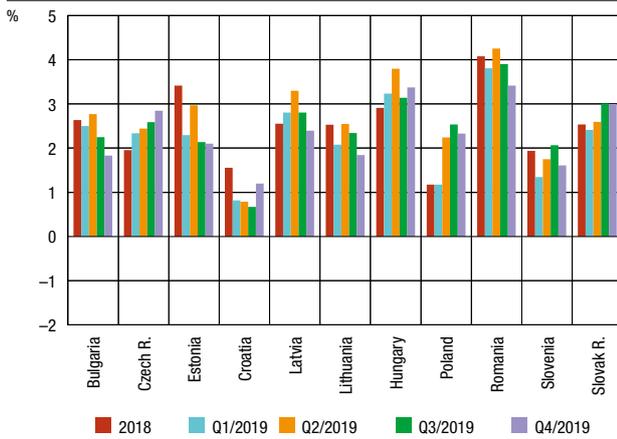
Sources: Eurostat and CNB.

Figure 13.5 Goods exports
quarterly moving average, seasonally adjusted data



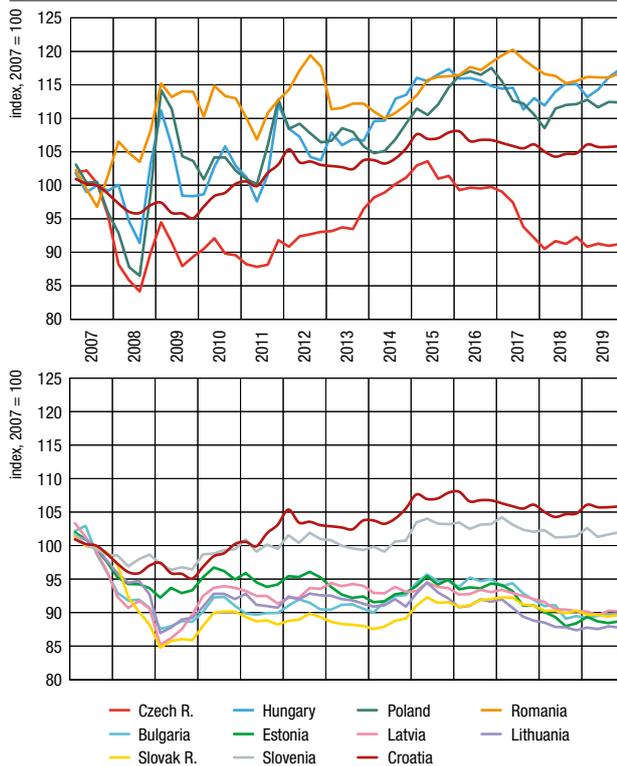
Sources: Eurostat and CNB.

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



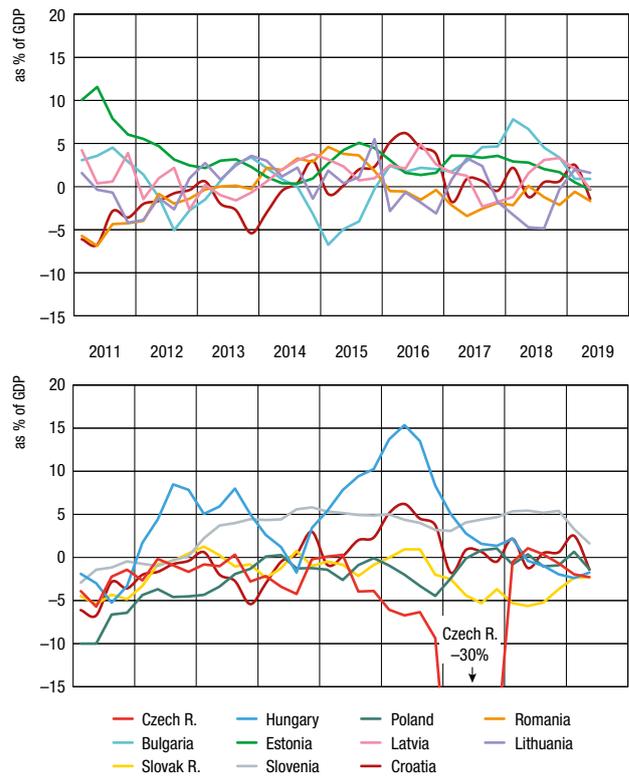
Note: Data for the fourth quarter of 2019 refer to October.
Source: Eurostat.

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



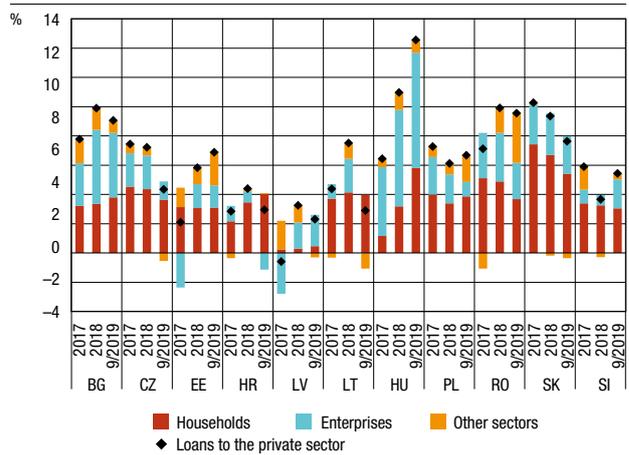
Notes: Data for 2019 refer to the January-October period. A fall in the index indicates a real effective appreciation.
Sources: BIS and CNB.

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



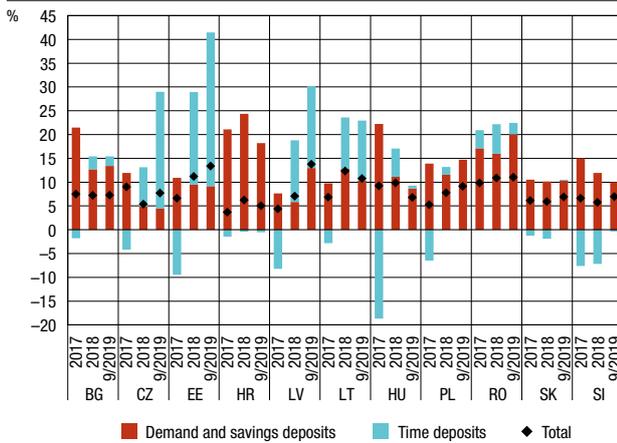
Sources: Eurostat and CNB.

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



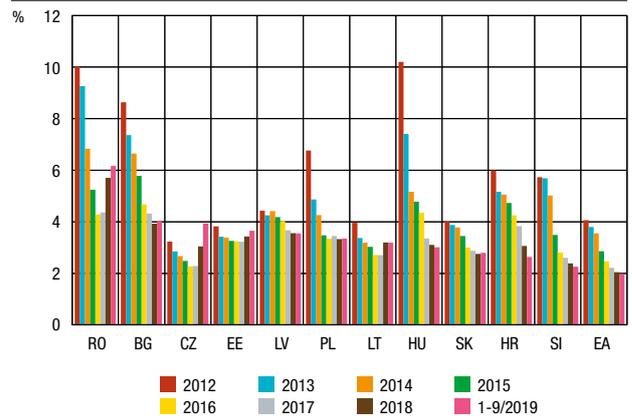
Sources: ECB and CNB.

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



Sources: ECB and CNB.

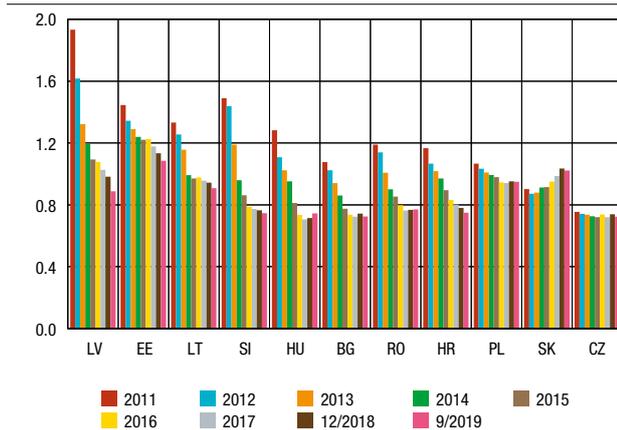
Figure 13.13 Short-term interest rates on corporate loans



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

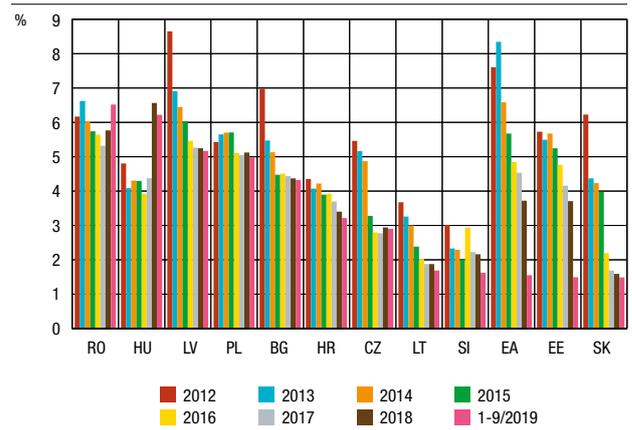
Source: ECB.

Figure 13.11 Placement to deposit ratio of the private sector



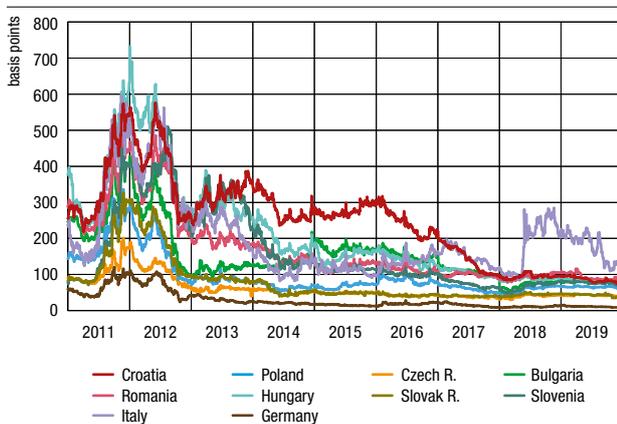
Sources: ECB and CNB.

Figure 13.14 Interest rates on housing loans



Sources: ECB and NCBS.

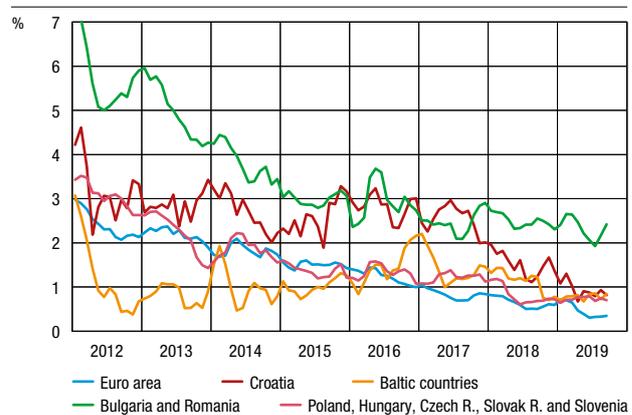
Figure 13.12 CDS spreads for 5-year government bonds of selected countries



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.

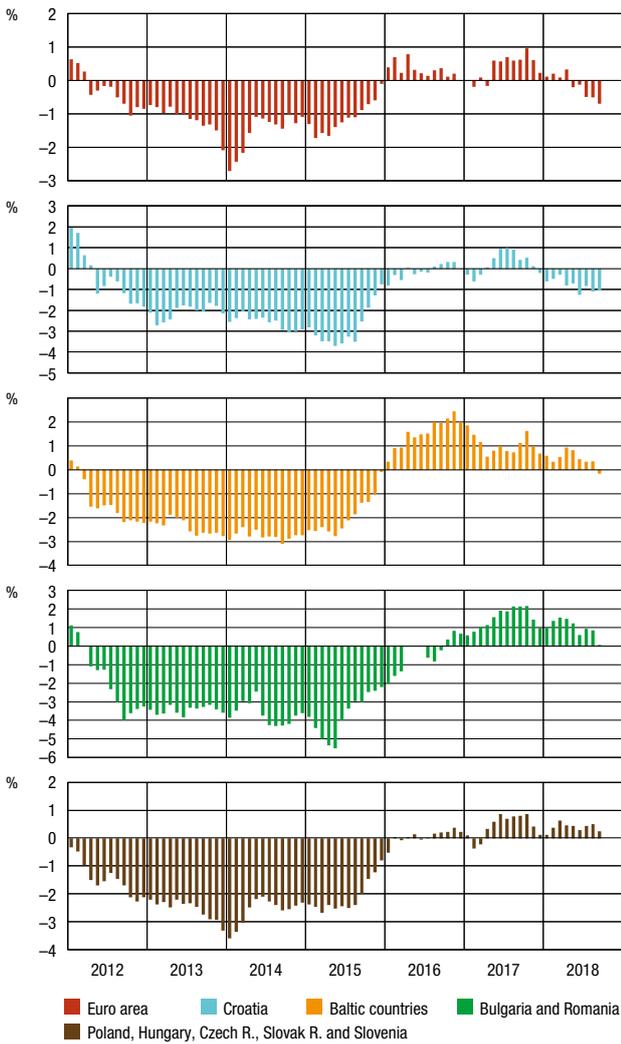
Figure 13.15 Expected real interest rate on corporate loans up to EUR 1m and with maturity up to 1 year



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.

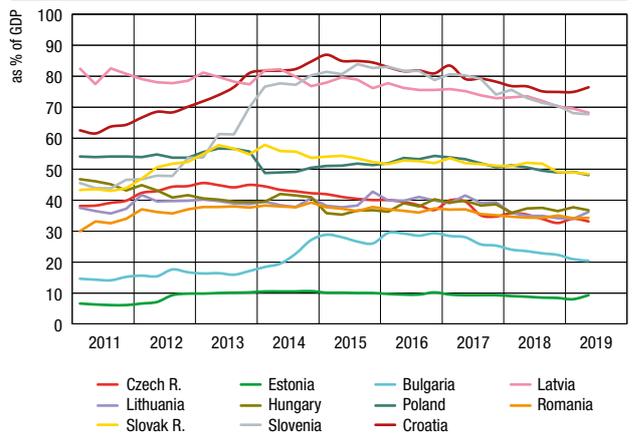
Sources: ECB and Consensus Forecasts.

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



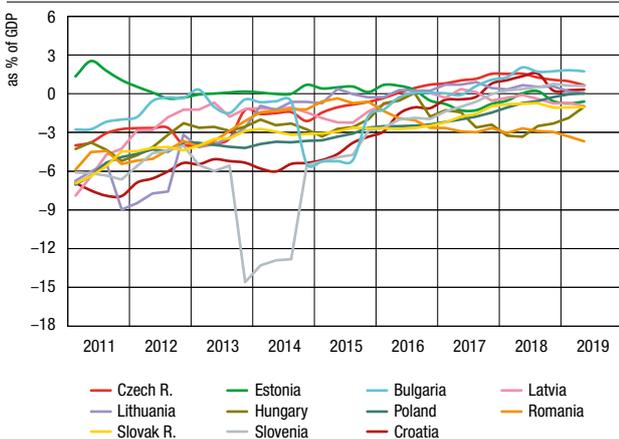
Notes: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts and the achieved real interest rate equals the nominal interest rate deflated by inflation achieved. Country group averages are not weighted.
Sources: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

Figure 13.18 General government debt end-quarter stock



Sources: Eurostat and CNB.

Figure 13.17 Consolidated general government balance four-quarter moving sums



Sources: Eurostat and CNB.

Abbreviations and symbols

Abbreviations

ARZ	– Rijeka-Zagreb Motorway
BIS	– Bank for International Settlements
bn	– billion
b.p.	– basis points
BEA	– U. S. Bureau of Economic Analysis
BOP	– balance of payments
c.i.f.	– cost, insurance and freight
CBRD	– Croatian Bank for Reconstruction and Development
CBS	– Central Bureau of Statistics
CCI	– consumer confidence index
CDCC	– Central Depository and Clearing Company Inc.
CDS	– credit default swap
CEE	– Central and Eastern European
CEFTA	– Central European Free Trade Agreement
CEI	– consumer expectations index
CES	– Croatian Employment Service
CHIF	– Croatian Health Insurance Fund
CM	– Croatian Motorways
CLVPS	– Croatian Large Value Payment System
CNB	– Croatian National Bank
CPF	– Croatian Privatisation Fund
CPI	– consumer price index
CPII	– Croatian Pension Insurance Institute
CR	– Croatian Roads
CSI	– consumer sentiment index
DAB	– State Agency for Deposit Insurance and Bank Resolution
dep.	– deposit
DVP	– delivery versus payment
EC	– European Commission
ECB	– European Central Bank
EFTA	– European Free Trade Association
EMU	– Economic and Monetary Union
ESI	– economic sentiment index
EU	– European Union
excl.	– excluding
f/c	– foreign currency
FDI	– foreign direct investment
Fed	– Federal Reserve System
FINA	– Financial Agency
FISIM	– financial intermediation services indirectly measured
f.o.b.	– free on board
GDP	– gross domestic product
GVA	– gross value added
HANFA	– Croatian Financial Services Supervisory Agency
HICP	– harmonised index of consumer prices
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
NCS	– National Clearing System
n.e.c.	– not elsewhere classified
OECD	– Organisation for Economic Co-Operation and Development
OG	– Official Gazette
R	– Republic
o/w	– of which
PPI	– producer price index
RTGS	– Real-Time Gross Settlement
Q	– quarterly
RR	– reserve requirement
SDR	– special drawing rights
SE	– South-East
SITC	– Standard International Trade Classification
SGP	– Stability and Growth Pact
ULC	– unit labour cost
VAT	– value added tax
WTO	– World Trade Organization
ZMM	– Zagreb Money Market
ZSE	– Zagreb Stock Exchange
Three-letter currency codes	
ATS	– Austrian schilling
CHF	– Swiss franc
CNY	– Yuan Renminbi
DEM	– German mark
EUR	– euro
FRF	– French franc
GBP	– pound sterling
HRK	– Croatian kuna
ITL	– Italian lira
JPY	– Japanese yen
USD	– US dollar
Two-letter country codes	
BG	– Bulgaria
CZ	– Czech R.
EE	– Estonia
HR	– Croatia
HU	– Hungary
LV	– Latvia
LT	– Lithuania
PL	– Poland
RO	– Romania
SK	– Slovak R.
SI	– Slovenia
Symbols	
–	– no entry
....	– data not available
0	– value is less than 0.5 of the unit of measure being used
∅	– average
a, b, c,...	– indicates a note beneath the table and figure
*	– corrected data
()	– incomplete or insufficiently verified data

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