



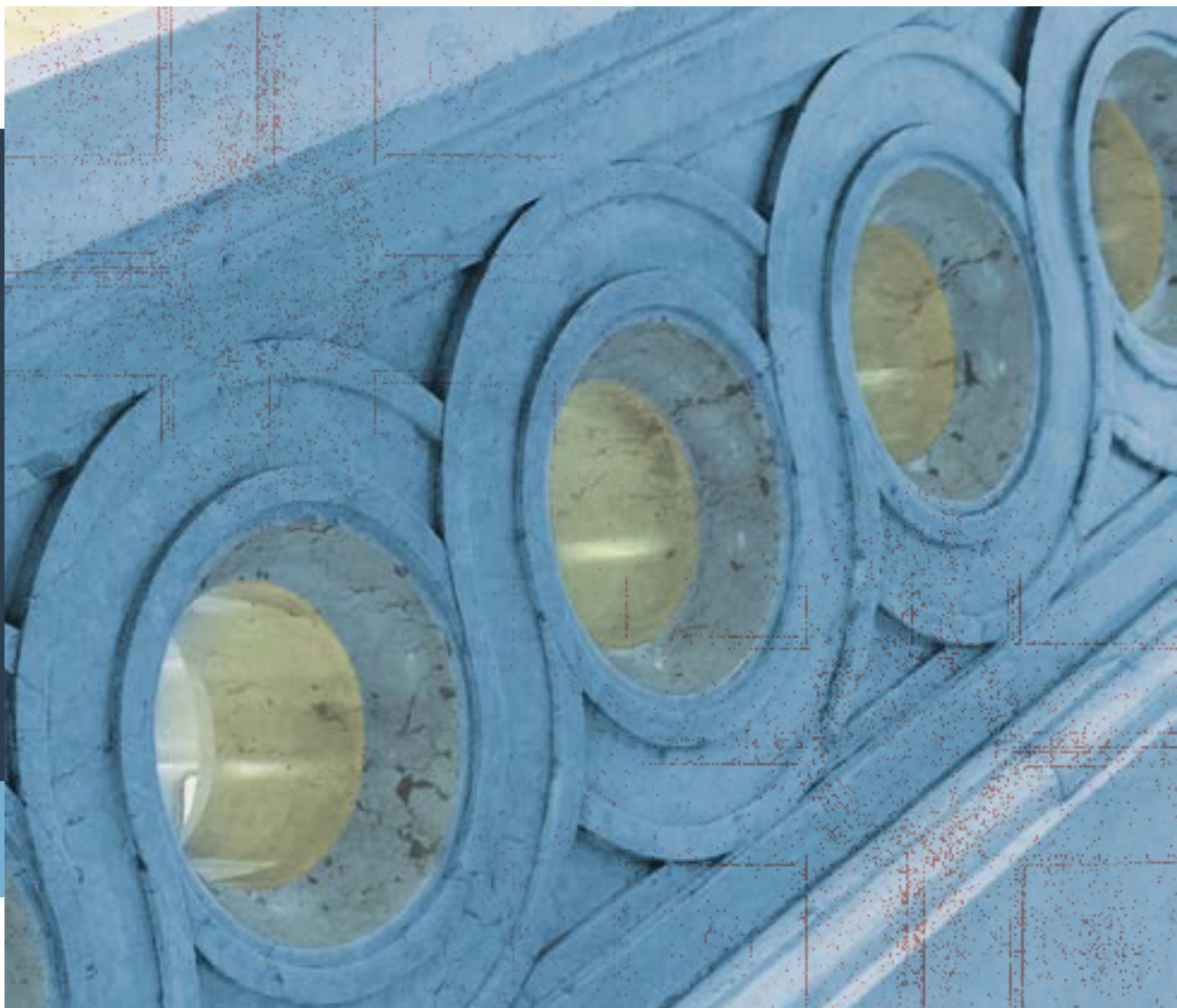
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# Macroeconomic Developments and Outlook

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

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# General information on Croatia

## Economic indicators

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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) <sup>a</sup>	4.290	4.280	4.268	4.256	4.238	4.204	4.174	4.125	4.088	4.065	4.047
GDP (million HRK, current prices) <sup>b</sup>	332,223	337,572	334,592	335,955	335,292	344,034	355,920	372,355	390,856	412,228	378,349
GDP (million EUR, current prices)	45,596	45,408	44,509	44,359	43,944	45,211	47,271	49,913	52,718	55,604	50,225
GDP per capita (in EUR)	10,629	10,609	10,429	10,423	10,369	10,754	11,324	12,100	12,896	13,678	12,410
GDP – real year-on-year rate of growth (in %)	-1.3	-0.1	-2.3	-0.4	-0.3	2.5	3.5	3.4	2.9	3.5	-8.1
Average year-on-year CPI inflation rate	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.1	1.5	0.8	0.1
Current account balance (million EUR) <sup>c</sup>	-973	-764	-788	-453	153	1,524	1,091	1,767	994	1,686	-56
Current account balance (as % of GDP)	-2.1	-1.7	-1.8	-1.0	0.3	3.4	2.3	3.5	1.9	3.0	-0.1
Exports of goods and services (as % of GDP)	35.9	38.4	39.1	39.9	42.8	45.8	47.1	49.3	49.5	50.8	42.1
Imports of goods and services (as % of GDP)	37.5	40.1	40.7	41.9	43.2	45.5	45.9	48.6	50.3	51.1	48.8
External debt (million EUR, end of year) <sup>c</sup>	49,515	49,198	47,624	48,622	49,468	48,340	44,675	43,548	42,583	40,278	40,074
External debt (as % of GDP)	108.6	108.3	107.0	109.6	112.6	106.9	94.5	87.2	80.8	72.4	79.8
External debt (as % of exports of goods and services)	302.8	282.5	273.7	274.5	262.9	233.2	200.8	176.9	163.1	142.6	189.7
External debt service (as % of exports of goods and services) <sup>d</sup>	51.2	42.5	46.1	43.4	46.3	44.0	35.7	33.0	27.0	37.7	34.9
Gross international reserves (million EUR, end of year)	10,660	11,195	11,236	12,908	12,688	13,707	13,514	15,706	17,438	18,560	18,943
Gross international reserves (in terms of months of imports of goods and services, end of year)	7.5	7.4	7.5	8.3	8.0	8.0	7.5	7.8	7.9	7.8	9.3
National currency: kuna (HRK)											-
Exchange rate on 31 December (HRK : 1 EUR)	7.3852	7.5304	7.5456	7.6376	7.6615	7.6350	7.5578	7.5136	7.4176	7.4426	7.5369
Exchange rate on 31 December (HRK : 1 USD)	5.5683	5.8199	5.7268	5.5490	6.3021	6.9918	7.1685	6.2697	6.4692	6.6499	6.1390
Average exchange rate (HRK : 1 EUR)	7.2862	7.4342	7.5173	7.5735	7.6300	7.6096	7.5294	7.4601	7.4141	7.4136	7.5331
Average exchange rate (HRK : 1 USD)	5.5000	5.3435	5.8509	5.7059	5.7493	6.8623	6.8037	6.6224	6.2784	6.6223	6.6108
Consolidated general government net lending (+)/borrowing (-) (million HRK) <sup>e</sup>	-21,276	-26,584	-18,236	-18,436	-18,354	-11,736	-3,297	2,804	864	1,202	-27,851
Consolidated general government net lending (+)/borrowing (-) (as % of GDP) <sup>e</sup>	-6.4	-7.9	-5.5	-5.5	-5.5	-3.4	-0.9	0.8	0.2	0.3	-7.4
General government debt (as % of GDP) <sup>e</sup>	57.3	63.7	69.4	80.3	83.9	83.3	79.8	76.7	73.3	71.1	87.3
Unemployment rate (ILO, persons above 15 years of age) <sup>f</sup>	11.6	13.7	15.9	17.3	17.3	16.2	13.1	11.2	8.4	6.6	7.5
Employment rate (ILO, persons above 15 years of age) <sup>f</sup>	46.5	44.8	43.2	42.1	43.3	44.2	44.6	45.8	46.9	47.7	47.2

<sup>a</sup> 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 2020 are preliminary.

<sup>b</sup> The GDP data are presented according to the ESA 2010 methodology. Data for 2020 are preliminary.

<sup>c</sup> 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 2021 and data on the gross external debt position as at the end of September 2021.

<sup>d</sup> 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.

<sup>e</sup> Fiscal data is shown according to the ESA 2010 methodology.

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

Sources: CBS, MoF and CNB.



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# Macroeconomic Developments and Outlook



## 1 Introduction

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A favourable epidemiological situation in the third quarter of 2021 and Croatia's more lenient containment measures compared with those imposed by competitor countries, have led to exceptionally good economic results. Current developments delivered an upside surprise, notably exports of services and household consumption. Compared with the third quarter of 2020 real GDP grew by 15.8%, reflecting a quarterly upswing in real economic growth. Available data for October hint at the continuation of positive trends in real growth in the remainder of the year, though at a weaker intensity than in the third quarter. After a strong contraction in 2020, real GDP is projected to increase by 10.8% in 2021, exceeding its pre-crisis level. This should contribute to the closing of the negative domestic output gap. As regards individual components, foreign demand is expected to have contributed the most to the economic growth in 2021, together with other demand components. With the growth of total exports projected to significantly outstrip the growth of imports, it is estimated that net foreign demand has provided a strong positive impetus to total economic growth. An only relatively high economic growth of 4.1% is expected in 2022, the slowdown being partly attributable to the base effect. As negative risks surrounding the future pandemic developments are projected to remain in the rest of the projection horizon, it is estimated that risks to economic growth are mainly tilted to the downside. The consumer price inflation (CPI) might accelerate to 2.4% in 2021 and average at that level also in 2022. The spike in inflation in 2021 broadly reflects the acceleration in the growth of energy prices, and to a smaller extent in the CPI excluding food and energy, amid the recovery in demand and supply disruptions. Larger contributions of food prices and the CPI excluding food and energy in 2022 are projected to be offset by a smaller contribution of energy prices to overall inflation. The surplus in the balance of payments, current and capital account, might grow significantly in 2021 relative to the previous year, primarily on the back of strong recovery of tourism revenues, and these trends are expected to continue in 2022. As a result, the financial account of the balance of payments is expected to see an outflow of net capital and the relative indicators of external debt are likely to continue improving over the projection horizon. The CNB continued to pursue an expansionary monetary policy in the second half of 2021, primarily by purchasing foreign exchange inflows from the Ministry of Finance, mostly related to EU funds. Substantial purchases of foreign currency from the government in 2021 were the major contributor to substantial growth in banks' free reserves, leading to the reduction in financing costs and individual interest rates dropping to their historic lows. Lending to households continued to strengthen, mostly on account of continuing several-year acceleration in housing loans, and the annual growth in corporate loans slowed down. According to the latest amendments to the 2021 budget, the general government budget deficit could stand at 4.5% of GDP, while the budget proposal for 2022 assumes a deficit of 2.6% of GDP in 2022. Following a one-off increase in 2020, the general government debt to GDP ratio is expected to resume its downward path.

A relatively favourable epidemiological situation in Croatia in the third quarter of 2021, together with foreign visitors' preference for private accommodation and transportation by personal vehicles as well as an increased propensity to spend resulted in strong tourism performance during the main season. As a result, real services exports almost returned to their level from the same period in 2019. All other GDP components, except government consumption and goods exports, grew on a quarterly basis, accelerating real economic growth to 2.7%. Available data for October hint at the continuation of positive trends in real growth in economic activity in the fourth quarter, though at a weaker intensity, with developments in November and December expected to be partly affected by recently more serious epidemiological conditions. As good economic results in the third and early in the fourth quarter outstripped earlier expectations, total real economic activity is projected to increase by 10.8% in 2021, after contracting by as much as 8.1% in 2020, and to perform better than in 2019 already this year. The strong expected real growth might also contribute to the closing of the negative domestic output gap. Foreign demand is estimated to have been the key driver behind the economic growth in the whole of 2021 and both exports of goods and exports of services are expected to post growth rates. As regards domestic demand components, economic growth could benefit most from the rise in personal consumption, with the growth in household consumption in part supported by the favourable epidemiological situation in the summer and, most likely, the spending of a portion of accumulated forced savings. A strong positive impetus to total real growth could also come from gross fixed capital formation.

The growth of total imports, albeit strong, might fall behind the growth in exports so that the contribution of net foreign demand to total real GDP growth might remain markedly positive. Expected in 2022 is a moderately high economic growth, at an annual rate of 4.1%. It is anticipated that all GDP components might positively contribute to its growth in 2022, while foreign demand could nevertheless remain the main generator of economic growth. It is estimated that the risks associated with the central values are more tilted to the downside than to the upside across the projection horizon. The main negative risk concerns the further course of the pandemic and its impact on economic developments and the business environment. In addition, disruptions in world supply chains could strongly affect global developments over a prolonged period, which in turn could lead to the weakening of foreign demand. The elevated risks of the inflation rate going up could also affect the volume and structure of consumption. In contrast, the main positive risk arises from a stronger than expected absorption of EU funds.

Employment picked up in 2021, after a relatively slight decline in 2020, with measures implemented by the Government of the Republic of Croatia helping to preserve jobs in affected activities. Employment is expected to rise by 2.2% in 2021 and the number of employed persons to outstrip the results from 2019. However, broken down by activity, there is much heterogeneity in the recovery of employment. The growth in total employment is also substantially supported by the hiring of workers from third countries. Employment growth in 2022 is expected to be somewhat smaller (1.5%) and not to be significantly affected by the anticipated discontinuation of job preservation grants paid

to employers. The ILO unemployment rate could fall to 6.2% in 2022, from the estimated 6.8% of the labour force in 2021. Wages accelerated in the public sector in 2021, reflecting a rise in the wage calculation base, and so did the wages in the rest of the economy, which could result in a 4% increase in the average nominal gross wage (2.5% in 2020). Following the reduction of the income tax burden early in the year, the average nominal net wage is expected to increase by a strong 5.3%; however, its purchasing power might show smaller rate of growth (2.7%) due to an expected increase in consumer prices. In 2022, the growth in the average nominal gross wage could accelerate to 4.5%, driven primarily by a fairly strong rise in wages in the rest of the economy, spurred by labour shortages in the tourism sector, and the reconstruction works in earthquake-hit areas.

The average annual consumer price inflation could accelerate to 2.4% in 2021 (from 0.1% in 2020), and then remain at that level in 2022 as well. A sharp increase in the year-on-year rate of change in energy prices, supported by the growth in global oil prices and the positive base effect, was the largest contributor to the rise in inflation in 2021; as a result, it might account for half of total inflation in 2021. In addition, somewhat faster growth was also seen in other CPI components excluding food and energy due to inflationary pressures of the recovery in demand and the supply-side factors, i.e. the increase in global raw material prices and freight charges and disturbances in the supply chains resulting in shortages of individual intermediate goods and finished products. While the average annual rate of change in food prices in 2021 was strongly affected by the negative inflation carry over from 2020, the year-on-year growth in

food prices accelerated gradually, spurred by the spillover of the strong growth in global food raw material prices, unfavourable weather conditions causing poorer domestic yields of individual crops and the positive base effect (the drop in food prices in the last quarter of 2020). On this basis, the average annual growth rate of food prices could rise substantially early in 2022, after which it is expected to gradually decline. The annual CPI growth rate excluding food and energy could also accelerate in 2022, mainly as a result of further recovery in demand and a gradual spillover of the rise in global raw material prices to domestic prices. This assumes a gradual normalisation of supply chains and a balanced supply of and demand for individual semi-finished and finished products on a global level. The average annual growth rate in energy prices could slow down in 2022, reflecting the downward trend in crude oil prices in the futures market. The risks of inflation exceeding the projected 2.4% in 2022 are very pronounced and mostly arise from a possible significant rise in administered prices (notably gas and electricity) and possibly more prominent inflationary pressures from the demand side amid expectations of gradual increase in the positive output gap in Croatia. There is also a risk of higher imported inflation.

After reaching 2.0% of GDP in 2020, the surplus in the current and capital account might surge to 4.6% of GDP in 2021, largely reflecting strong rise in net services exports, notably tourism revenues. Albeit to a smaller degree, the current and capital account developments might benefit from the rise in net inflows from personal remittances and the continual increase in the uptake of EU funds. In contrast, the expected growth in the foreign trade deficit and the rise in the profitability of foreign-owned

**Table 1.1 Summary table of projected macroeconomic measures**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>National accounts (real rate of change, in %)</b>												
GDP	-0.1	-2.3	-0.4	-0.3	2.5	3.5	3.4	2.9	3.5	-8.1	10.8	4.1
Personal consumption	1.0	-2.4	-1.6	-2.5	0.2	3.1	3.2	3.3	4.0	-5.3	9.4	3.7
Government consumption	1.3	-0.9	0.7	1.3	-0.9	1.0	2.2	2.4	3.3	4.1	1.0	2.8
Gross fixed capital formation	-3.7	-4.6	1.0	-2.3	8.4	5.0	1.5	3.8	9.8	-6.1	7.9	7.8
Exports of goods and services	2.3	-1.5	2.5	7.4	10.3	7.0	6.9	3.7	6.8	-22.7	31.1	8.1
Imports of goods and services	2.5	-2.4	3.2	3.5	9.4	6.5	8.4	7.5	6.5	-12.3	19.0	7.8
<b>Labour market</b>												
Number of employed persons (average rate of change, in %)	-1.1	-1.2	-1.5	-2.0	0.7	1.9	1.9	2.3	2.3	-1.2	2.2	1.5
Registered unemployment rate	17.8	18.9	20.2	19.6	17.0	14.4	11.6	9.2	7.6	8.9	8.2	7.5
ILO unemployment rate	13.7	15.9	17.2	17.3	16.2	13.1	11.2	8.4	6.6	7.5	6.8	6.2
<b>Prices</b>												
Consumer price index (average rate of change, in %)	2.3	3.4	2.2	-0.2	-0.5	-1.1	1.1	1.5	0.8	0.1	2.4	2.4
Consumer price index (rate of change, end of period, in %)	2.1	4.7	0.3	-0.5	-0.6	0.2	1.2	0.8	1.4	-0.7	4.2	1.2
<b>External sector</b>												
Current account balance (as % of GDP)	-1.7	-1.8	-1.0	0.3	3.4	2.3	3.5	1.9	3.0	-0.1	2.0	1.4
Current and capital account balance (as % of GDP)	-1.5	-1.5	-0.8	0.8	4.1	3.7	4.5	3.2	4.6	2.0	4.6	5.0
Gross external debt (as % of GDP)	108.3	107.0	109.6	112.6	106.9	94.5	87.2	80.8	72.4	79.8	74.6	68.1
<b>Monetary developments (rate of change, in %)</b>												
Total liquid assets – M4	5.6	3.6	4.0	3.2	5.2	4.7	2.1	5.5	2.9	9.3	10.1	8.0
Total liquid assets – M4 <sup>a</sup>	4.4	3.5	3.8	2.4	4.6	5.3	3.2	6.1	3.5	9.1	10.0	8.0
Credit institution placements to the private sector	4.8	-5.9	-0.5	-1.6	-3.0	-3.7	-1.2	2.0	2.8	3.9	2.8	3.3
Credit institution placements to the private sector <sup>a</sup>	3.5	-1.2	0.8	-1.5	-2.3	1.1	2.9	4.4	4.2	3.9	3.4	3.4
Credit institution placements to corporates <sup>a</sup>	7.6	-1.5	1.8	-3.7	-3.0	3.2	2.5	1.9	0.4	5.6	0.2	2.9
Credit institution placements to households <sup>a</sup>	-0.7	-1.1	-1.2	-0.7	-1.8	0.5	4.0	6.2	7.4	2.1	4.9	3.8

<sup>a</sup> 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.



banks and enterprises could alleviate the growth of the surplus in the current and capital account. In key with the much higher estimate of the current and capital account surplus, a substantially higher net capital outflow is expected to be recorded in the whole of 2021 relative to 2020, primarily due to a sharp fall in the net debt liabilities of domestic sectors. After the years-long upward trend in the relative indicator of gross external debt was temporarily interrupted last year due to the fall in nominal GDP, the gross external debt to GDP ratio is expected to decline again in 2021. As regards the year 2022, the surplus in the current and capital account could increase additionally, to 5.0% of GDP, on the back of the expected further increase in net exports of services and a further acceleration in the use of EU funds. At the same time, net outflow of capital is expected to continue, sustained by continuous improvement in the relative indicators of external debt.

The CNB continued to pursue an expansionary monetary policy in the second half of 2021, primarily by purchasing foreign exchange inflows from the Ministry of Finance, mostly related to EU funds. In the same way as in the first half of 2021, the CNB did not have to resort to additional monetary policy measures in the second half of the year due to stable conditions in the domestic financial markets. Substantial purchases of foreign currency from the government in 2021 were the major contributor to substantial growth in banks' free reserves, leading to the reduction in financing costs and individual interest rates dropping to their historic lows. Credit institutions' corporate placements decreased in the first ten months of 2021 on the back of an equal fall in working capital and other loans, while investment loans increased. The annual growth in corporate

placements might slow down to 0.2% by the end of the year due to poorer performance and the base effect of strong increase in placements in December 2020. Lending to households continued to strengthen, mostly on account of continuing several-year acceleration in housing loans and, to a lesser extent, a mild recovery in the growth of general-purpose cash loans. It is estimated that loans to households might be 4.9% higher at the end of 2021 than twelve months previously. Having regard to the anticipated rise in the current and capital account surplus, it may be expected that the CNB will continue to use foreign exchange transactions to boost international reserves and create reserve money in 2022 as well. In such circumstances, the kuna to euro exchange rate should remain stable and financing conditions favourable, underpinned by continuing strong growth in monetary aggregates M1 and M4. As household placements are expected to slow down and corporate placements to accelerate in 2022, total placements (government excluded) might grow at the same pace as in 2021 (3.4%).

As regards fiscal policy, according to the latest amendments to the 2021 budget, the general government budget deficit, amounting to 7.4% of GDP in 2020, could amount to 4.5% of GDP in 2021, due to the economic rebound and gradual relaxation of counter-crisis measures. It is expected to drop below 3% of GDP under the budget proposal for 2022 and to continue to slow down gradually in line with the 2023 and 2024 projections. The autumn projections of the European Commission from November 2021 show a comparable trajectory. Following the strong increase in the general government debt to GDP ratio in 2020, the public debt is expected to resume its downward path in 2021 and thereafter.

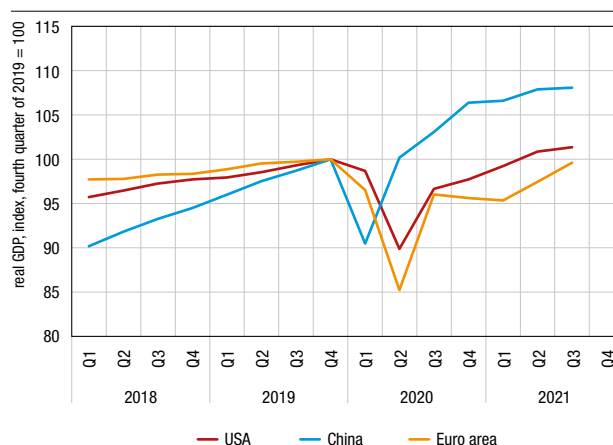
## 2 Global developments

The global economy continued to recover from the coronavirus crisis in the first nine months of 2021, but with growth decelerating gradually owing to increasingly strong disturbances in global supply chains. The speed of recovery in individual countries depended mostly on economic policy measures aimed at alleviating the consequences of the pandemic and the degree of success in containing the contagion. China's economic activity, for example, had returned to its pre-pandemic trajectory as early as in the beginning of 2021 due to very stringent containment measures and strong fiscal support, before it started to decelerate because of supply chain disturbances and real estate market problems (Figure 2.1). The recovery of developed economies was strongly supported by population vaccination campaigns, which intensified in the second quarter, whereas the pace of recovery in developing countries was slower. In addition to adversely impacting global industrial production and consumption, supply chain disturbances contributed to a surge in global inflation. Most countries' monetary policy remained highly accommodative, continuing to ensure very favourable financing conditions. However, some central banks started announcing earlier than expected monetary policy normalisation or raising interest rates in response to growing inflationary pressures (for more details, see Box 1 Expected interest rate trends under the conditions of monetary policy normalisation).

Due to substantial fiscal support and a successful vaccination campaign that prompted the recovery of the services sector, strong growth continued in the US in early 2021 and economic activity returned to the pre-crisis level. However, during the

summer months, when supply chain problems got worse, economic growth decelerated sharply, which was primarily reflected in a decrease in the personal consumption of durable goods and goods exports. Investment activity, however, remained relatively strong, despite continued elevated uncertainty. Labour market developments continued to improve, with the unemployment

Figure 2.1 Economic activity in selected markets



Sources: Eurostat, BEA and NBS.

rate down to 4.6% of the labour force at the end of October, still above the pre-crisis level. Disturbances in global supply chains, coupled with increases in the prices of energy products and raw materials, boosted US inflation from 1.4% in January to 6.2% in October 2021, which is the fastest acceleration of the inflation rate among large developed countries.

In contrast with the US, the pace of euro area recovery accelerated in the second and third quarters of 2021 (2.1% and 2.2% respectively), and economic activity almost returned to the pre-crisis level by the end of September. While the intensification of the vaccination campaign boosted the recovery of the services sector, the lack of some important intermediate goods, especially semiconductors, had a strong dampening effect on the recovery of industrial production. As concerns individual member states, the largest contribution to growth acceleration in the second and third quarters, deriving from the recovery of the services sector, was made by Germany, Italy and France. However, early indicators of economic activity at the beginning of the fourth quarter point to a slowdown in growth due to increasingly widespread supply chain difficulties and the renewed spread of the pandemic in many European countries (Figure 2.2).

Figure 2.2 Euro area confidence indicators

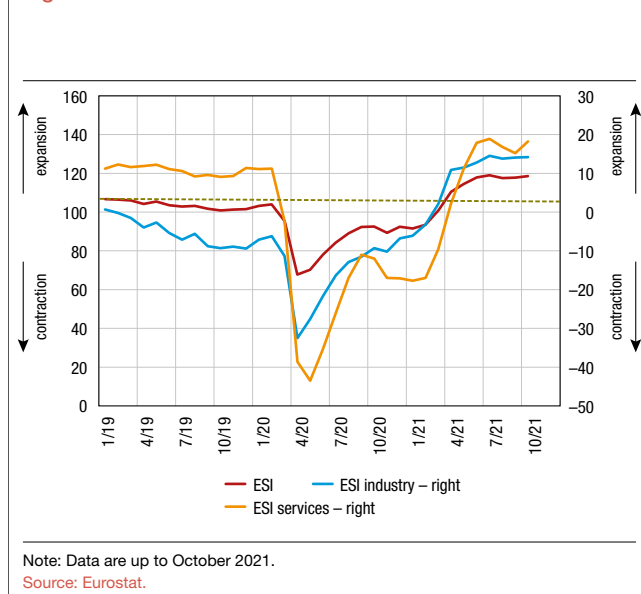
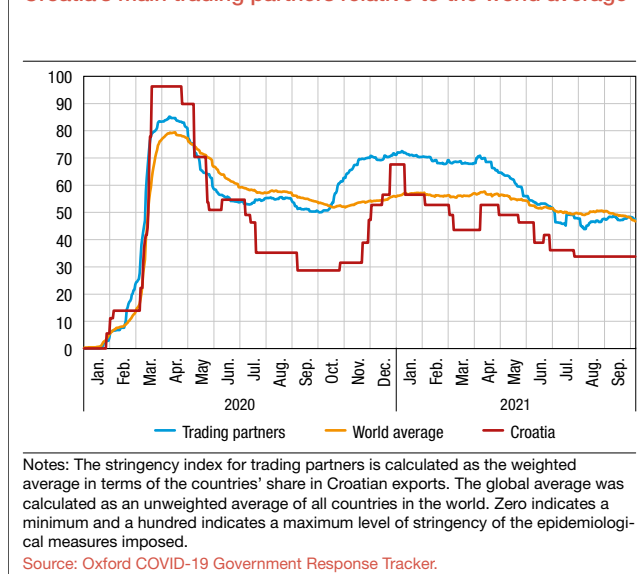


Figure 2.3 Stringency index of epidemiological measures in Croatia's main trading partners relative to the world average



## Croatia's main trading partners

In 2021, economic activity continued to recover in all Croatia's major trading partners, due among other things to the marked improvement of the epidemiological situation and the relaxation of containment measures (Figure 2.3). The economic recovery of some of the most important partners from the euro area, such as Italy, Austria and Germany, did not intensify until the second quarter, while Slovenia's growth was relatively strong from the beginning of the year. Economic developments in Eastern European trading partners were even more favourable, not only because of somewhat more lenient containment measures, but also due to their lesser sensitivity to disturbances in global supply chains. Serbia's economic activity, for example, exceeded the pre-crisis level by the end of September 2021, while other countries, especially those dependent on tourism, continued to considerably lag behind the pre-crisis level of economic activity.

## Prices, exchange rates and monetary and fiscal policy

The substantial rise in raw material prices, which began at mid-2020, continued during a large part of 2021. The price of a barrel of Brent crude jumped by 68% (to USD 84) in the first ten months. The growth of oil prices was driven by growing demand and the improvement in the global economic outlook due to intensifying vaccination efforts as well as by the failure of OPEC+ countries to agree to a gradual oil supply adjustment. After the summer, further pressures on the growth of prices arose from increases in the prices of natural gas in Europe and Asia, which created additional demand for oil for the purpose of producing electric and heat energy. However, at the beginning of October, when OPEC+ countries agreed to increase oil production, oil prices stabilised, before dropping to USD 71 per barrel at the end of November owing to growing uncertainties surrounding the appearance of a new coronavirus variant.

Having hit a decade peak in the first half of 2021, the prices of raw materials excluding energy decelerated markedly in the third quarter of the year. Metal prices dropped considerably during the summer months due to the weakening of global industrial production. This only partially offset the surge of these prices in the previous part of the year, caused by growing demand from China, the announcements of large infrastructure projects in the US and the energy transition of developed economies. The prices of food raw materials decreased to a slightly lesser extent, but remained elevated. The high level of food raw material prices was also supported by the growth of energy product prices, which added to production and transportation costs.

The monetary policy of the central banks of the largest world's economies remained highly accommodative in 2021, although expectations are that normalisation is to be implemented sooner than anticipated owing to mounting inflationary pressures. According to expectations, the Fed began reducing the monthly volume of bond purchases in November, leaving the interest rate unchanged. The ECB also kept its monetary policy highly accommodative in 2021, adopting a decision in September to gradually reduce the volume of the pandemic emergency purchase programme. The quantitative easing policy was thus continued at a somewhat slower pace. Both the ECB and the Fed kept key interest rates at record low levels.

Developments in the world's foreign exchange market in 2021 mostly reflected the fact that the euro area's economic recovery was slower than that in the US. The US dollar strengthened against the euro, standing at EUR/USD 1.17 in late October, which is a decrease of 5.1% from the end of 2020. The exchange rate of the Swiss franc also strengthened against the

euro, although to a slightly lesser degree, amounting to EUR/CHF 1.06 at the end of November.

### Projected developments

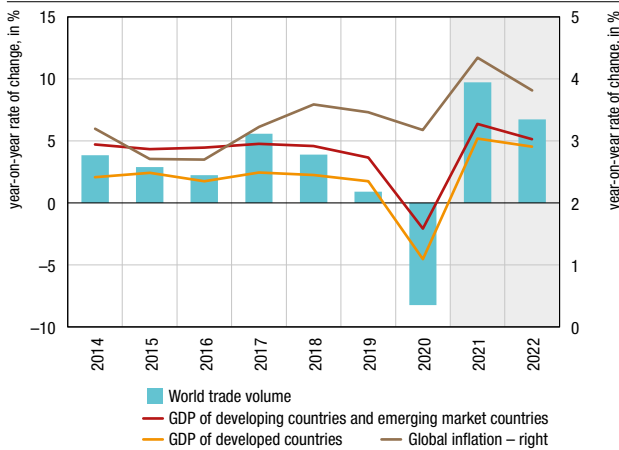
Most of the projections of international financial institutions are based on the assumption of a continued relaxation of containment measures, made possible primarily by the further deployment of the vaccine and a successful adjustment of business operations to pandemic conditions. This should enable the services sector to continue recovering and increase the volume of global trade. Given that mounting inflationary pressures are primarily related to supply side factors, the Fed and the ECB are assumed to continue pursuing an accommodative monetary policy. Furthermore, crude oil prices are expected to drop gradually, while the prices of other raw materials could remain at the currently high levels.

IMF projections, published in October, suggest that global economic growth will stand at 5.9% in 2021 and 4.9% in 2022 (Figure 2.4). The 2021 growth projection, slightly lower than the previous one, reflects weaker expectations for developed economies, especially for the US, mainly caused by continuing

difficulties with supply chains and the lower availability of certain production goods. Expectations for the euro area and emerging market economies, especially those in Europe, improved on account of the better results achieved in the last few months; expectations for raw material exporting countries also improved because of price growth. Projections for China and India did not change markedly. Expectations for global growth in 2022 remained unchanged.

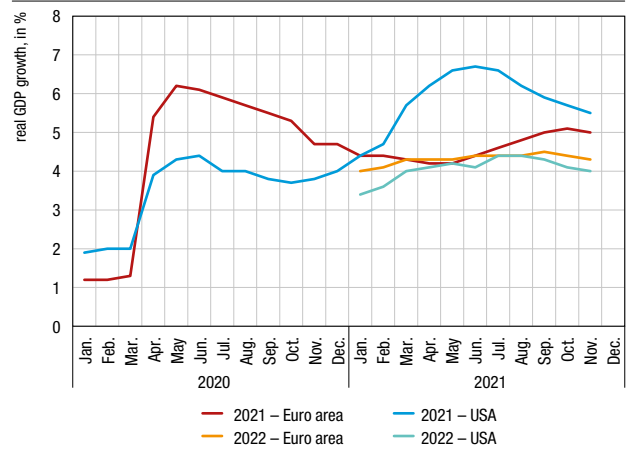
ECB and IMF projections for the euro area are very similar. The ECB's latest projections from September point to the continued recovery of the euro area economy, with real GDP expected to rise by 5.0% in 2021 and by a relatively high 4.6% in the following year (Figure 2.5). This projection is based on the assumption that containment measures will be relaxed and that fiscal stimuli and favourable financing conditions will continue. Domestic demand is expected to be the main driver of the recovery, due to strong personal consumption growth, deriving partly from savings funds accumulated during the pandemic. Supply chain restrictions are also expected to ease. The euro area inflation rate could reach 2.2% in 2021, which exceeds the ECB's June projection by 0.3 percentage points. With the annual inflation rate

Figure 2.4 Global economic developments



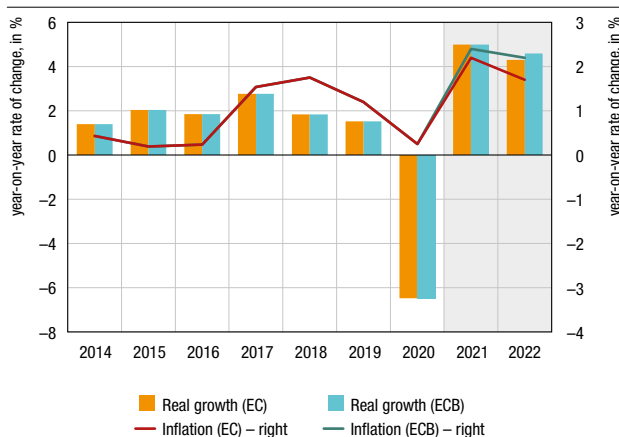
Source: IMF (WEO, October 2021).

Figure 2.6 Expected real GDP growth in selected countries



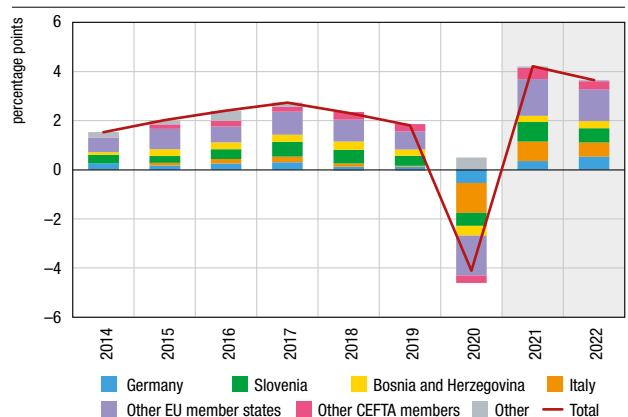
Source: Consensus Forecasts.

Figure 2.5 Economic growth and inflation in the euro area



Sources: ECB (September 2021) and EC (November 2021).

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 2021).

rising above expectations (to 4.1% in October), the average annual inflation rate is likely to be somewhat higher. The recent deterioration of the epidemiological situation in many European countries poses a risk to the short-term economic outlook.

The latest economic growth forecasts, published by Consensus Forecasts in November 2021, which take into account the latest results, deteriorated slightly compared with those for the previous months, especially as regards the US. Expectations for the euro area worsened only for 2022. Increased supply chain restrictions are considered to be the main cause of weaker economic growth (Figure 2.6).

In accordance with the described trends in the global economy, demand for Croatian export products is expected to decline slightly in the remaining part of 2021. It will continue to be generated by imports from key partners from the euro area, especially from Slovenia, Italy and Germany, and from non-euro area EU member states. Foreign demand is expected to grow at a slightly weaker pace in 2022 too (Figure 2.7).

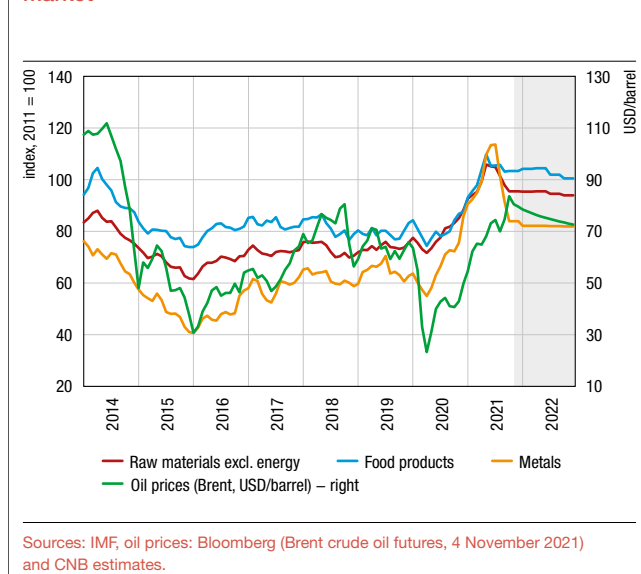
As regards the global prices of raw materials, crude oil prices are expected to decrease gradually towards the rest of the year and in 2022 (Figure 2.8). The slight decrease in prices should be affected by the adjustment of the OPEC+ output agreed in October. Such expectations notwithstanding, the average price level in 2022 could be higher than in the current year.

The prices of other raw materials could remain at current levels for a longer period of time. Metal prices will remain high as a result of limited production capacities and strong demand for metal raw materials, used, among other things, for the decarbonisation of the economy. The prices of food raw materials could edge down when supply normalises and supply side constraints ease.

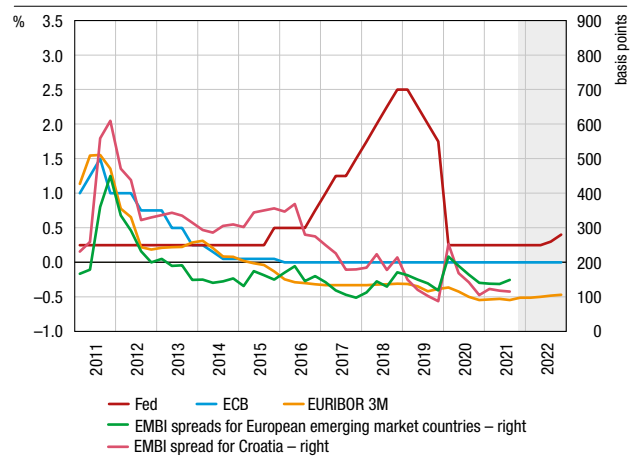
Markets still expect that expansionary monetary policies and favourable financing conditions will remain in place, although the reduction of monetary stimuli could proceed at a somewhat faster pace. Key interest rates could remain at current levels over a large part of the projection period: the Fed is expected to increase interest rates for the first time not before the second part of 2022 and the ECB at the end of 2023 (Figure 2.9). The Fed is also expected to end its bond purchase programme by mid-2022, whereas the ECB could end its pandemic emergency purchase programme in March 2022.

According to the November Foreign Exchange Consensus Forecasts, the exchange rate of the euro against the US dollar is

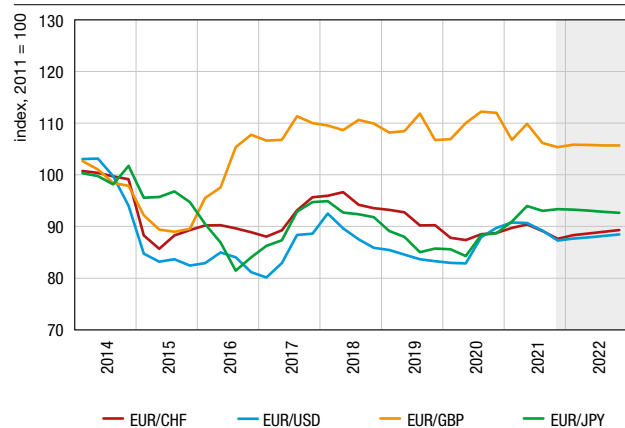
**Figure 2.8 Prices of raw materials on the international market**



**Figure 2.9 Benchmark interest rates and the average yield spread on bonds of European emerging market countries end of period**



**Figure 2.10 Exchange rates of individual currencies against the euro**



expected to recover slightly on the global foreign exchange market by the end of 2022, after having weakened in the previous year (Figure 2.10). However, euro could strengthen less than expected due to increasing discrepancies between the monetary policies of the US and the euro area. Similarly, the euro is expected to continue strengthening against the Swiss franc, while its exchange rate against the Japanese yen and the British pound should remain generally unchanged.

The prevailing risks related to global economic growth have remained negative and inflation risks have increased considerably. In less developed countries with lower vaccination rates negative risks are still primarily related to the further course of the pandemic. However, new virus variants that could be more resistant to available vaccines have increased risks for developed countries too. The still present global supply chain disturbances have continued to pose significant risks to investments and consumption in developed countries. Should they continue, inflation pressures stemming from those disturbances could spill over to the growth of inflationary expectations, which would require a faster normalisation of monetary policy. This could, in turn, lead to the worsening of global financing conditions and

have a negative impact on economic activity, especially in highly indebted countries. There are positive risks to growth, too, mainly concerning a faster increase in personal consumption

based on the savings accumulated during the pandemic, while a more favourable epidemiological situation could additionally spur the recovery of the services sector.

**Box 1 Expected interest rate trends under the conditions of monetary policy normalisation**

*In response to mounting inflationary pressures in recent months, increasing numbers of central banks, including those in Central and Eastern Europe, are initiating or accelerating the process of monetary policy normalisation following a long period of extremely low interest rates. The central banks of large developed countries are still reluctant to adjust their monetary policies, assessing inflationary pressures to be temporary and likely to ease gradually in 2022. However, the expectations of inflation reaching target levels in the medium term made them change the course of monetary policy or, at least, consider the initiation of the process. Such a reversal of monetary policies could have a considerable impact on financing conditions in Croatia. Global financial markets are currently expecting financing conditions to tighten gradually and benchmark interest rates to remain at levels that are lower than those recorded before the pandemic and, especially, before the outbreak of the global financial crisis. Changes in financing conditions in the domestic market will depend on the speed of normalisation of monetary policy in the environment (primarily in the euro area); these influences can be offset by the improvement of risk perception of Croatia, that is, the strengthening of macroeconomic fundamentals and the adoption of the euro.*

Following a long period of muted inflation, inflationary pressures have strengthened perceptibly in a large number of countries in recent months (Figure 1). Inflation has grown in a wide range of countries, both in emerging market countries and in developed countries that recorded slightly more pronounced deflation pressures at the peak of the pandemic. In October 2021, the annual inflation rate stood at 4.1% in the euro area, the highest level since the global financial crisis, and reached a high of 6.2% in the US. Like in other countries, this increase was for the most part a direct consequence of the pandemic, that is, of a mismatch between supply and demand in the goods and services market, resulting from the abrupt re-opening of large economies. Also important in this respect was the strong growth of

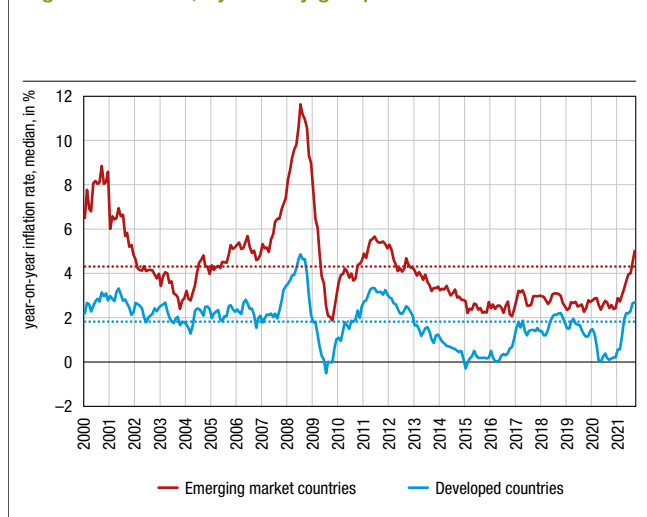
energy products and other raw materials, driven both by growing demand and supply side shocks, such as the labour force shortage, limited production capacities and adverse weather conditions.

Global inflation growth has shifted market expectations towards a faster relaxation of pandemic containment measures and a gradual normalisation of monetary policy. In a large number of emerging market countries central banks have already responded to inflationary pressures by raising benchmark interest rates (Figure 2). These include the central banks of Brazil, Mexico and Russia and most central banks of non-euro area member states, such as the Czech Republic, Poland, Hungary and Romania. The central banks of Hungary and the Czech Republic began tightening their monetary policies as early as in June, adopting additional measures in October and November in response to the further worsening of the inflation outlook. The central banks of Romania and Poland followed suit in October. Some of these central banks have considerably increased benchmark interest rates, almost returning them to the pre-pandemic level.

The central banks of large developed countries, exposed to inflationary pressures to a lesser extent, have been reluctant to adjust their monetary policies, assessing inflationary pressures to be temporary and likely to ease gradually in 2022. However, as they expect inflation to stabilise around target levels in the medium term, these banks have started with monetary policy normalisation by announcing or by implementing a reduction of their pandemic security purchase programmes, which precedes the raising of benchmark interest rates. The Fed has been among the first of large developed countries' central banks to do so, having recently announced that it will end its security purchase programme by mid-2022, thus giving rise to market expectations that benchmark interest rates will increase gradually from the current 0.25% to 1.05% by the end of 2023.

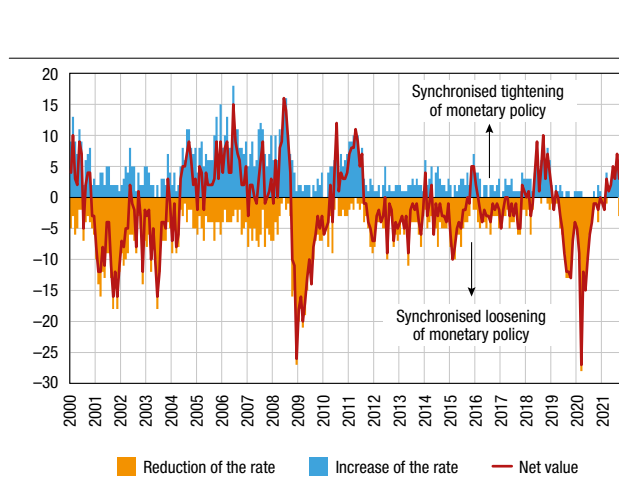
The ECB also expects inflationary pressures, somewhat less

**Figure 1 Inflation, by country groups**



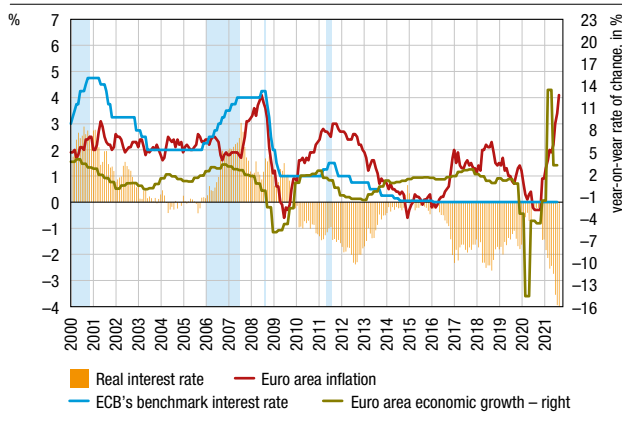
Note: The dotted lines represent average inflation in individual country groups in the period shown.  
Source: IMF.

**Figure 2 The number of changes in benchmark interest rates of central banks in the world**



Note: The number of monthly decreases or increases of benchmark interest rates by 38 central banks in the world.  
Source: BIS.

**Figure 3 Monetary policy, inflation and economic activity in the euro area**



Notes: The blue shaded areas represent the periods of ECB monetary policy tightening. The real interest rate is calculated as the difference between the 3-month EURIBOR and the annual inflation rate.  
Sources: Eurostat and Bloomberg.

pronounced in the euro area than in the US, to decline relatively quickly, and therefore considers it unnecessary to accelerate the process of monetary policy normalisation to any very great degree. The ECB slightly reduced the size of the pandemic emergency purchase programme in September and is expected to confirm the announced ending of the programme in March 2022 by the end of the year. However, it has reiterated its readiness to keep key interest rates at record low levels until it sees core inflation sufficiently advancing towards the target level of 2% in the medium term. Under such conditions, markets do not expect the ECB to increase interest rates before the end of 2023 and by more than 0.05 percentage points.

The current market belief is that the ECB is likely to exercise considerable caution when it comes to the timing and pace of raising interest rates. This belief relies on the experiences from previous tightening cycles, especially those preceding the global financial crisis and the European debt crisis, which were followed by a period of decelerated economic growth in the euro area (Figure 3). In addition, the euro area's economic recovery is still lagging significantly behind that in the US, with the result that the monetary policy adjustment requirement has been

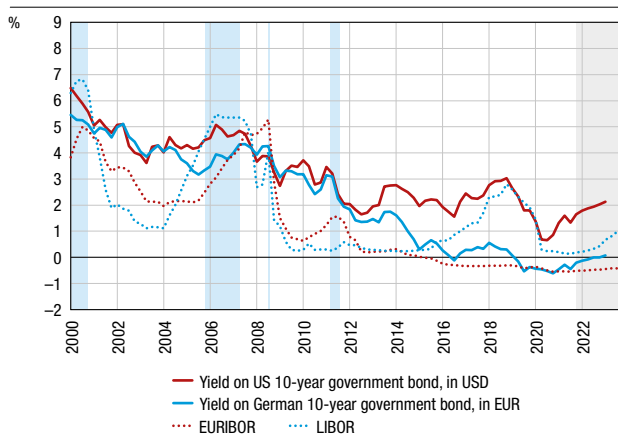
postponed. In addition, in its new monetary policy strategy, published in July 2021, the ECB adopted symmetric inflation target. Finally, the growth of euro area interest rates in the medium term will be limited by a number of structural factors, including population ageing and related savings surpluses. However, it should be taken into account that market expectations are very quick to change, especially if inflationary pressures prove to be more deeply embedded and persistent than currently expected. In this case, changes in euro area and US monetary policies could be faster and more pronounced.

While short-term market interest rates are directly influenced by current monetary policy, long-term interest rates depend more on the macroeconomic outlook, expected moves of central banks and risk perception. Due precisely to these factors, benchmark yields on US ten-year government bonds increased by about 60 basis points during the previous year, although remaining relatively low in historical terms (Figure 4). The increase in the European market is much lower, although high enough to point to an increase in inflationary expectations. Markets expect bond yields to continue growth, at a somewhat higher rate in the US than in the euro area, but to keep below the levels they were at on the eve of the global financial crisis, especially in the early 2000s.

The gradual normalisation of monetary policy in the euro area will spill over to the domestic market. However, this does not necessarily mean that financing conditions will soon and considerably worsen. The cost of borrowing in Croatia will be determined not only by global financing conditions but also by a series of other factors, most importantly by domestic market liquidity, risk perception and regulatory cost, which are incorporated into the cost of bank sources of funds, as well as bank margin.

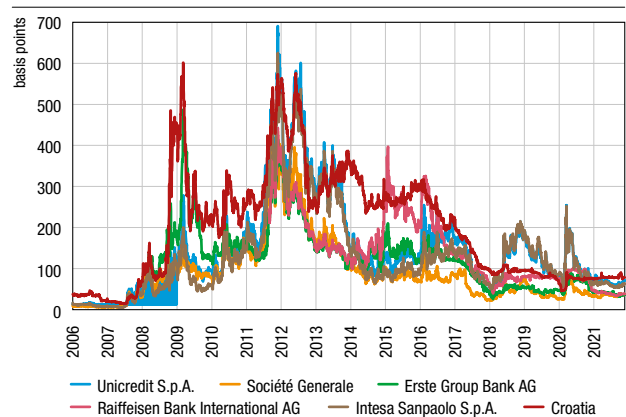
In this context it would be helpful to analyse trends in short-term and long-term interest rates in the euro area in the previous cycles of the ECB's monetary policy tightening. In the period from the beginning of 2006 to mid-2008, when the ECB's benchmark interest rate increased by a total of 2.25 percentage points, the EURIBOR rose by almost 3 percentage points, while yields on German ten-year bonds rose only by 1 percentage point. The tightening at the height of the European debt crisis at mid-2011 was considerably milder (0.5 percentage points) and shorter-lived, but it still completely spilled over to short-term interest rates, decelerating the downward trend in German bond yields.

**Figure 4 Short-term and long-term interest rates in the foreign market**



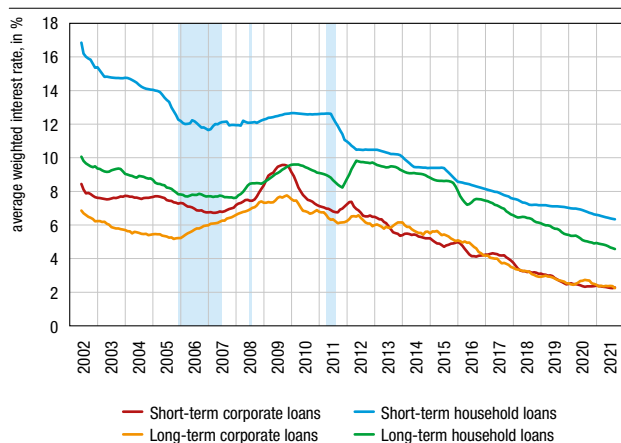
Notes: The blue shaded areas represent the periods of ECB's monetary policy tightening. The grey shaded areas represent market expectations.  
Source: Bloomberg.

**Figure 5 CDS spreads for Croatia and selected parent banks of domestic banks**



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

**Figure 6 Average interest rates on new corporate and household loans in Croatia**



Note: The shaded areas represent the periods of ECB monetary policy tightening.  
Source: CNB.

In contrast with Germany, risk perception increased significantly for some other euro area member states, including Italy, which was negatively reflected in the financing conditions of the parent banks of Croatian banks.

After the stabilisation in the European market, and especially after Croatia's accession to the EU in 2013, domestic sectors' financing costs started to drop sharply due precisely to the decrease of risk perception. The long-term kuna bond yield fell by as much as 5 percentage points in the period from mid-2013, when Croatia became a fully-fledged member state, until the third quarter of 2021. Croatia's credit default swap spread decreased in the same period from over 300 basis points to 86 basis points in November 2021. In this context it should also be mentioned that in November 2021 Fitch upgraded Croatia's credit rating to the highest level in the country's history, 'BBB'

with a positive outlook, which nevertheless failed to be reflected in the reduction of the risk premium due to the growth of global risk aversion caused by the appearance of new coronavirus variants. The risk premium for the parent banks of domestic banks also declined considerably in the last few years (Figure 5). As sovereign and parent bank risk premiums are indirectly incorporated into loan costs for consumers, their decrease contributed to a drop in interest rates on corporate and household loans (Figure 6).

There are several factors that could lessen interest rate risk for domestic borrowers in the forthcoming period after the start of the cycle of interest rate growth in the international market. First, the share of domestic loans contracted at a variable interest rate, although still high, has been on the decrease thanks to the CNB's efforts to ensure that banks provide an adequate product offer and inform customers on the possibilities of hedging against interest rate risk. Furthermore, a large portion of the credit portfolio granted at a variable interest rate is linked to the national reference rate (NRR) to which, partially and with a time lag, changes in financing conditions in the international market are transferred.

In the macroeconomic area, the most important factor that could have a positive impact on borrowing costs in the period to come is the further narrowing of the risk premium, with a precondition being the strengthening of macroeconomic fundamentals. In this respect, the introduction of the euro will reduce the regulatory cost of bank operations and potentially offset the impact of the expected increase in foreign interest rates. The introduction of the euro will eliminate the exchange rate risk, to which Croatia is heavily exposed at the moment, which could also have a favourable effect on the sovereign risk premium.

Finally, it should be noted that the global environment is going through a period of extreme uncertainty, which is rising again owing to the appearance of new coronavirus variants. Under such conditions, market expectations, including those regarding future interest rate trends, are easy to change, so that this might happen in the near future.

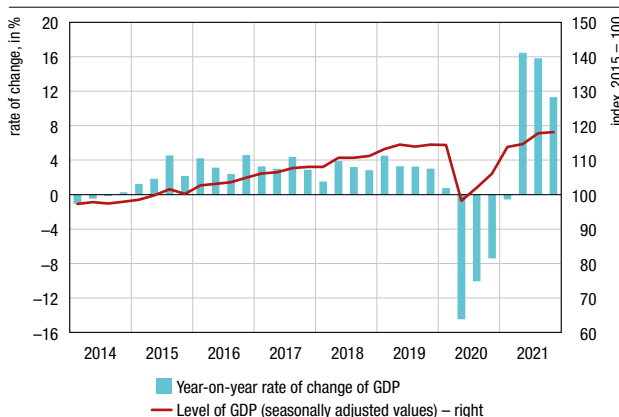
### 3 Aggregate supply and demand

Economic activity picked up in the third quarter with GDP growth accelerating sharply to 2.7% from 0.8% in the previous quarter. All GDP components increased for the quarter except for government consumption and goods exports. High-frequency economic indicators, available mostly for October, point to a relatively modest current economic growth in the fourth quarter.

Real GDP increased by 15.8% in the third quarter of 2021 from the same period in the previous year, exceeding the pre-crisis level. The annual increase was primarily driven by the growth of total exports, above all services exports, thanks to good tourism performance, with a large positive contribution coming from personal consumption. Other GDP components also increased annually, with the exception of government consumption. Net foreign demand made a record-high positive contribution to economic growth, and domestic demand also increased. However, GDP failed to increase at a much higher rate because of the strong negative contribution of a change in inventories.

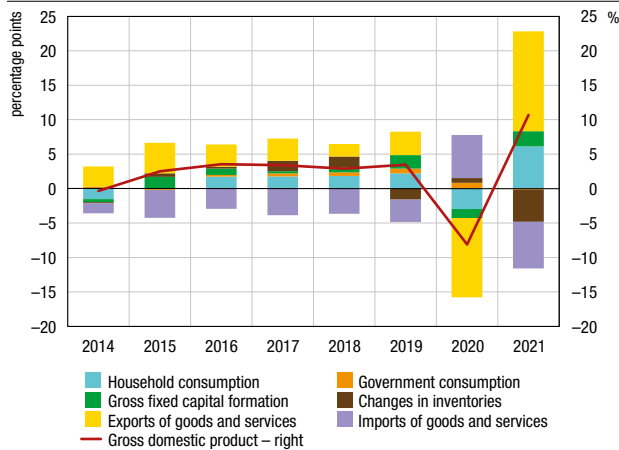
The GDP by production approach also shows strong growth of gross value added, which was up at a quarterly rate of 3.2% in the third quarter of 2021 from 1.2% in the previous quarter. The quarterly increase in GVA had a positive effect on annual

**Figure 3.1 Gross domestic product (GDP) real values**



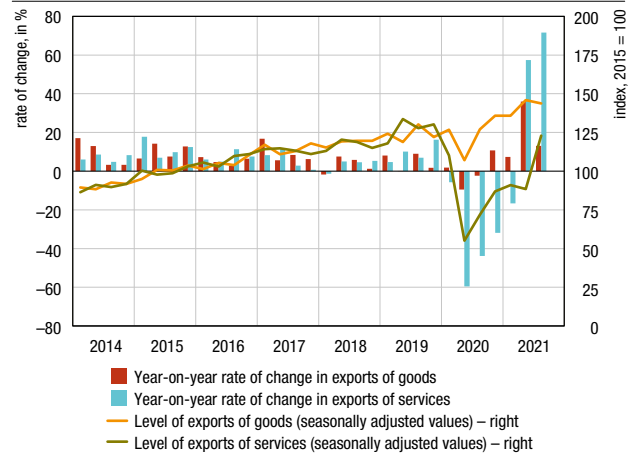
Note: Data for the fourth quarter of 2021 refers to the CNB's monthly indicator of real economic activity, estimated on the basis of data published until 30 November 2021.  
Source: CBS (seasonally adjusted by the CNB).

**Figure 3.2 GDP rate of change contributions by components**



Note: Data for 2021 refer to the third quarter.  
Source: CBS.

**Figure 3.4 Exports of goods and services real values**



Source: CBS (seasonally adjusted by the CNB).

trends, so that GVA grew by 13.5% from the third quarter in 2020. GVA increased less than GDP, which can probably be attributed to a higher growth of revenues from indirect taxes. The largest positive contribution to the annual change in GVA in the third quarter came from activities related to tourism, including wholesale and retail trade, transportation and storage, accommodation and food service activities.

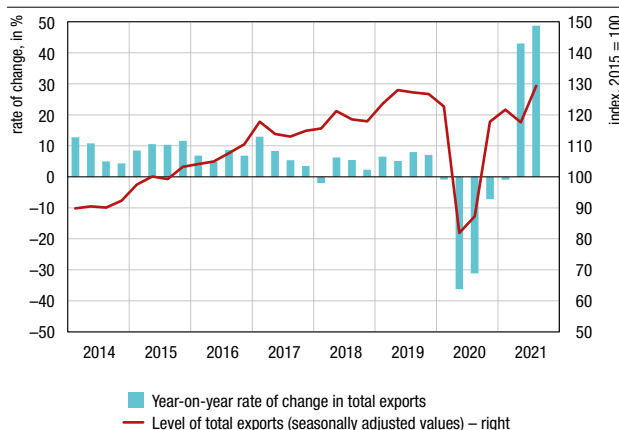
### Aggregate demand

Real exports of goods and services grew by a high 10.0% in the third quarter of 2021 from the previous quarter, when they had fallen by 3.4%. Real exports of services almost reached the level from the third quarter of 2019. The surge in services exports was supported by very favourable trends in tourism and a favourable epidemiological situation during the summer months, which allowed containment measures more lenient than those imposed by competitor countries. Goods exports went down by 1.5% from 7.4% in the previous quarter. Nominal CBS data on foreign trade by main industrial groupings, available for July and August, show that exports of capital goods decreased sharply from the second quarter. Exports of non-durable consumer

goods and energy also decreased, while exports of intermediate goods and durable consumer goods increased. A comparison of results from July to September with those achieved in the same period in 2020 shows that exports of goods grew at an annual rate of 13.1%, weakening at the quarterly level, whereas the annual growth rate of services exports, due to very favourable developments in tourism and the base effect, amounted to a high 71.6%. Total exports thus grew by 48.8% from the third quarter in the previous year, making a record-high contribution to overall economic activity growth (27.6 percentage points).

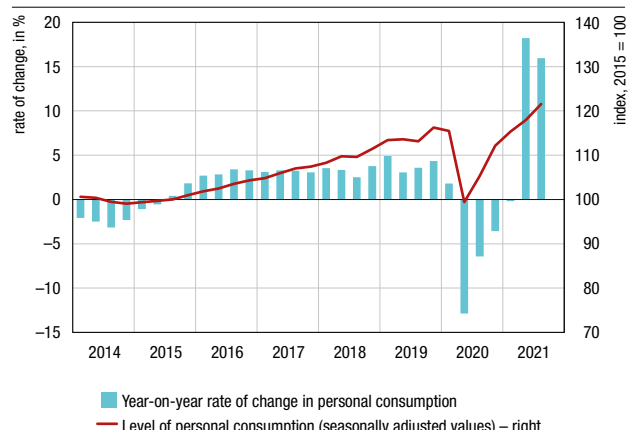
Personal consumption grew at the quarterly level, up at a rate of 3.1% from 2.2% in the second quarter. In addition to a favourable epidemiological situation, the increase was also due to the re-establishment of customary spending and saving patterns, after a sharp fall in spending and the growth of savings at the peak of the pandemic. The annual growth was 16.0% from the same period in 2020, which is an increase of as much as 8.5% from the same period in 2019. Personal consumption growth was also driven by the growth of available funds. Consumer lending increased annually in the third quarter, and workers' remittances, which decreased in the same period of the previous

**Figure 3.3 Exports of goods and services real values**



Source: CBS (seasonally adjusted by the CNB).

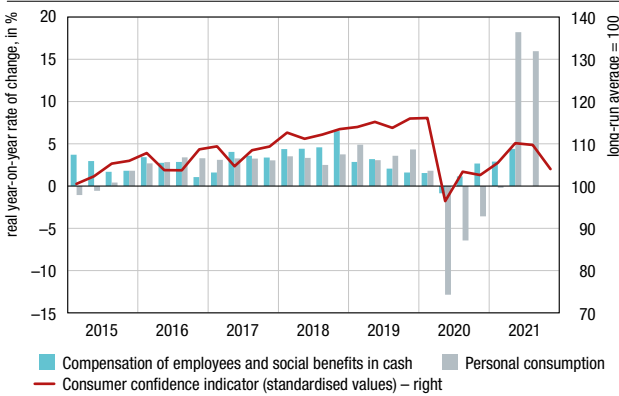
**Figure 3.5 Personal consumption real values**



Source: CBS (seasonally adjusted by the CNB).



**Figure 3.6 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 2021.

Sources: CBS, Ipsos and CNB.

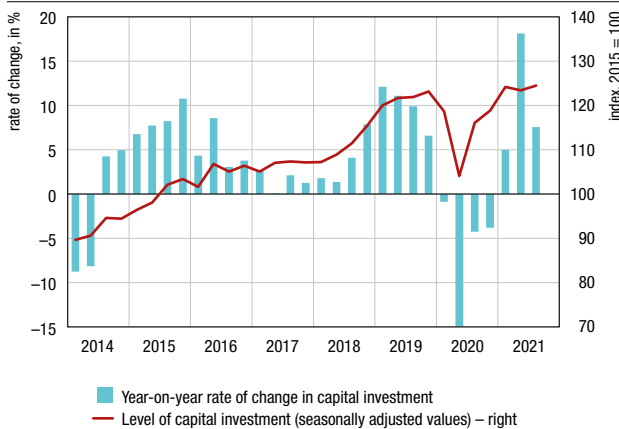
year, also rose. Although household spending grew at a high annual rate, the consumer confidence index worsened in the period from June to September, which can probably be attributed to expectations related to price increases in the following period.

Gross fixed capital formation increased by 0.9% in the third quarter of 2021 compared with the previous three months, when it decreased by 0.6%. Investment activity thus grew by 7.6% from the same period in the previous year. Contributions to capital investment growth came from the continuing increase of construction activity in both private and public sectors, as indicated by the further growth of the volume of construction works on buildings and civil engineering works. Nominal data on the growth of capital goods imports provide a further indication of the investment activity growth in the July to September period.

Government consumption dropped by 11.7% in the third quarter from the previous quarter, when it grew at a high quarterly rate of 16.8%. Such developments led to an annual fall of 4.5%.

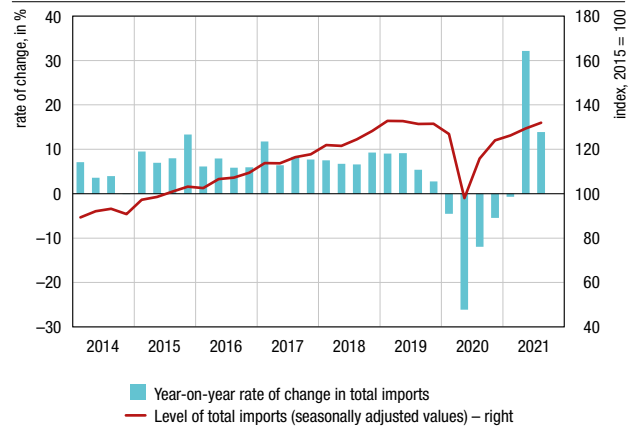
The growth of imports of goods and services decelerated to 2.0% in the third quarter of 2021 from 2.5% in the previous quarter. An increase in personal consumption and high tourist demand supported goods imports, which rose by 1.6% from the

**Figure 3.7 Gross fixed capital formation**  
real values



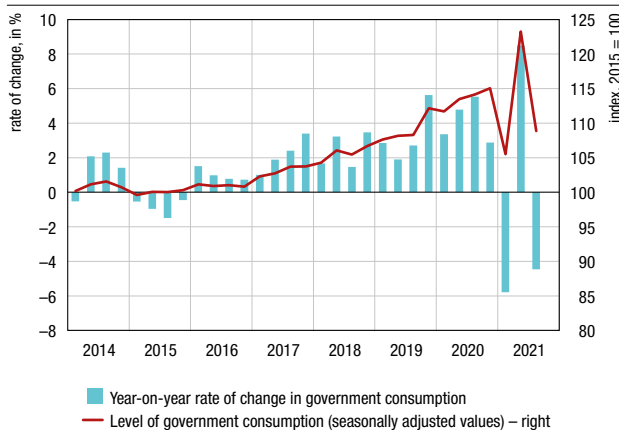
Source: CBS (seasonally adjusted by the CNB).

**Figure 3.9 Imports of goods and services**  
real values



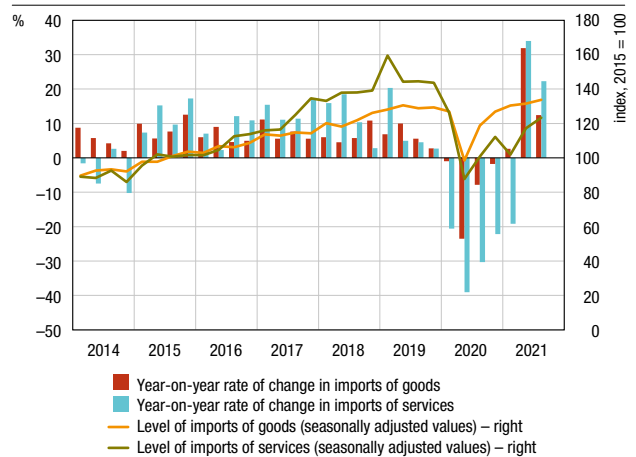
Source: CBS (seasonally adjusted by the CNB).

**Figure 3.8 Government consumption**  
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).

previous quarter and by 12.4% annually. Services continued to grow, both on the quarterly and the annual level, although the annual growth was slower than in the second quarter, when high growth rates were primarily due to the base effect. Total annual imports grew 13.9% in the third quarter of 2021 from the third quarter of 2020. The prices of imported goods and services surged from the previous year, as reflected in the high deflator of total imports. The annual growth of total exports considerably exceeded the growth of goods and services imports, with the result that net foreign demand made a record-high contribution to total economic growth (21.2 percentage points).

### Aggregate supply

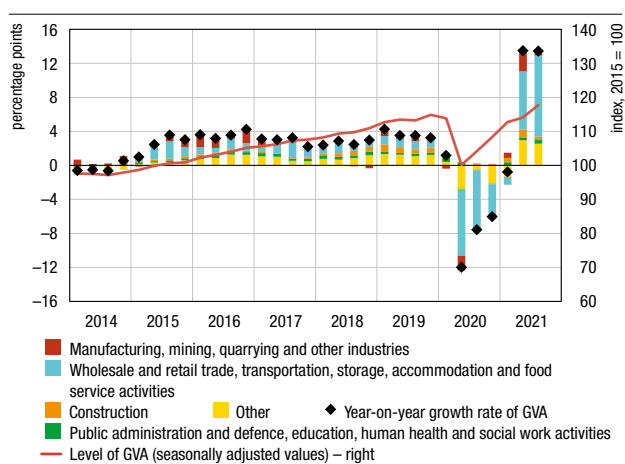
Gross value added increased by 3.2% in the third quarter of this year from the 1.2% recorded in the previous three months. GVA grew the most in wholesale and retail trade, transportation and storage, accommodation and food service activities, which can be attributed to the improvement of the epidemiological situation in Croatia during the summer and good tourism performance. Global supply chain disturbances did not have a major negative effect on current trends. GVA showed quarterly growth in all activities, except in construction (-0.9%), so that the construction growth started at mid-2020 was discontinued. In addition, a slightly lower GVA than in the previous three months was recorded by financial and insurance activities (down by 0.5%).

At the annual level, real GVA was 13.5% higher in the third quarter of this year than in the same period in the previous year. The largest positive contribution came from wholesale and retail trade, transportation and storage, accommodation and food service activities, which saw GVA increase (39.4%). All other GVA components grew annually.

The GDP nowcasting model, based on high-frequency data, mostly available for October, suggests that the growth of economic activity in the fourth from the third quarter could be mild, but remain high on the annual level. Developments in November and December could also be negatively affected by the recent deterioration of the epidemiological situation.

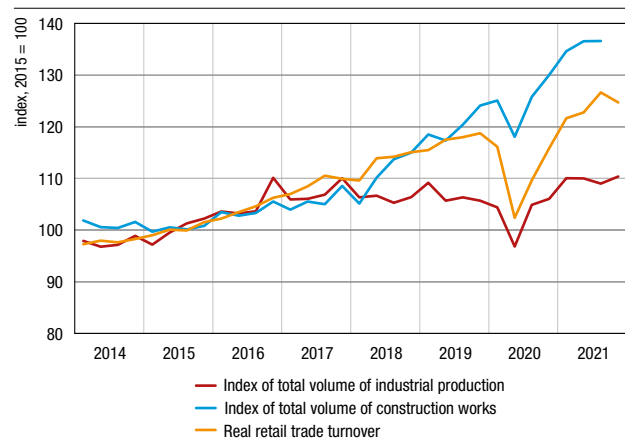
Industrial production exceeded the third quarter average by 1.3% in October, with all main industrial groupings recording growth, except the production of intermediate goods. Real retail trade turnover dropped by 1.5% from the previous three months, which could reflect the deterioration of the epidemiological situation in October.

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



Source: CBS (seasonally adjusted by the CNB).

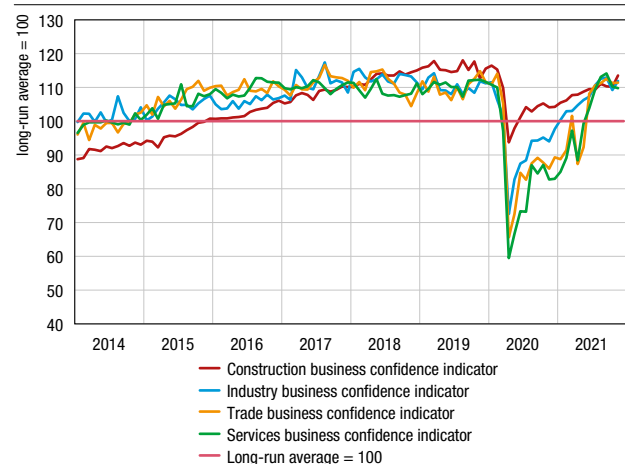
**Figure 3.12 Short-term economic indicators**  
seasonally adjusted values



Notes: Quarterly data are calculated as an average of monthly data. Data on industry and trade in the fourth quarter of 2021 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).

The Consumer Confidence Survey data show that consumer confidence continued to decline in November on a monthly basis. The decline in consumer optimism could be related to the effect of unfavourable expectations about price trends. Specifically, according to Survey data, the share of respondents who assess prices to have grown over the last twelve months has risen markedly since June 2021. The number of respondents who believe that the price growth will accelerate in the following twelve months has also increased, although to a lesser extent. At the quarterly level, consumer expectations in October and November were below the average level of the previous three months. As regards business expectations, business confidence in construction increased considerably, with the result that the construction confidence index also rose on the quarterly level in October and November. Business expectations in trade remained the same as in the previous three months, deteriorating in industry and services. At the monthly level, business expectations in industry and construction improved in November from October, remaining at the previous month's level in trade and services.

## Projected developments

GDP is expected to grow at a rate of 10.8% in 2021, following a contraction of economic activity of 8.1% in the previous year. It is expected that by 2021 economic activity will already have exceeded the 2019 level. GDP is expected to grow at a relatively high rate of 4.1% in 2022, although this rate will be lower than in 2021 due to the disappearance of the base effect.

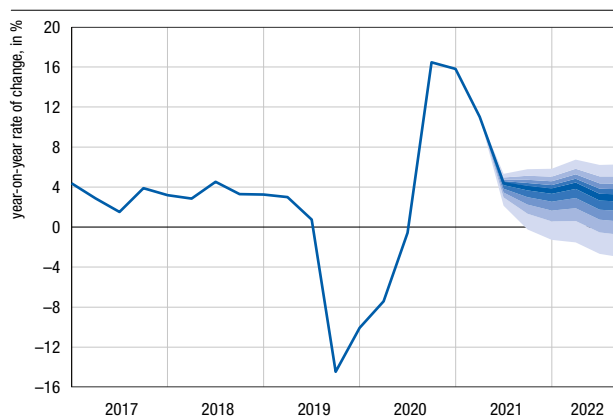
Total exports are projected to increase by 31.1% in 2021, after having decreased by 22.7% in 2020. The growth of services exports is expected to exceed the growth of goods exports as a result of the recovery of tourist demand after a steep pandemic-induced decrease in the previous year.

Household consumption could increase by 9.4% in 2021, after falling by 5.3% in 2020, and make the largest positive contribution to total economic growth of all domestic demand components. The growth of personal consumption reflects very good results in the third quarter of this year and favourable labour market developments as well as the reduction of the income tax burden, coupled with the improvement of consumer optimism. Total investment activity could also grow at a high rate, of 7.9%, having dropped by 6.1% in 2020. Capital investment growth is expected in both public and private sectors. Investment activity could be positively affected by a favourable position in the cycle of withdrawal of EU funds and the expected start of the use of the Next Generation EU fund. Government consumption is also expected to increase in 2021 (1.0%). Given the expected recovery of domestic demand and the strong growth of foreign demand, goods and services imports are expected to increase at an annual rate of 19.0%. As the projection of economic trends suggests that exports of goods and services will grow more than total imports, the contribution of net foreign demand to total economic growth could amount to 3.8 percentage points in 2021.

In 2022, economic recovery could continue and real GDP could grow by 4.1%. The lower growth rate of economic activity in 2022 than in the previous year is due to the base effect and, in turn, the lower anticipated growth rates of personal consumption, investments and total exports, especially services exports. GDP growth is expected to be driven by all of its components in 2022, with the main driver being foreign demand. However, the contribution of net foreign demand to economic growth is expected to be almost neutral until the end of the projection horizon.

Mean estimated and projected values for the end of 2021 and the whole of 2022 are expected to be more exposed to negative risks. The main negative risk concerns the further course

Figure 3.14 Projection of real GDP dynamics



Sources: CBS and CNB.

of the pandemic and its impact on economic developments. The potential introduction of stricter containment measures, a relatively low vaccination rate and the appearance of new coronavirus variants that could, according to recent data, be more resistant to vaccines, could have an unfavourable effect on total economic activity. Because business operations in some activities could again be hindered, uncertainty in the business environment is still present, which could have an adverse impact on the decision-making of business entities related to increasing investments in the forthcoming period. Global supply chain problems could have a strong negative effect on global trends, which could in turn negatively impact foreign demand. Finally, a potential sharper increase in global inflation, caused by supply chain disturbances, could result in the reaction of central banks and worsen financing conditions. In Croatia, changes in inflationary expectations could lead to changes in the structure and volume of personal consumption. In contrast, a positive risk is related to the possibility that an increased number of citizens will get vaccinated, which could bring about an improvement of the epidemiological situation. In addition, a positive risk is associated with the absorption of EU funds, which could be more dynamic than currently expected under rather modest projections.

## 4 Labour market

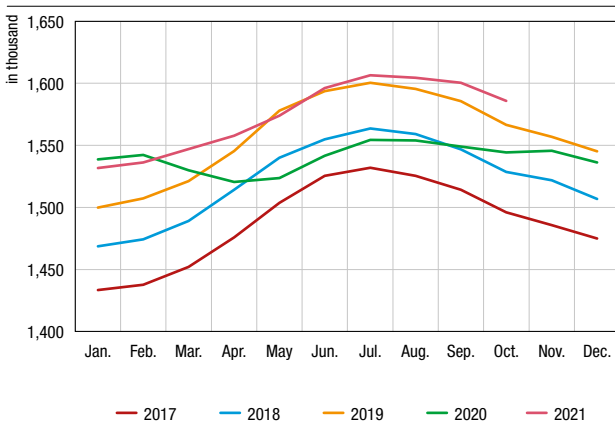
### Employment and unemployment

At the end of the second and the beginning of the third quarter of 2021, employment continued to recover driven by the continued acceleration of economic activity in activities less affected by the crisis (such as information and communication and construction) and by seasonal hiring supported by a more favourable epidemiological situation. Employment began to increase more noticeably in tourism-related service activities in June this year, later than usual, and continued in July, but at a slightly slower pace. Seasonal fluctuations (the decline in employment following the peak) were also less pronounced than usual in the rest of the year (Figure 4.1). At the end of October, the total number of employed persons was 1.2% higher than in the same

month in 2019. The sharpest rise in employment was seen in information and communication and construction activities, while the number of persons employed in accommodation and food service activities grew at a noticeably slower pace.

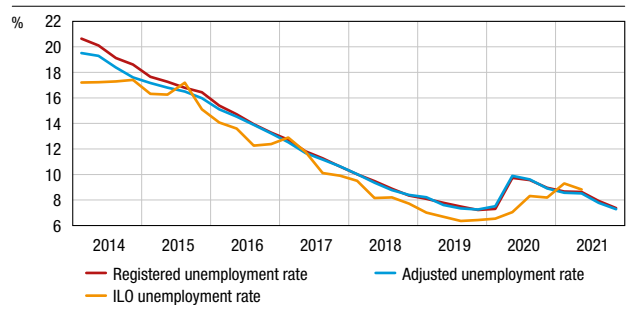
The delayed start of the tourist season was reflected in unemployment trends as well, with contained seasonal fluctuations. After unemployment decreased noticeably in the period up to June 2021, a marked slowdown was observed in July and August. As was the case with employment, the seasonal increase in unemployment also slowed down towards the end of the year, and September saw stronger employment (Figure 4.2). In the first ten months of 2021, the number of unemployed persons stood at levels higher than those recorded before the crisis;

**Figure 4.1 Employment levels**



Source: CPII.

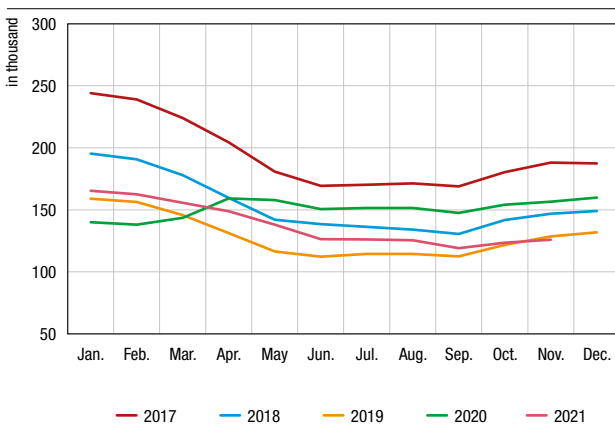
**Figure 4.3a Unemployment rates seasonally adjusted data**



Notes: The ILO unemployment rate data for the first quarter of 2021 and onwards are not comparable to the data previously released due to changes in the methodology of the Labour Force Survey. 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 2021 for the registered and the adjusted unemployment rate refer to October.

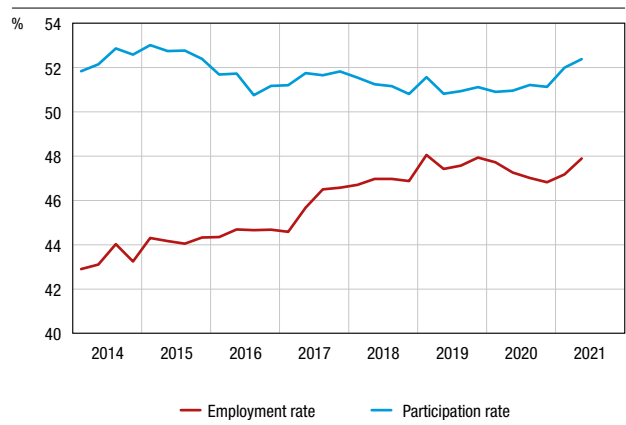
Sources: CBS and CES (calculated and seasonally adjusted by the CNB).

**Figure 4.2 Total unemployment levels**



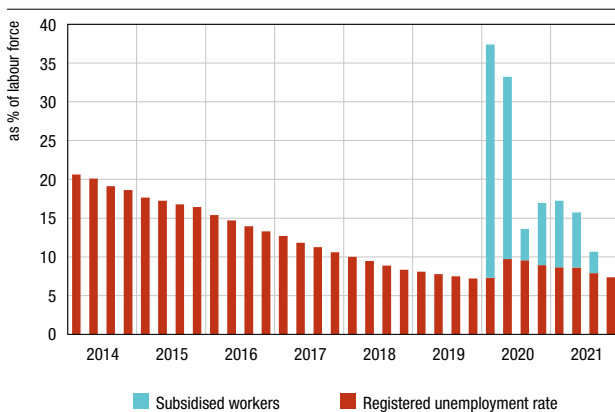
Note: Data for November 2021 refer to the situation as at 29 November.  
Source: CES.

**Figure 4.4 Labour Force Survey seasonally adjusted series**



Note: Due to changes in the methodology of the Labour Force Survey, the data for the first quarter of 2021 and onwards are not comparable to previously released data.  
Source: CBS (seasonally adjusted by the CNB).

**Figure 4.3 Registered (seasonally adjusted) unemployment rate and subsidised workers as % of labour force**



Notes: Data on subsidised workers for the first quarter of 2020 refer to March. The unemployment rate is the adjusted unemployment rate.  
Source: CES (seasonally adjusted by the CNB).

however, preliminary data suggest that in November, the number of unemployed persons could drop to a level below the one recorded in 2019.

The continued payment of job preservation grants supported employment preservation in activities affected by the crisis, with the scope of beneficiaries gradually declining as a result of the more favourable epidemiological situation and stricter criteria for grant allocation. According to latest announcements, the last grants should be paid out in November 2021.

In June 2021 over 100,000 workers were covered by this measure, but in August, their number dropped to 22,000. The average share of workers covered by job preservation measures stood at 2.7% of the labour force in July and August 2021, having gone down from 7.2% in the preceding quarter (Figure 4.3). The share of workers covered by subsidies in the labour force could be even lower in the third quarter (1.9%) according to preliminary data showing that there were only 5,000 workers covered by subsidies in September this year.

The registered unemployment rate decreased in line with the decline in the number of unemployed persons. According to seasonally adjusted data, the share of unemployed persons in the

labour force dropped from 8.8% in June to 7.4% in October 2021 (Figure 4.3a)

According to latest available data, the ILO unemployment rate went down to 8.8% of the labour force in the second quarter of 2021 (from 9.3% in the first quarter, Figure 4.3a). In the same period, the employment rate was 47.9% and the participation rate was 52.4% (Figure 4.4). Due to changes in the methodology of the Labour Force Survey, the data for the first quarter of 2021 and onwards are not comparable to previously released data.

### Wages and unit labour costs

In the third quarter of 2021, wage growth picked up, because although wages in the public sector remained almost unchanged from the preceding quarter, there was a stronger wage growth in the rest of the economy. However, at the beginning of the fourth quarter, the increase in the average nominal gross wage slowed down, primarily due to the decrease in wages in the public sector, but also on account of a slowdown in the increase of wages in the rest of the economy (seasonally adjusted data, Figure 4.5). The average nominal gross wage was 4% higher in

October 2021 than in the same month in 2020, as a result of equal increases in wages in both the public sector and the rest of the economy.

Nominal net wage trends were favourably affected by the reduced tax burden resulting from the income tax system reform implemented in January 2021. Hence, in October 2021, the average nominal net wage was 5.4% higher than in the same month in 2020, while the real net wage grew by 1.4%.

In the first quarter of 2021, nominal unit labour costs continued to fall rapidly, but in the second quarter, their decline decelerated. This reflects a slowdown of the increase in labour productivity (Figure 4.6).

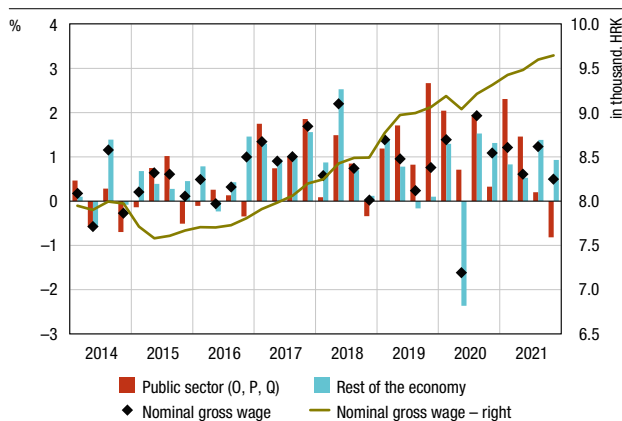
### Projected developments

Following a relatively small decrease in employment in 2020, in 2021 as a whole, an increase in total employment of 2.2% is anticipated, and the average number of employed persons at the level of the entire year is expected to exceed the figures recorded in 2019. The hiring of workers from third countries is expected to provide a noticeable contribution to total employment growth in the current year. A considerable portion of workers coming to Croatia from outside the European Union are employed in construction, and this trend is likely to continue (Figure 4.7). The number of unemployed persons is likely to decline in 2021 and the ILO unemployment rate is expected to drop to 6.8% of the labour force.<sup>1</sup>

It is estimated that the average nominal gross wage could grow by some 4.0% in 2021 owing to higher wages in the public sector (the increase in the wage calculation base for civil servants and government employees of 4% at the beginning of 2021) as well as due to wage increases seen in the rest of the economy. Thanks to the tax disburdening from January 2021, the average nominal net wage is expected to grow at a rate of 5.3%, but its purchasing power could increase more slowly (2.7%) due to the expected rise in consumer prices.

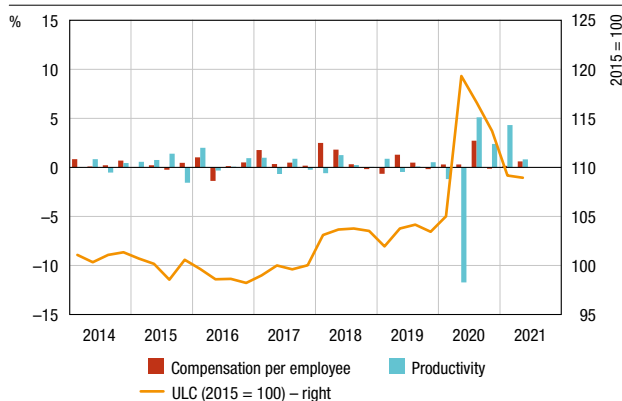
Employment growth is expected to continue in 2022, though at a slower pace than in 2021 (1.5%), while the ILO unemployment rate might fall to 6.2% of the labour force. At the same time, the average nominal gross wage is expected to accelerate

**Figure 4.5 Average nominal gross wage**  
seasonally adjusted data, quarterly rate of change and levels



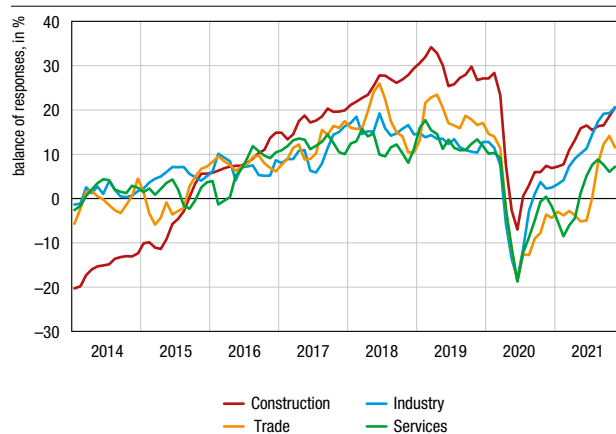
Notes: Data on the average nominal gross wage by activity refer to data from the RAD-1 form, and from January 2016 to data from the JOPPD form. Data for the fourth quarter of 2021 refer to October.  
Source: CBS (calculated and seasonally adjusted by the CNB).

**Figure 4.6 Compensation per employee, productivity and unit labour costs**  
seasonally adjusted data, quarterly rate of change and levels (2015 = 100)



Note: In the calculation of unit labour costs, paid compensation of employees and real GDP were taken from the national accounts, while data on the number of employees (persons employed in legal persons and natural persons who received compensation) and total employment were taken from the CPII.  
Sources: CPII and Eurostat (seasonally adjusted by the CNB).

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



Source: Ipsos (seasonally adjusted by the CNB).

1 The change in the methodology of the Labour Force Survey implemented in the first quarter of 2021 has not been considered in the projection of the ILO unemployment rate.

**Table 4.1 Estimate and projection of labour market indicators for 2021 and 2022**

year-on-year rate of change, in %

	2018	2019	2020	2021	2022
Number of employed persons – CPII	2.3	2.3	-1.2	2.2	1.5
Number of employed persons – national accounts	2.6	3.1	-1.2	2.2	1.5
Participation rate (ILO)	51.2	51.2	51.0	52.0	52.7
Unemployment rate (ILO)	8.4	6.6	7.5	6.8	6.2
Average nominal gross wage	4.9	3.8	2.5	4.0	4.5
ULC	3.6	0.0	9.7	-4.4	2.0
Productivity	0.3	0.4	-7.0	8.3	2.5

Notes: 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 2016 refer to data from the JOPPD form, whereas year-on-year rates of change in unit labour costs and productivity refer to national accounts data. The estimate and projection 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. Average gross nominal wages are recorded on an accrual basis.

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

to 4.5%, primarily thanks to the fairly strong increase in wages in the rest of the economy amid the quite substantial labour force shortages in tourism and reconstruction works in earthquake-hit areas. Furthermore, the projection assumes that the complete discontinuation of payments of job preservation grants in 2022 will not have an unfavourable effect on the developments in employment and wages, in line with labour market developments after the gradual reduction of the scope of beneficiaries began in July 2021.

## 5 Inflation

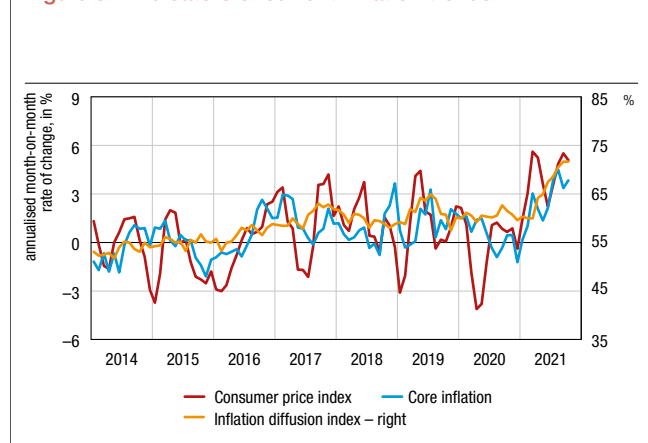
The annual consumer price inflation (CPI) picked up considerably in Croatia in the first ten months of 2021, driven largely by the rise in energy prices, most notably refined petroleum products. The increase in domestic retail prices of refined petroleum products reflects the hike in crude oil prices on the global market, resulting from rebounding demand spurred by the reopening of economies throughout the world and the improvement of the global economic outlook, as well as from the agreement of OPEC+ countries on supply cuts. Due to the increased prices of refined petroleum products, prices of goods in the production of which refined petroleum products are used as important intermediate goods also moved up. The strengthening of inflationary pressures was also driven by growing prices of other raw materials on the global market, increasing freight charges in sea transport and difficulties in global supply chains causing shortages

of certain semi-finished and finished products. Furthermore, adverse weather conditions in Croatia caused lower yields of certain crops. Against such a backdrop, the inflation diffusion index has been growing continually since April 2021, i.e. the share of the number of products whose prices increased in a particular month in the total number of products rose, and the short-term indicators of overall and core inflation increased substantially as well (Figure 5.1).

After increasing to 2.0% in June 2021 (from -0.7% in December 2020), the annual consumer price inflation continued to accelerate, reaching 3.8% in October (Table 5.1). Energy provided the most significant contribution to overall inflation, standing at 1.9 percentage points in October (of which 1.6 percentage points referred to refined petroleum products), or one half of overall inflation (for more information, see Box 2 Developments in the consumer prices of energy in Croatia and other EU countries with an emphasis on the developments in the prices of natural gas). The pick-up in inflation seen in the first six months of the current year mostly derived from the increase in energy prices. Prices of energy (particularly refined petroleum products) led to inflation acceleration in the following four months as well, coupled with an even greater contribution of food products. The annual rate of change in the prices of processed food products went up from 1.5% in June to 4.2% in October, mostly as a result of a spillover of imported cost pressures, i.e. of the increase in the prices of food raw materials and energy products on the global market to the consumer prices of bread, milk, cheese and eggs and oils and fats. At the same time, the annual rate of change in the prices of unprocessed food products rose from -0.9% to 3.2% under the influence of adverse weather conditions that caused poorer yields of certain crops (fruit and vegetables) and as a result of the increase in the prices of meat on the global market.

In addition to the prices of food and energy, the annual rate of change in the prices of industrial products also picked up, from 0.0% in June to 1.0% in October, but remained low, so that for now, no significant spillover of the increase in the prices

**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.

**Table 5.1 Price indicators**

year-on-year rate of change

	12/2020	3/2021	6/2021	9/2021	10/2021
<b>Consumer price index and its components</b>					
Total index	-0.7	1.2	2.0	3.3	3.8
Energy	-5.7	3.9	8.1	9.8	11.5
Unprocessed food	-3.5	-3.3	-0.9	3.0	3.2
Processed food	1.3	2.2	1.5	3.5	4.2
Non-food industrial goods without energy	-0.7	-0.7	0.0	0.3	1.0
Services	1.8	1.7	1.6	1.9	1.6
<b>Other price indicators</b>					
Core inflation	-0.1	0.5	0.8	1.9	2.5
Index of industrial producer prices on the domestic market	-1.2	3.2	7.8	13.7	19.6
Index of industrial producer prices on the domestic market (excl. energy)	0.1	0.7	1.4	3.0	3.5
Harmonised index of consumer prices	-0.3	1.6	2.2	3.5	3.9
Harmonised index of consumer prices at constant tax rates	-0.1	1.1	2.0	3.3	3.7

Note: Processed food includes alcoholic beverages and tobacco.

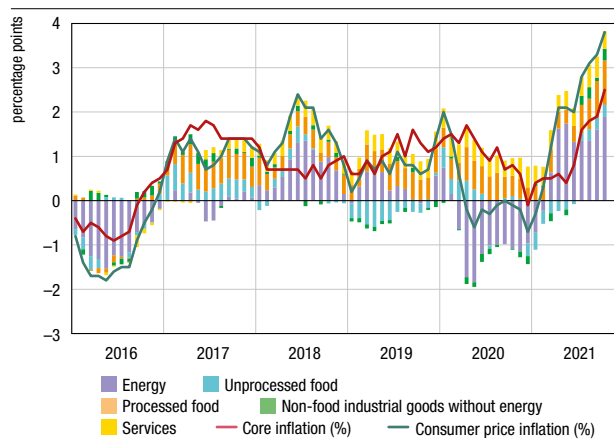
Source: CBS.

of industrial raw materials and particular intermediate goods (for example, semiconductors) on the global market to domestic consumer prices has been observed, except in the segment of durable consumer goods (furniture, motor vehicles, IT equipment, products for personal care, etc.), where the spillover was somewhat stronger. Moreover, indicators of price developments in earlier phases of production and distribution point to a moderate increase in the annual growth of producer prices of intermediate goods on the domestic market (from 3.4% in June to 6.6% in October), while the pick-up in the annual increase in producer prices of durable consumer goods was less marked (from 2.0% in June to 2.8% in October).

The annual growth rate in the prices of services increased in the summer months as a result of an increase in the prices of catering and accommodation services; however, due to the recent slowdown in the growth of these prices, in October it was the same as in June (1.6%).

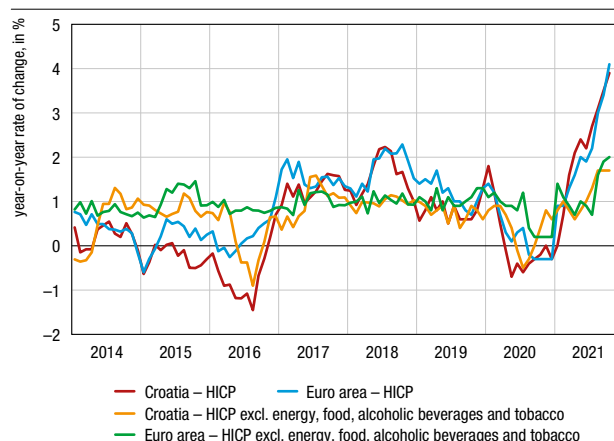
Amid recovering demand and increased imported cost pressures, the annual rate of core inflation (excluding agricultural product prices, energy prices and administered prices) accelerated gradually from 0.8% in June to 2.5% in October (Figure 5.2). This was, by and large, brought about by the increase in the contribution of food products (excluding agricultural products), used motor vehicles<sup>2</sup>, furniture, non-durable household goods and products for personal care.

The annual rate of inflation measured by the harmonised index of consumer prices (HICP) picked up in the euro area from 1.9% in June to 4.1% in October (Figure 5.3), primarily as a result of growing energy prices. In addition to refined petroleum products, whose contribution continued to increase on account of rising crude oil prices on the global market, the trend was also due to other energy components (natural gas and electricity). The increase in the prices of energy products and other raw materials on the global market gradually spilled over to consumer prices of food and industrial products in the euro area. The rise in the prices was also affected by rebounding demand arising from the reopening of economies throughout Europe and by the positive base effect attributable to the VAT decrease in Germany in mid-2020. Despite the increase, the contribution of prices of

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

Note: Core inflation excludes 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.

2 During the pandemic, the use of public transportation decreased and the use of individual transportation increased, leading to an increase in the prices of motor vehicles, motor cycles and bicycles.

food and industrial products to the acceleration of overall inflation in the euro area was significantly smaller than the contribution of energy.

Responding to the recovery in demand, the annual rate of growth in the prices of services (particularly catering services and travel-related services) increased in the past four months as well. This, coupled with the aforementioned increase in industrial product prices, drove core inflation (excluding the prices of energy, food, alcoholic beverages and tobacco) in the euro area upwards from 0.9% in June to 2.0% in October, so that both core inflation and overall inflation climbed to the highest levels since 2008.

The pick-up in inflation seen in Croatia over the past four months has been less pronounced than in the euro area. Croatia's overall inflation measured by the HICP increased from 2.2% in June to 3.9% in October, while core inflation (measured by the HICP excluding energy, food, alcoholic beverages and tobacco) increased from 1.0% in June to 1.7% in October. The muted acceleration of core inflation in Croatia stems from the slower increase in the prices of services, particularly tourism-related services, than in the euro area. At the same time, the increase in the contribution of prices of food products, more substantial than in the euro area, was offset by a slower growth in energy prices. Thus, in October 2021, overall inflation and core inflation were, respectively, 0.2 and 0.3 percentage points lower in Croatia than in the euro area.

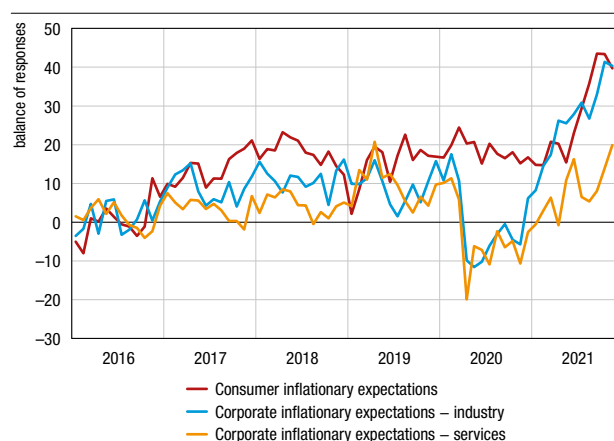
### Inflationary expectations

Short-term inflationary expectations of consumers and corporate managers in Croatia rose significantly in the period from June to October (Figure 5.4). Growing inflationary expectations of consumers probably reflect the increase in the prices of refined petroleum products and food products, which, combined, account for some 40% of the consumer basket. Furthermore, the analysis examining the main determinants of inflation perception in Croatia shows that inflation is mainly linked to the developments in the volatile components of inflation (energy and food; for more information, see Box 3 Inflation perception in Croatia). In addition, the increase in inflationary expectations of consumers may also have been affected by the greater publicity given to the increase in inflation in the media. Still, in October, inflationary expectations of consumers stabilised at September levels, after which they declined, probably as a result of petrol and diesel fuel price caps.<sup>3</sup>

Furthermore, in the second half of 2021, particularly in September and October, the sharp upward trend in the inflationary expectations of managers of industrial enterprises continued, which may probably be linked to growing production costs arising from, among other things, the lack of materials and equipment and labour shortage, still seen by a significant number of industrial enterprises as factors limiting their operations (Figure 5.5). In November, inflationary expectations of enterprises in industry decreased slightly. At the same time, the recovery of the services sector, slower than that of industry, limits, to a certain extent, a more substantial rise in corporate inflationary expectations in the services sector.

In the second half of the year, economic analysts gradually revised their expectations regarding consumer price inflation in Croatia for 2021 from 1.6% in June to 2.3% in November (Figure 5.6). This was brought about by the fact that the preceding months saw inflation rates higher than those anticipated, but

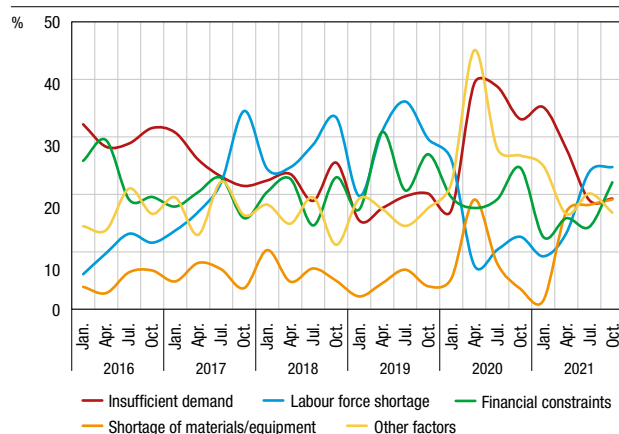
Figure 5.4 Short-term consumer and corporate inflationary expectations



Note: The consumer expectations refer to a twelve-month period ahead and the corporate expectations refer to a three-month period ahead.

Source: Ipsos.

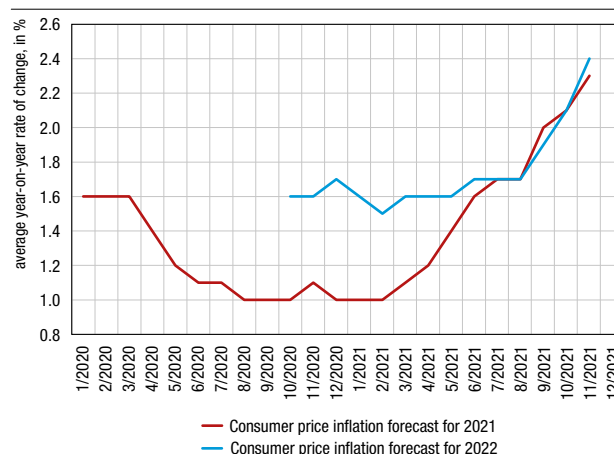
Figure 5.5 Factors limiting industrial production



Note: The percentage on the y-axis refers to the share of enterprises in industry specifying the indicated factors as limiting for their production process.

Source: Ipsos.

Figure 5.6 Short-term inflationary expectations by economic analysts



Source: Eastern Europe Consensus Forecasts.

<sup>3</sup> The regulation on the maximum price of petrol and diesel fuels in Croatia entered into force on 16 October 2021 with an initial duration of 30 days, and in mid-November, it was extended for at least 30 days more.



also by increasing energy prices and continued supply-demand imbalances arising from bottlenecks in global supply chains. Economic analysts' inflationary expectations for 2022 are somewhat more stable, mainly due to estimates that the factors affecting the recent increase in inflation might be temporary. Still, on account of some indications that the aforementioned factors could persist for longer than expected, expectations of economic analysts regarding consumer price inflation in Croatia in 2022 increased from 1.7% in the period from June to August to 2.4% in November.

### Projected developments

In the rest of 2021, inflation is expected to pick up slightly, but the trend could end in early 2022. It is estimated that the average annual consumer price inflation might accelerate to 2.4% (from 0.1% in 2020) at the level of 2021 as a whole, mostly due to the considerable rise in the annual rate of change in the prices of energy (particularly refined petroleum products) from -5.3% in 2020 to 7.2% in 2021.

In addition to energy prices, prices of other goods (raw materials excluding energy, certain intermediate and finished products) increased globally as well, and this, coupled with the increase in the prices of certain services (most notably those related to travel and transportation), resulted in a substantial pick-up in the annual growth of the imports deflator in 2021 (Figure 5.7). In such circumstances, the average annual rate of core inflation growth (measured by the CPI, excluding food and energy) could accelerate to 1.5% in 2021 (from 1.0% in 2020). The increase in inflationary pressures in 2021 is also affected by rebounding demand against the backdrop of reopening economies and the economically more efficient coexistence with the coronavirus. The acceleration of core inflation is also partially a result of a (relatively mild) spillover of the increase in the prices of certain raw materials on the global market to domestic consumer prices. On the other hand, factors pushing inflationary pressures downwards were less pronounced in 2021, and were mainly related to the reduction of unit labour costs brought about by an increase in labour productivity stronger than wage growth.

In 2021, the average annual increase in food prices could pick up considerably, from -1.5% in the first quarter to 5.0% in the last. This is a result of the spillover of the increase in the prices of food raw materials on the global market, lower yields of

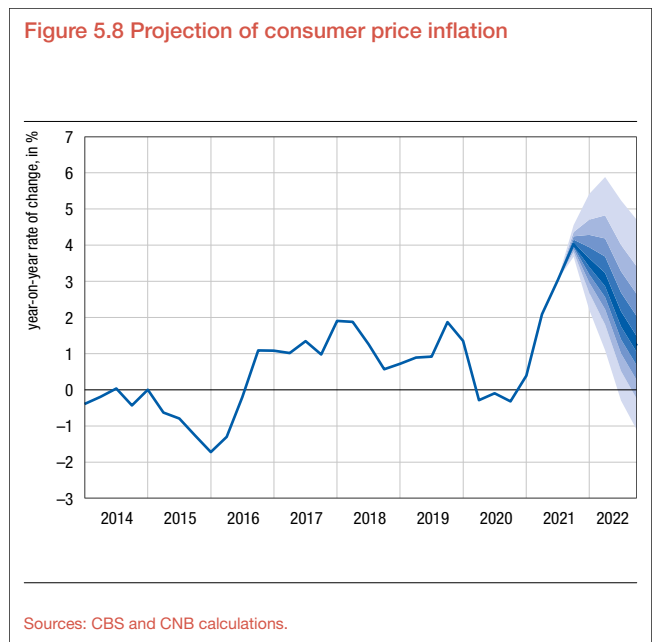
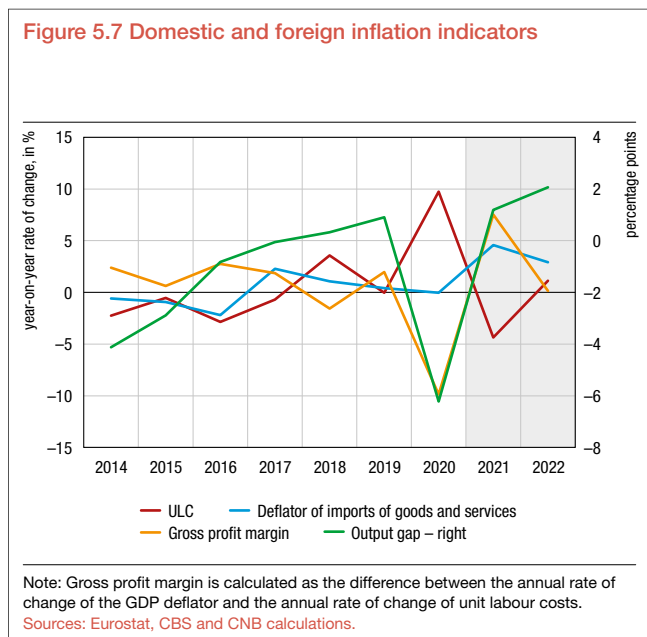
individual crops resulting from the adverse weather conditions that hit Croatia and the expected positive base effect at the end of 2021 (due to the strong decrease in retail prices in late 2020).

Average annual consumer price inflation is forecast to remain at a level of 2.4% in 2022. In the first half of the year, inflation is expected to decrease from a level of above 3%, and in the second half of the year, it may drop to below 2% (Figure 5.8). In the structure of contributions of individual components, at the level of 2022 as a whole, an increase of the contribution of food and core inflation (measured by the CPI, excluding food and energy) is expected, while the contribution of energy to overall inflation could decrease relative to the year before.

The anticipated average annual rate of growth in food prices could pick up from 1.2% in 2021 to 4.0% in 2022, and the increase could largely be attributed to a considerable spillover of inflation of food prices into 2022. Towards the end of the year, a gradual slowdown in the annual rate of growth in food prices is expected as a result of an anticipated decline in the prices of refined petroleum products (which account for a significant share in the costs of production of food products), stabilisation of prices of food raw materials on the global market and the negative base effect related to the significant rise in the prices of food in the second half of 2021.

Furthermore, an increase in the average annual rate of growth in the CPI excluding food and energy to 1.9% is expected (from 1.5% in 2021), which could mostly be a result of the continued recovery of demand coupled with a gradual spillover of the global increase in the prices of raw materials recorded in 2021 to domestic prices. The aforementioned increase is not likely to be significant amid the expected gradual normalisation of supply chains and the re-establishment of balance in the supply and demand of certain semi-finished and finished products on a global scale. The increase in inflationary pressures related to the price developments in Croatia's major trading partners should be mild, considering that the core consumer price inflation in the euro area is expected to hover around 1.6%<sup>4</sup> in 2022, up by only 0.2 percentage points from 2021. Domestic cost pressures arising from the increase in unit labour costs should be relatively low in 2022, as they are expected to grow at a rate below 1.5%.

On the other hand, the average annual rate of growth in



4 Measured by the HICP excluding the prices of food, energy, alcoholic beverages and tobacco (Consensus Forecasts, November 2021).

energy prices could drop to 1.9% in 2022 (from 7.2% in 2021).<sup>5</sup> The expected gradual slowdown of the annual growth in energy prices reflects the current developments in the prices of Brent crude oil on the futures market, suggesting that prices could move slightly downwards in 2022.

Risks related to the inflation projection for 2022 are considerable, with prevailing risks that could push inflation higher than anticipated. A higher inflation could be brought about by a possible increase of certain administered prices (most notably natural gas and electricity)<sup>6</sup> in consequence of the substantial increase in the prices of natural gas on the global market. Furthermore, the positive domestic output gap could increase in 2022, with pressures to increase prices from the demand side stronger than currently anticipated. The labour shortage indicated by corporate surveys could lead to a wage growth more substantial than projected and thus strengthen the cost pressures on inflation. Moreover, external cost inflationary pressures could also increase relative to the projected baseline scenario, particularly if energy prices continue to grow, although current prices on

the futures markets point to their decline. In addition, external inflationary pressures could be more pronounced should inflation in Croatia's major trading partners be higher than expected. Furthermore, the increase in the prices of semi-finished and finished products due to the temporary mismatch between supply and demand globally and supply chain disruptions could be more substantial and/or persist for longer than projected.

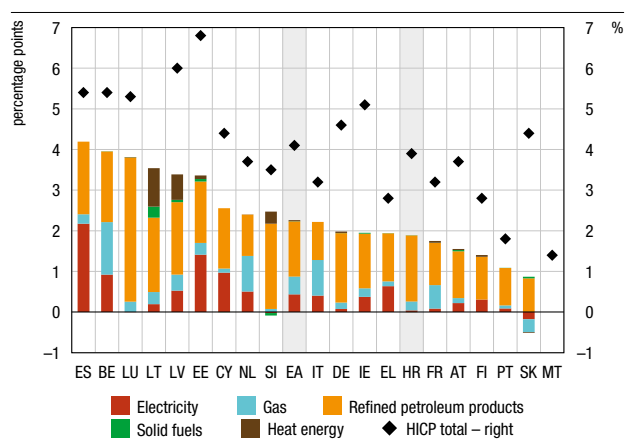
On the other hand, risks that could drive inflation lower than anticipated are less pronounced and concern the possible weaker intensity of economic recovery in Croatia and abroad. This could arise from a possible worsening of the coronavirus pandemic in Croatia and abroad and the resulting tightening of epidemiological measures. In such an event, inflationary pressures would be subdued by the weaker recovery of demand and lower prices of oil and raw materials on the global market. A faster return of supply chains to normal is a factor that could lead to a lower increase in the prices of intermediate and final products than expected.

### Box 2 Developments in the consumer prices of energy in Croatia and other EU countries with an emphasis on developments in the prices of natural gas

The sharp rise in crude oil prices in the current year was accompanied by an increase in the prices of natural gas, which hit record highs on European markets in the period from September to November this year. Analysis results indicate that the annual increase in the retail prices of gas in Croatia significantly lags behind the increase of equivalent prices in the euro area in 2021. The uneven increase in the consumer prices of gas is attributable to differences in the level of gas market liberalisation, tax rates and purchase prices of gas agreed upon in the long term. Amid increasing prices of gas and CO<sub>2</sub> emission rights, the annual increase in electricity prices for households picked up considerably in the euro area in 2021, while in Croatia, these prices held steady owing to the fact that they are administered. A possible rise in the administered prices of gas and electricity in Croatia in 2022 poses a significant risk for the current projection of consumer price inflation, which could, if the aforementioned prices move up, increase noticeably.

Although energy prices are highly volatile and not directly affected by monetary policy, they influence inflation perception and inflationary expectations, which is why they are closely monitored. The increase in energy prices has strongly contributed to the recent increase in consumer price inflation and, even more so, to the increase in producer prices. Specifically, in October 2021, overall inflation (measured by the HICP) reached 3.9% in Croatia (Figure 1), with energy providing the most significant contribution to the trend with 1.8 percentage points (of which 1.6 percentage points refer to refined petroleum products). Inflation was somewhat higher in the euro area in October (4.1%), and the contribution of energy to overall inflation also exceeded that in Croatia (standing at 2.3 percentage points and thus accounting for over one half of the inflation rate). The higher contribution of energy prices to overall inflation is a result of a higher contribution of gas and electricity prices, while the contribution of refined petroleum product prices was slightly lower than in Croatia (1.4 percentage points). It is worth noting that refined petroleum products have a slightly higher weight in

Figure 1 Annual consumer price inflation rate (measured by the HICP) and contributions of energy components to overall inflation in October 2021



Note: The refined petroleum products component includes liquid fuels (fuel oil) and fuels and lubricants for personal transport equipment.  
Sources: Eurostat and CNB calculations.

the goods basket than in the euro area (4.747% versus 4.205%, Figure 2).

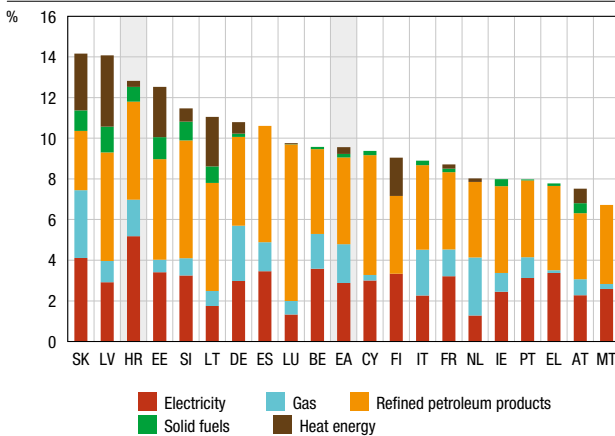
The refined petroleum product market is liberalised in Croatia and changes in retail prices of refined petroleum products greatly depend on the price developments on the Mediterranean market and US dollar exchange rate trends, as in most EU countries.<sup>7</sup> Prices of refined petroleum products are usually modified on a weekly basis, and most adjustments of domestic refined petroleum prices to global market developments occur fast, with a time lag of one week to a fortnight. Refined petroleum product prices (which include liquid fuels and fuels and lubricants for personal transport equipment) grew by 33.5% in annual terms in Croatia in October 2021, almost the same as in the euro area, where the growth was 31.9% (Figure 3).

<sup>5</sup> Assuming that after March 2022 retail prices of natural gas and electricity do not grow.

<sup>6</sup> In addition, prices of utility services could grow in Zagreb in 2022.

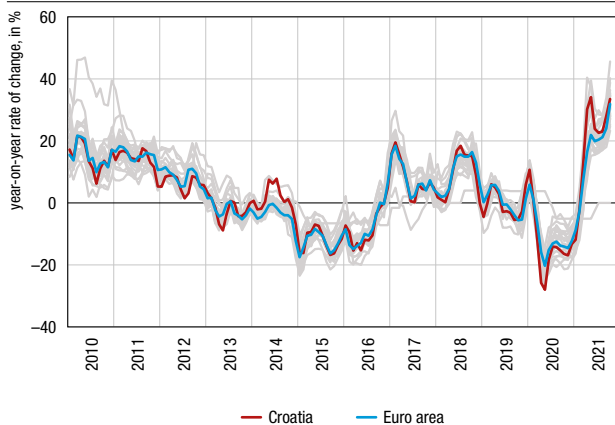
<sup>7</sup> Changes in domestic refined petroleum products are also affected by margins deriving from processing, transportation and distribution to end consumers as well as by taxes and excises.

Figure 2 Shares of individual components of energy prices



Source: Eurostat.

Figure 3 Developments in consumer refined petroleum product prices year-on-year rate of change



Note: Data for individual EU member states are shown in grey.  
Source: Eurostat.

Figure 4 Developments in the prices of natural gas in Europe



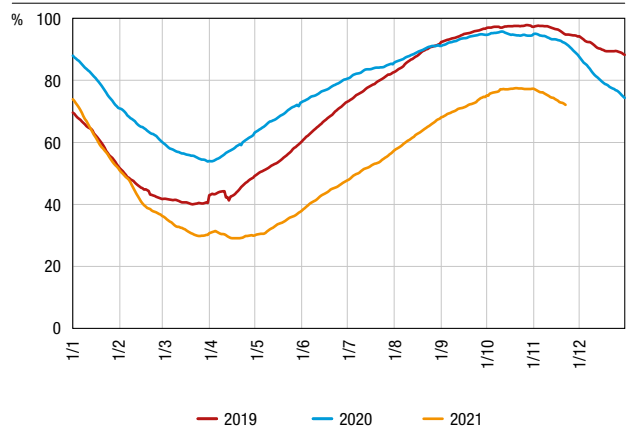
Note: Prices are indicated in euro per megawatt-hour (EUR/MWh) and are formed in the relevant title transfer facility.  
Source: ICE Exchanges.

By implementing a new regulation on 16 October 2021, the Government of the Republic of Croatia temporarily capped fuel prices and set the maximum retail price of petrol and diesel fuels in Croatia at HRK 11.10 and HRK 11.00 respectively for the following month.<sup>8</sup> In mid-November, the measure was extended for at least 30 days, with the exception of so-called “premium” fuels. In late November, crude oil prices began to decline on the global market, and the Government abolished the regulation on 6 December 2021.

The surge in the prices of crude oil and refined petroleum products that began in early 2021 was coupled with an increase in the prices of natural gas, which was particularly strong over the past several months: in the period from September to November this year, prices in Europe reached all-time highs (Figure 4). The increase was primarily a result of a stronger demand for energy products, which gained pace as the global economy recovered from the consequences of the pandemic; in addition, it was influenced by certain specific factors in Europe. On the demand side, a prolonged period of colder weather seen in Europe in the first half of 2021 led to increased demand and the depletion of natural gas storage accumulated in earlier periods.

This resulted in the emptying of storage facilities across the continent and could not be offset by the increase in storage levels in the summer months (when the demand for natural gas is significantly lower). To illustrate, EU natural gas storages were around 70% full in September, which was below the average level of about 90% seen in the equivalent period over the past ten years (Figure 5). Slower accumulation of storage was mostly caused by factors on the supply side, i.e. by slower Russian export of gas, which may be attributed to the increased need of Russia to refill its own storage capacities, but also, possibly, to a political decision by Russia, aimed at accelerating the activation of the Nord Stream 2 gas pipeline.<sup>9</sup> The supply side was also hit by lower supplies of gas from Norway and Algeria, causing EU gas storages to shrink. In addition, investments in the research and development of gas fields have been reduced due to the pandemic. Furthermore, the demand of China for natural gas rose sharply, directing Russian supply towards China rather than Europe.

Figure 5 Share of natural gas storage capacity fullness in Europe



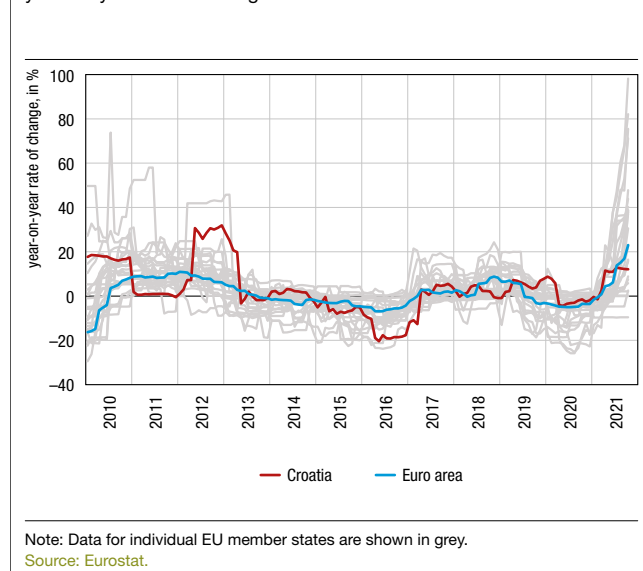
Source: Gas Infrastructure Europe (GIE).

<sup>8</sup> [https://narodne-novine.nn.hr/clanci/sluzbeni/2021\\_10\\_112\\_1949.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2021_10_112_1949.html)  
<sup>9</sup> Financial Times, *Why Europe fears a gas crunch even before winter demand begins*, available at: <https://www.ft.com/content/7c51ca15-aa4f-4a32-bb90-ebc1341ed374>

Seeing that weather conditions (i.e. the intensity of the upcoming winter) are one of the key factors for the future developments in gas prices on the European market, in the event of a mild winter, the natural gas market could return to normal over the course of 2022; but should colder weather persist over a longer period, the upward pressure on prices could continue. Furthermore, future developments in the prices of gas will significantly depend on the activation of Nord Stream 2, i.e. on the amounts of gas supplied by Russia to Europe. The European Commission expects wholesale prices of natural gas to remain high during the winter months and to decline in the spring of 2022.<sup>10</sup> However, even then the prices of gas might be higher than the average recorded over the past years.

From observation of the consumer prices of gas, it can be seen that their annual increase over the past months has been slower in Croatia than in the euro area (Figure 6). In October 2021, the annual increase in natural gas prices was significantly lower than that in the euro area, while the increase in the prices of liquefied hydrocarbons was somewhat more pronounced in Croatia.<sup>11, 12</sup>

**Figure 6 Developments in the consumer prices of gas year-on-year rate of change**



Retail prices of gas increased by 12.1% annually in October 2021 in Croatia, while in the euro area, they grew by 23.0% in the same month. Broken down by individual euro area member states, the intensity of the annual increase in gas prices varied considerably: in some countries, the rise was very sharp, e. g. in France (43.9%), Estonia (47.8%), Belgium (75.5%) and Greece (82.1%), while in some countries, the increase was relatively low, and even negative, e. g. in Germany (5.8%), Portugal (7.5%), Slovenia (8.9%) and Slovakia (-9.6%). The share of gas prices in the basket of products used to calculate the HICP in the euro area is relatively small, standing at 1.913%, while in Croatia, it is slightly lower (1.804%, Figure 2).<sup>13</sup>

10 European Commission, *Questions and Answers: Commission Communication on Energy Prices*, Brussels, 13 October, available at: [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_21\\_5202](https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_5202)

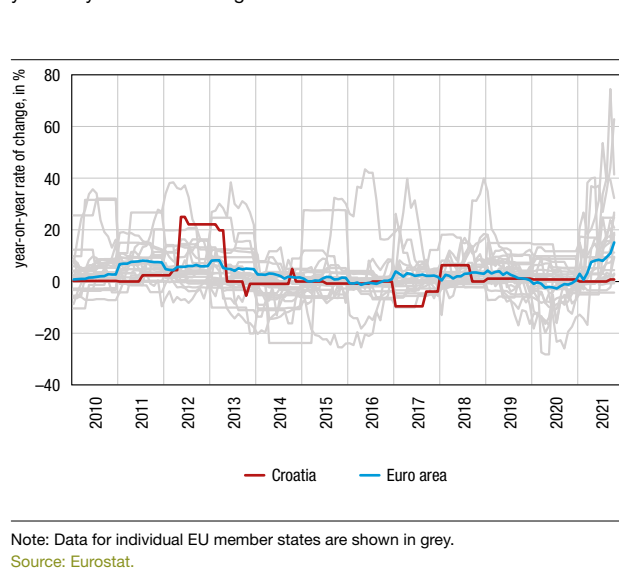
11 The annual increase in the prices of the natural gas component stood at 25.1% in the euro area in October 2021, while the prices of the liquefied hydrocarbons component (butane, propane, etc.) increased by 21.8% in annual terms.

12 The annual increase in the prices of the natural gas component stood at 8.6% in Croatia in October 2021, while the prices of the liquefied hydrocarbons component grew significantly faster in annual terms (28.2%). The respective prices of the aforementioned two components are formed in different ways in Croatia.

The uneven annual increase in the consumer prices of gas across countries is a result of several important factors. Among other things, individual countries have different tax rates applicable to energy products<sup>14</sup>, and the level of gas market liberalisation also varies. Where the market is more liberal, the degree to which price increases in the global market spill over to domestic prices is higher than in countries where the prices are administered. Furthermore, individual countries independently conclude long-term gas supply agreements. In addition to the increase in gas prices, the rise in the prices of CO<sub>2</sub> emission rights, which have doubled since the beginning of 2021, is an additional expense for producers consuming large amounts of gas.<sup>15</sup> The aforementioned developments may indirectly affect consumer price increases, depending on the extent to which producers and traders decide to pass the increased costs on to consumers.

The relatively low increase in retail prices of gas in Croatia is a result of the method by which these prices are determined. Of the households connected to the gas infrastructure in Croatia, some 82% use public gas supply service, while 18% use market gas supply services. The Croatian Energy Regulatory Agency (HERA) is in charge of determining the prices of natural gas for public supply, with prices being set for the period from 1 April of the current year to 31 March of the following year. Administered prices of natural gas are thus modified once a year, in April. If a household opts for market gas supply services, the prices of natural gas are freely formed and market-based. The price of natural gas for households may be broken down into three components: the cost of purchase, the cost of distribution and the supply margin. The Government of the Republic of Croatia announced that the administered price of natural gas for households would not change by April 2022, but after that, the price of natural gas could grow (although the amount by which it might increase has not been specified as yet). As regards businesses purchasing natural gas from local suppliers, their price is not regulated by the government, or the HERA; rather, the price is freely formed by the seller.

**Figure 7 Developments in consumer prices of electricity year-on-year rate of change**



13 Observed by components, natural gas and liquefied hydrocarbons account for 1.478% and 0.326% respectively.

14 For example, in countries where the prices of energy products are less burdened by indirect taxes (excises), the spillover of a wholesale price increase to the end price for consumers is more pronounced.

15 <https://www.vecernji.hr/biznis/divljaju-cijene-emisija-co2-prljava-industrija-trazi-pomoc-1528273>

Since EU member states greatly rely on gas when producing electricity, hikes in gas prices tend to spill over to electricity prices. Figure 7 shows the significant pick-up in the annual growth in the prices of electricity for households in the euro area in 2021 (from 0.4% in December 2020 to 15.1% in October 2021), while the equivalent prices have held steady in Croatia as they are, by and large, administered. However, it remains to be seen how long electricity prices may linger at current levels in Croatia considering the pressures coming from increasing gas prices. About one half of the electricity production comes from renewable sources in Croatia (mainly hydropower), which could, to a certain extent, mitigate the potential increase in electricity prices. Also, the Croatian national energy company Hrvatska elektroprivreda (HEP) announced that the prices of electricity for households would not change over the following months, but that prices for businesses would be more susceptible to changes in market conditions. Hence, businesses whose contracts are expiring soon could pay higher prices for electricity in the years to come.<sup>16</sup>

Therefore, in the upcoming period, prices of electricity will depend on the extent to which the HEP will pass increasing prices of electricity on the wholesale market on to its users. The exposure of Croatia's main electricity suppliers (HEP Elektra d.o.o. and HEP Opskrba d.o.o.) to the external market is not great, as only some 25% of electricity is purchased there. Furthermore, since a significant portion of electricity in Croatia is produced in hydroelectric power plants, trends in electricity prices for end consumers in Croatia could depend more on hydrological conditions than on the increase in the prices of gas on the global market. Croatia has the highest weight for electricity in the basket of goods used for the calculation of the HICP among EU countries (Figure 2). The share of electricity in the basket for HICP calculation is 5.176% in Croatia, whereas in the euro area, the share is

**Table 1 Baseline scenario and alternative scenario of projected consumer price inflation for 2022**

Average annual consumer price inflation rate	2022
Projection baseline scenario, December 2021	2.4
Projection alternative scenario, December 2021: with a hypothetical increase in electricity and gas prices of 10%	3.0

Source: CNB calculations.

considerably smaller (2.875%). The fact that electricity prices are highly significant in the goods basket of households in Croatia points to potential inflationary pressures that might arise from this component.

The analysis above has shown that the annual increase in the prices of natural gas, and particularly in the prices of electricity, lags behind the increase in equivalent euro area prices for households in 2021. Furthermore, the Government of the Republic of Croatia announced that the aforementioned prices would not increase by March 2022, but that in the period after that, an increase was possible, which poses a significant risk for the CNB's current projection of consumer price inflation. In order to quantify the risks mentioned above, we made a simulation of the direct effect of a hypothetical increase in consumer prices of gas and electricity in April 2022 on the projected average annual rate of overall inflation in 2022 (measured by the CPI, Table 1). The simulation has shown that, in case of a hypothetical increase of 10% in the prices of both energy products (assuming that all other factors remain the same and taking into consideration only the direct effects of such a price increase), the projected average annual consumer price inflation in 2022 could be 0.6 percentage points higher than the current CNB projection, i.e. it could hover around 3.0%.

### Box 3 Inflation perception in Croatia

*In 2021, following a period of several years during which prices increased slower than the long-term average, consumer price inflation picked up again and thus became the focus of attention of the media and the public. In general, inflation in Croatia is currently perceived as markedly high and the increase in inflation perceived by consumers is stronger than that indicated by the official price statistics released by the Croatian Bureau of Statistics. Drawing on Consumer Confidence Survey data, in this box we will first analyse the dynamics of perceived inflation in Croatia, and then attempt to find the causes of the recent discrepancy between the perceived and the actual rates of consumer price inflation. Analysis results show that inflation perception is mostly linked to the developments in the prices of energy products and food, which have recently recorded the most substantial growth, while the changes in other components of inflation (prices of services and industrial products) go almost unnoticed by consumers.*

Inflation perception is highly important for monetary policy makers as it is tightly linked to the formation of expectations of future inflation, which are, in turn, an important determinant of actual future inflation trends. To quantify the perceived inflation in Croatia, we analysed the answers from the Consumer Confidence Survey, which, on a sample of 1,000 participants, provides useful monthly information on the subjective assessment of price change over the past 12 months, i.e. the perceived inflation.<sup>17</sup> Figure 1, comparing the average perceived consumer

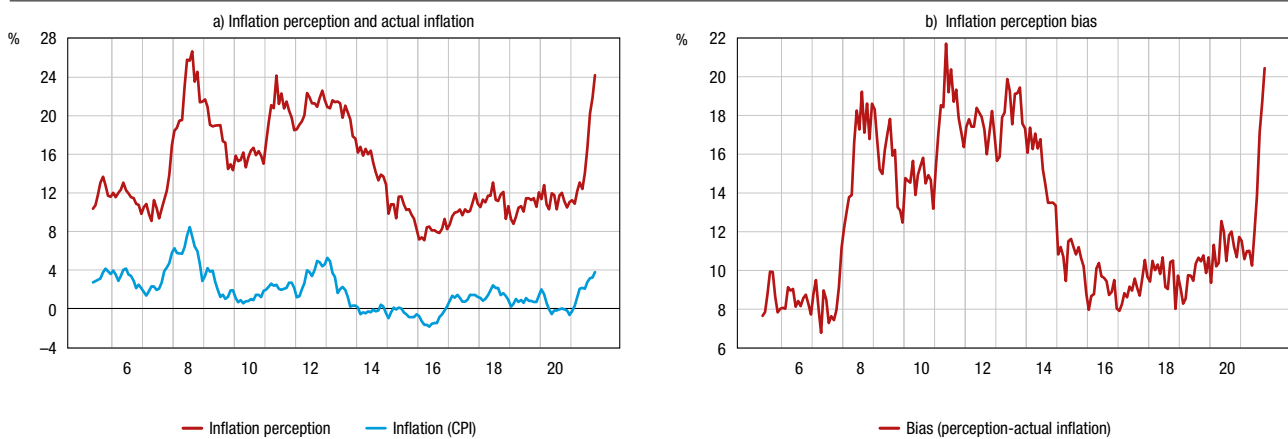
price inflation with the actual consumer price inflation, suggests that the respondents, on average, correctly perceive the direction in which inflation is headed (upwards or downwards), but that there is a significant bias in the perception of inflation, i.e. it is continuously perceived as significantly higher than the actual inflation rate.<sup>18</sup> Over the past several months, perceived inflation has thus increased sharply, currently exceeding 24%, which is significantly higher than the actual consumer price inflation rate of some 3.8% measured in October. In addition, average perceived inflation has been growing uncommonly rapidly relative to the actual inflation and is hovering around levels that were recorded in periods when actual inflation stood at around 7% to 8% annually, that is, at a level considerably higher than now.

There are numerous possible causes of the perceived inflation bias noticed in the analysis. Firstly, the relative importance placed by consumers on the prices of individual goods and services (subjective weights) when forming answers to the survey question concerning inflation perception does not necessarily correspond to the one used by the CBS when calculating the official price index and which is obtained from the structure of

17 The Consumer Confidence Survey is carried out, on behalf of the CNB, by the Ipsos agency. In the aforementioned survey, we focused on analysing the distribution of answers to question 5.1, in which respondents are asked to quantify (in percentage points) the change in price levels over the past 12 months, i.e. we measured the perception of the current rate of annual inflation.

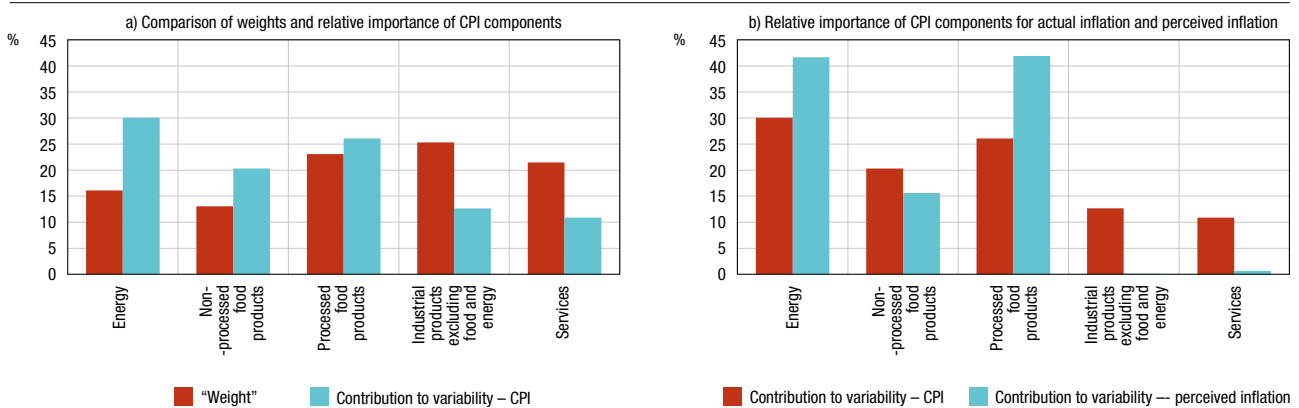
18 Inflation perception shown in Figure 1a demonstrates the weighted average of answers, with extreme values excluded from analysis (inflation perception above 90%).

Figure 1



Sources: CBS, Ipsos and CNB calculations.

Figure 2



Notes: The regression model was estimated using the least-squares method under non-negativity constraint. The contribution to variability is the relative importance of individual CPI components in explaining inflation and perceived inflation, calculated as the average contribution to R<sup>2</sup> statistics. The weight in the left figure is the average share of five CPI sub-components, i.e. it shows the share of each component in the average basket. For details on the calculation of relative importance, see Lindeman, R. H., P. F. Merenda and R. Z. Gold (1980): *Introduction to Bivariate and Multivariate Analysis*, Scott, Foresman, Glenview, IL.

Sources: CBS, Ipsos and CNB calculations.

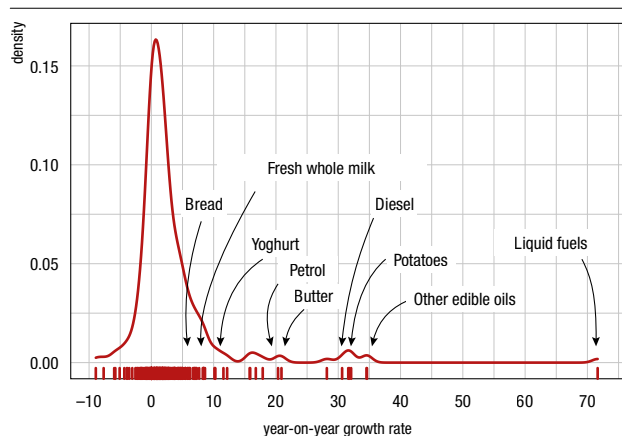
household consumption (objective weights). Furthermore, in addition to the trends in the prices of individual goods and services included in the consumer price index (CPI), when forming their opinion on the change in price levels, consumers may also consider the trends in the prices of real estate, securities and other assets not included in CPI structure.

To pinpoint what generates the perception of inflation, i.e. its subjective determinants, we analysed the relation of the perceived and the actual inflation to the five main sub-aggregates of actual inflation: energy, non-processed food products, processed food products, industrial products excluding food and energy and services. Using two simple econometric specifications, we calculated the weights of individual components (regression coefficients) and the relative importance of each of the five sub-aggregates for the overall variability of the actual and the perceived inflation (the contribution of each variable to R<sup>2</sup> statistics). It is necessary to note that the estimated regression coefficients related to individual sub-aggregates of inflation do not necessarily reflect their importance for overall inflation, but rather serve as weights used to include them in the calculation of overall inflation. For instance, energy has a relatively small

weight in inflation (around 15%); however, due to its considerable volatility, its importance for overall inflation trends is twice as high and accounts for some 30% of overall inflation variability (Figure 2a). It is therefore safe to assume that energy will have a very significant role in the formation of perceived consumer price inflation. As regards the determinants of inflation perception, it is evident that inflation perception is indeed mostly linked to the developments in the more volatile inflation components, namely, the prices of energy products and food, while changes in the less volatile inflation components, such as prices of services and industrial products, on average go almost unnoticed by consumers (Figure 2b). Still, it is necessary to emphasise that a simple model such as the one at hand, which takes only five relatively roughly partitioned sub-aggregates of consumer price inflation into consideration to explain inflation perception, can only account for around two thirds of inflation perception trends, suggesting that such a level of disaggregation is, to a certain extent, too rough and that causes of increased inflation perception are to be found at individual product level.

In this context, the prevailing opinion is that inflation perception is currently high because the increase has been the greatest

**Figure 3 Breakdown of inflation component growth rates (HICP) in October 2021**



Sources: Eurostat and CNB calculations.

in the prices of products and services most frequently used and paid “straight out of one’s pocket”. The changes in such goods and services are regularly noticed by consumers irrespective of their commonly low share in the consumer basket, particularly when such changes are substantial. To better illustrate this, Figure 3 shows the breakdown of rates of changes in the prices of all 252 products according to the ECOICOP classification used by the CBS when constructing the official consumer price inflation index. Another important characteristic of the recent rise in consumer prices is the unusually strong growth in the prices of some essential food products such as sunflower oil (indicated in the figure as Other edible oils), milk and dairy, bread, potatoes and car fuels (petrol, diesel). As shown above (Figure 2b), all of the aforementioned products may be classified into categories that affect consumers’ inflation perception the most.

## 6 Current and capital account

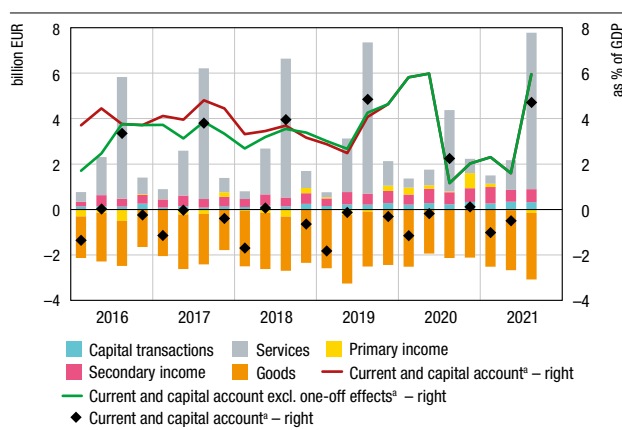
The surplus in the current and capital account more than doubled in the third quarter of 2021 from the same period of the year before, and almost fully approached the record-breaking 2019 level. This is mostly the result of the growth in net services exports owing to a strong recovery in tourism revenues. The growth in the surplus was also due to net inflows from personal transfers and those from transactions with the EU budget. By contrast, the foreign trade deficit continued to widen. Though to a lesser extent, the growth in the current and capital account surplus was alleviated by growth in the profitability of banks and enterprises in foreign ownership. The cumulative values in the last four quarters show that the current and capital account surplus stood at 6.0% of GDP in the period up to end-September 2021, having risen from 2.0% of GDP in 2020 (Figure 6.1).

### Foreign trade and competitiveness

Following the strong growth in total goods exports (24.3%) and imports (20.5%) in the first half of 2021, in the third quarter, goods exports continued to rise at a similar annual growth rate, while the growth of goods imports accelerated noticeably. Thus, according to the balance of payments data<sup>19</sup>, in the third quarter of 2021, goods exports rose by 24.4% on an annual level while total goods imports rose by 29.4%. A faster growth in goods imports than exports and a considerably larger import base resulted in a very strong increase in the foreign trade deficit (36.8%). High growth rates of goods exports and imports can only partly be attributed to the positive effect of the base period and largely to a recovery in domestic and foreign demand, partial resumption of supply chains, faster recovery in manufacturing than in the services sector and a noticeable growth in energy and other raw materials prices in the global market. The impact of these factors is particularly visible when recent performance in trade in goods is compared with the pre-crisis period. Thus, in the third quarter of 2021, total goods exports rose by 13.7%, imports by 16.8% and the deficit by 21.2% from the same period of 2019. If cumulative values in the past year are observed, the foreign trade deficit stood at 18.3% of GDP in the period up to end-September 2021, an increase of 1.0 percentage point from the entire 2020.

Detailed CBS data show that, in addition to being strong, the growth in total goods exports in the third quarter of 2021 was broadly based in terms of production categories (Figure 6.2), with a particularly noticeable growth in the exports of all categories of energy products, particularly electricity to Slovenia, oil and refined petroleum products to Bosnia and Herzegovina and

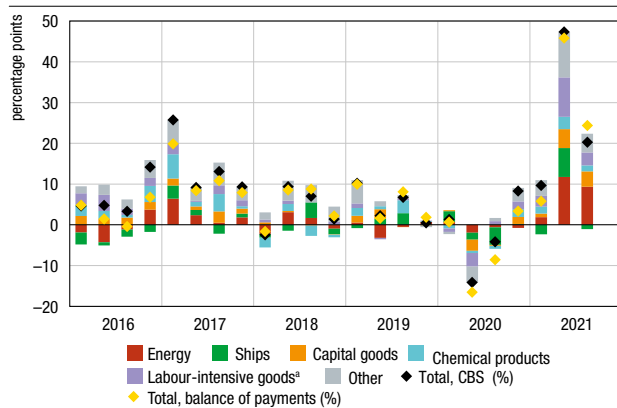
**Figure 6.1 Current and capital account balance and its structure**



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

<sup>19</sup> According to CBS data, in the third quarter of 2021 total goods exports rose by 20.3%, total goods imports by 27.1% and the deficit by 40.6% from the same period of the year before. For more information on the differences in the scope of the trade in goods according to the balance of payments and CBS data, see Box 3 Foreign trade developments according to the balance of payments data, Macroeconomic Developments and Outlook No. 2, July 2017.

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



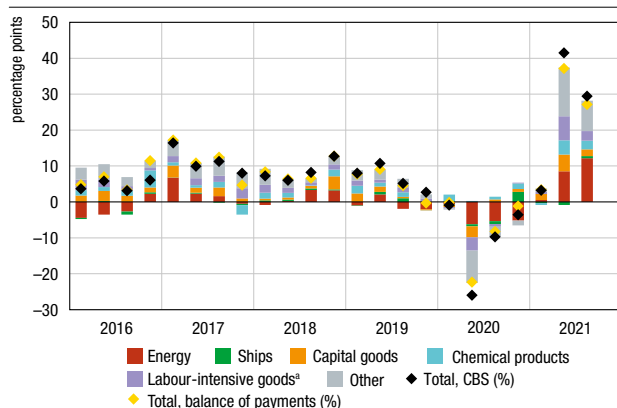
<sup>a</sup> Labour-intensive goods (according to the SITC) include: textile, wearing apparel, footwear, leather, paper, cork and wood, furniture, manufactures of metals and non-metallic mineral manufactures, prefabricated buildings and manufactured articles n.e.c.

Sources: CBS and CNB.

natural and manufactured gas to Hungary. The exports of capital goods also rose noticeably (particularly exports of electrical machinery, apparatus and appliances to Germany and Austria) and so did the exports of metal industry products (to Italy, Germany and Slovenia). By contrast, the exports of road vehicles (to Germany and Slovenia) and other transport equipment (mostly ships to Canada) shrank.

In the same way as exports, the growth of goods imports was also broadly based (Figure 6.3), strongly fuelled by the growth in imports of all categories of energy products (oil and refined petroleum products from Russia, natural and manufactured gas from the US and Qatar and electricity from Hungary), metal industry products from Italy and Slovenia and other chemical products (excluding medical and pharmaceutical products) from Bulgaria and Germany. The imports of road vehicles (from Germany, Hungary and France), some sorts of capital goods (mostly electrical machinery, apparatus and appliances from China) and food products (particularly fruits and vegetables from the Netherlands, Italy and Slovenia) also rose. However, the imports of medical and pharmaceutical products declined (from Belgium).

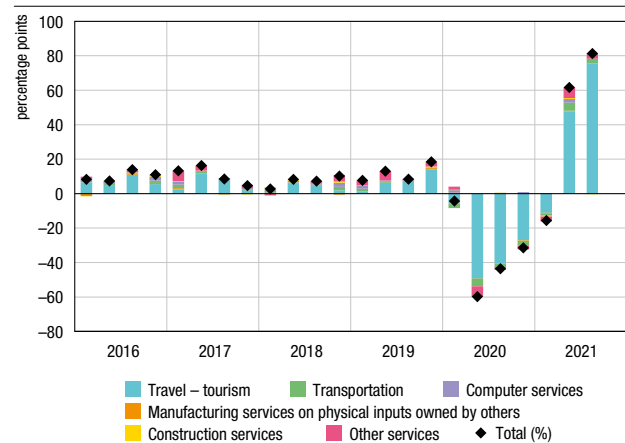
**Figure 6.3 Imports of goods**  
year-on-year rate of change and contributions



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

Sources: CBS and CNB.

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

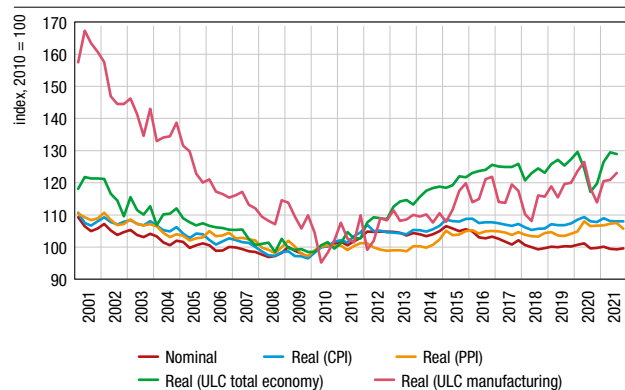


Source: CNB.

In contrast to foreign trade in goods, the net exports of services rose sharply owing to a pronounced recovery in the tourism consumption of foreign tourists, following a sharp fall in the same period of the previous year (Figure 6.4). Revenues from tourism doubled in the third quarter of 2021 from the same period of the year before, even slightly exceeding (2.2%) the results in the record-breaking 2019. The cumulative values recorded over the past year suggest that the surplus in the international trade in services rose noticeably from 10.5% of GDP in 2020 to 16.6% of GDP in the period up to end-September 2021. For more information on recent performance in tourism, see Box 4 What is behind the surprising recovery of Croatian tourism?

The nominal effective exchange rate of the kuna and the real effective exchange rate deflated by consumer prices were stable throughout 2021, while the real effective exchange rate deflated by producer prices appreciated slightly. The real effective exchange rates deflated by unit labour costs in the total economy and manufacturing depreciated sharply in the first half of the year, thus returning to their pre-pandemic level (Figure 6.5).

**Figure 6.5 Nominal and real effective exchange rates of the kuna**



Notes: A fall in the index indicates an effective appreciation of the kuna. Data for the fourth quarter of 2021 relating to the nominal exchange rate refer to October and November and those relating to the real exchange rate deflated by consumer and producer prices refer to October.

Source: CNB.

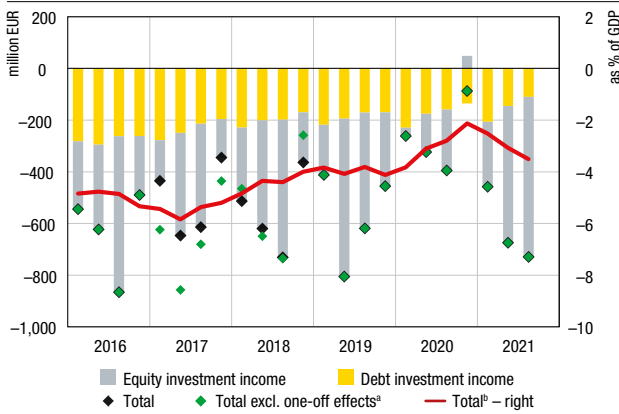


### Income and transactions with the EU

The balance in the primary income account deteriorated noticeably in the third quarter of 2021 from the same period of the year before as a result of a further growth in the deficit on equity investment (Figure 6.6), reflecting the rising profitability of banks and enterprises in foreign ownership. This supported a further trend of recovery in foreign-owned banks' and enterprises' profitability, recorded from the beginning of the year. The total profit generated by foreign-owned banks and enterprises in the first nine months of 2021 exceeded that recorded in 2019.

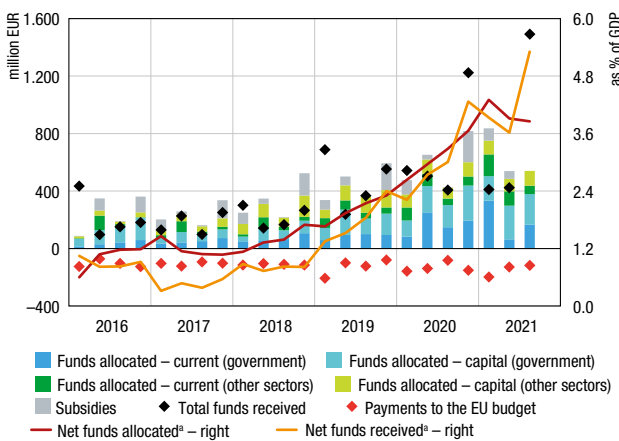
In the third quarter of 2021, net income arising from transactions with the EU budget rose from the same period of the year before owing to a larger uptake of EU funds, which exceeded the increase in payments to the EU budget, with the result that the positive balance of net transactions with the EU budget, reported as the sum of the last four quarters, increased from 3.7% of GDP at the end of 2020 to 3.9% of GDP at the end of September 2021 (Figure 6.7). As regards the structure of the increase in

Figure 6.6 Investment income



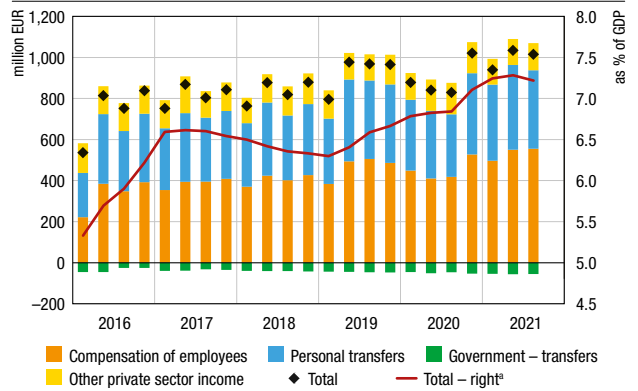
<sup>a</sup> One-off effects include the conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017 and 2018.  
<sup>b</sup> Sum of the last four quarters, excluding one-off effects.  
 Source: CNB.

Figure 6.7 Transactions with the EU budget



<sup>a</sup> Sum of the last four 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 6.8 Other income, excluding investment income and transactions with the EU



<sup>a</sup> Sum of the last four quarters.  
 Note: Compensation of employees is recorded in the primary income account, while other series (personal transfers, other private sector income and government transfers) are recorded in the secondary income account.  
 Source: CNB.

the use of EU funds in the third quarter of 2021, capital funds exceeded current funds, with more funds being allocated to the government than to other domestic sectors.

The net inflow of other income, which excludes income from equity and debt investment and transactions with the EU budget, also increased in the third quarter of 2021 from the same period of 2020, owing to a growth in net revenues from compensation of persons temporarily employed abroad and personal transfers (Figure 6.8).

### Projected developments

The surplus in the current and capital account in 2021 might rise to 4.6% of GDP and largely exceed its previous year's level of 2.0% of GDP. Namely, a greater net exports of services (particularly travel services) and, to a much lesser extent, a bigger net inflow from personal transfers and use of EU funds might more than offset the rise in the foreign trade deficit and profitability of banks and enterprises in foreign ownership. The current and capital account balance is expected to deteriorate considerably in the last quarter of 2021 from the same period of the year before, mostly driven by further widening of the foreign trade deficit owing to faster maximum goods imports than exports. But this could provide only a partial relief for the fast growth of current and capital account surplus generated earlier in the year.

The growth in net services exports, fuelled by recovery in tourism revenues, is the main factor behind the estimated increase in the current and capital account surplus in 2021. Owing to exceptionally favourable results thus far this year, particularly in the months of the peak tourist season, revenues from tourism consumption of foreign tourists in 2021 might reach 87% of the level reached in the record-setting 2019.

The foreign trade deficit, temporarily halted in 2020, is expected to resume its upward trend. Moreover, it is anticipated that exports, imports and the foreign trade deficit might surpass by a great measure their pre-crisis levels as early as in 2021. Despite extremely favourable results in the year thus far, the last three months of 2021 are expected to witness a noticeable slowdown in goods exports growth, mostly as a result of a slowdown in the pace of economic recovery in major trading partner countries and disruptions in global supply chains.

The growth in the current and capital account surplus might also be fuelled by, although to a much smaller extent than the growth in net services exports, bigger net inflows from personal

remittances from abroad as well as greater use of EU funds. The positive balance of transactions with the EU budget could thus rise from 3.7% of GDP in 2020 to 4.2% of GDP in 2021. By contrast, the growth in the current and capital account surplus might be offset by recovery in the profitability of banks and enterprises in foreign ownership.

Mainly due to the continued growth of net exports of services and acceleration in the absorption of EU funds, the expectations are that the year 2022 will witness further growth in the current and capital account surplus, which might reach 5.0% of GDP. On the other hand, the growth in the surplus might be mitigated by a further growth in the foreign trade deficit, and, to a much lesser extent, the growth in the profitability of domestic banks and enterprises in foreign ownership.

Greater net exports of services might again in 2022 have a positive impact on the current and capital account surplus, owing to a further recovery in tourism revenues, which might exceed slightly their pre-crisis level. Net exports of other services not related to tourism are also expected to grow, although much slower than those in tourism. However, the slowdown in the growth of domestic and foreign demand might lead to a noticeable fall in the growth of foreign trade in goods, with a continued faster growth in goods imports than exports. Despite growth in the foreign trade deficit, the fast growth in the net exports of services might lead to a fall in the total deficit in the trade in goods and services.

In addition to the growth in the foreign trade deficit, the deficit on investment income is also expected to grow, fuelled by

rising profitability of domestic banks and enterprises owned by non-residents. At the same time, net inflows of other income might increase, mostly as a result of a further increase in the use of EU funds, primarily those arising from the funds under the Next Generation EU plan, the new financial perspective 2021-2027 and the EU Solidarity Fund for the reconstruction of areas struck by the earthquakes. As a result, the positive balance of net transactions with the EU budget might peak at 4.7% of GDP in 2022. The revenues from compensation of employees working abroad and those from personal transfers are also expected to continue to grow, albeit at a slower pace.

The projection of developments in the current and capital account of the balance of payments is exposed to significant risks and uncertainties. The key risks arise from the assumed dynamics of recovery in tourism revenues, which in the short-term mostly depends on the epidemiological situation in Croatia and in the main outbound market countries. Noticeable risks are also present in the international trade in goods and they are associated primarily with shortages of some of the key resources needed in production processes. The developments in energy and other raw materials prices pose both positive and negative risks to developments in the current and capital account surplus in the projection period. The same is true of ample EU funds available to Croatia. Even though the use of EU funds could exceed present expectations, there is a risk of their slower uptake due to the limited absorption capacity for withdrawing such abundant funding.

#### Box 4 What is behind the surprising recovery of Croatian tourism?

*During the summer season Croatia witnessed noticeably better volume and financial results in tourism, outcompeting its main rivals in the Mediterranean and surpassing earlier expectations. This was partly due to a relatively favourable epidemiological situation, progress made in population vaccination in the main outbound markets in the EU, the use of COVID certificates facilitating cross-border travel, structural factors that also had a favourable impact on developments in tourism in 2020, such as pronounced seasonality, geographical proximity and dominant reliance of tourists on road infrastructure as well as the large share of privately owned accommodation units in total accommodation capacity. This Box therefore analyses the available volume and financial indicators in tourism and highlights their features in terms of geographical structure and key outbound markets.*

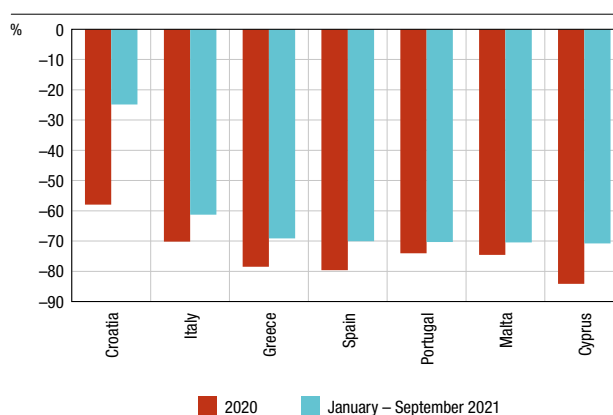
Even though tourism was one of the activities hardest hit by the pandemic globally, the Croatian tourist sector showed a high degree of resilience in 2020. Last year Croatia witnessed a smaller contraction in volume and financial indicators than any of its competitor countries in the Mediterranean, which was due to a number of factors, particularly a relatively favourable epidemiological situation during the summer season, the proximity of the main outbound markets and a much larger share of private accommodation units.<sup>20</sup>

This year the expectations of a partial recovery in tourism flows in all Mediterranean countries, including Croatia, were driven by a number of factors. Such expectations were supported by the momentum gained by population vaccination in the

EU countries and the use of COVID certificates that facilitated cross-border travel.

Despite favourable expectations regarding developments in tourism in 2021, the results achieved greatly outperformed them, with Croatia standing out in particular as the country that recorded the best results in the Mediterranean market. In the first three quarters of 2021, the main competitive markets reached between 30% and 40% of volume indicators in the pre-crisis period, while Croatia reached 75% of the results in the same period of 2019. (Figure 1). The favourable developments in Croatia in

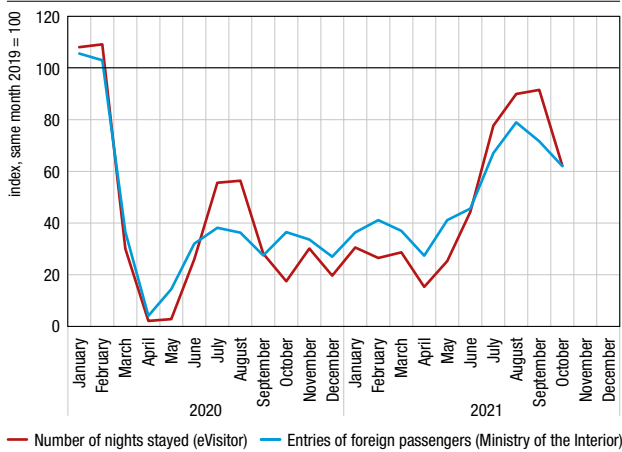
Figure 1 Rate of change in the number of nights stayed by foreign tourists from the same period of 2019



Notes: Data for Italy and Malta for 2021 refer to the first eight months. Data for Cyprus for 2021 show foreign tourist arrivals and refer to the first seven months.  
Sources: Eurostat and national statistical offices.

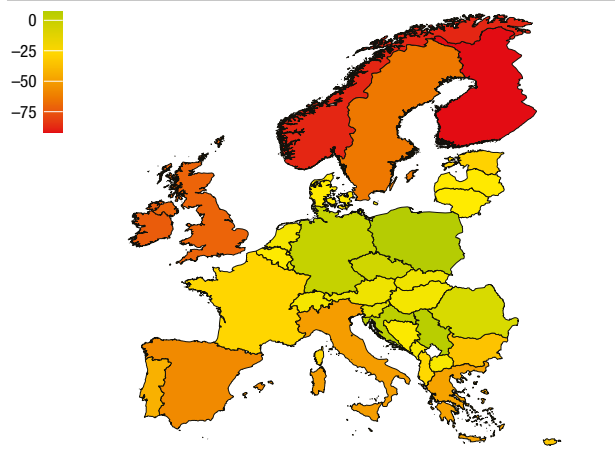
20 Macroeconomic Developments and Outlook No. 9, Box 1 Tourism in the time of pandemic, available at: [https://www.hnb.hr/documents/20182/3398618/hMKP\\_09.pdf/e4be4797-27b9-1592-f928-1faac7aad91](https://www.hnb.hr/documents/20182/3398618/hMKP_09.pdf/e4be4797-27b9-1592-f928-1faac7aad91)

Figure 2 Selected volume indicators in Croatia



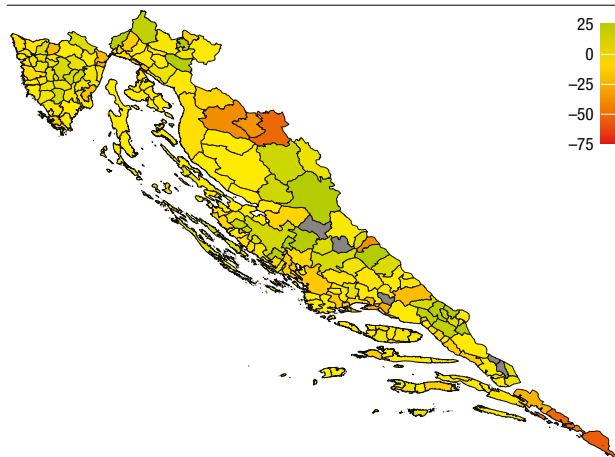
Sources: eVisitor and Ministry of the Interior.

Figure 3 Rate of change in the number of nights stayed by outbound markets in the first ten months of 2021 from the same period of 2019



Sources: eVisitor and Croatian National Tourist Board.

Figure 4 Rate of change in the number of nights stayed in selected municipalities in the first ten months of 2021 from the same period of 2019



Sources: eVisitor and Croatian National Tourist Board.

2021 were fuelled by the same structural factors that supported good results in the year before, a relatively favourable epidemiological situation in the country compared to the main competitor countries, rising numbers of vaccinated populations in outbound markets and the introduction of certificates that facilitated tourist travel.

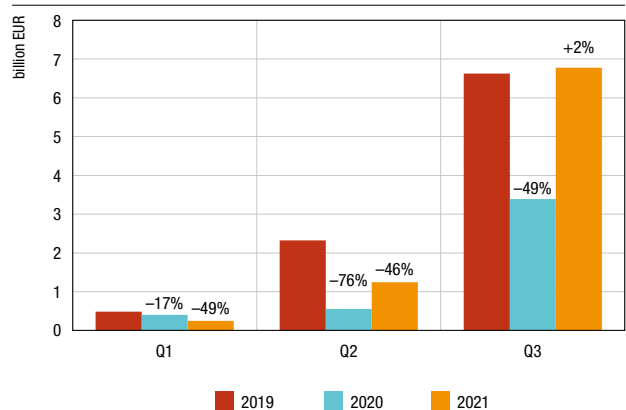
Relatively weak results in volume indicators in the first half of the year were followed by fast acceleration during the summer months. Thus in August, according to eVisitor system data, the nights stayed in commercial accommodation facilities reached 90% of those in August 2019 (Figure 2). Not only was it unevenly distributed throughout the year, but the recovery in tourism moved at considerably different paces in terms of outbound markets and geographical distribution.

In the same way as in 2020, visitors from countries in Croatia's close proximity predominantly relying on road transport witnessed the smallest cumulative fall in volume indicators in the first ten months of 2021 (Figure 3). These countries include in particular Poland, Germany, the Czech Republic, Hungary, Slovenia and Austria. By contrast, despite the results being more favourable than in the year before, considerable minuses were still evident compared to the record-setting 2019 when it comes to visitors from more distant markets (such as the United Kingdom or Scandinavian countries) arrivals from which depend more heavily on air transport.

The dynamics of the tourist activity also differed considerably on a regional level (Figure 4). Thus municipalities with foreign visitors relying prevalently on road infrastructure recorded the smallest rates of fall in the number of nights stayed by foreign tourists. This is particularly true of municipalities in the counties of Primorje-Gorski Kotar, Istra and Zadar. The municipalities in the southernmost part of the coast fared the worst, relying more on tourists arriving by air.

The financial indicators of tourism, i.e. revenues from tourism consumption of foreign tourists in Croatia, were more favourable than suggested by volume indicators. The indicators for the first quarter of this year were still below those in the same period of the previous year, considering that the outbreak of the pandemic in Croatia and the rest of Europe took place in mid-March 2020. However, given that the first three months of the year account for only a small share of the total annual tourist results, they did not have a big impact on developments on the entire year level.

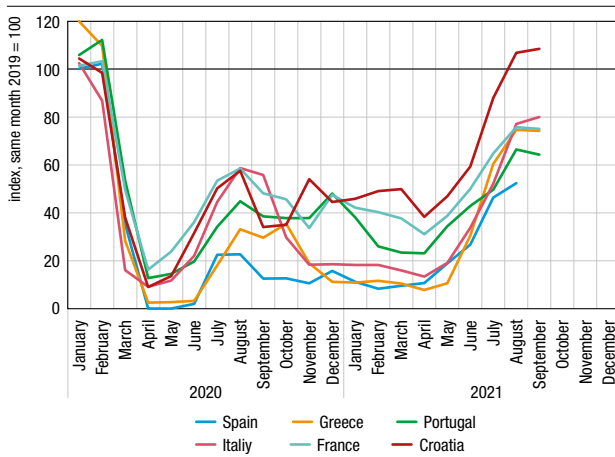
Figure 5 Developments in revenues from tourism consumption of foreign tourists in Croatia



Note: The percentages shown in the figure refer to the fall/rise of revenues in the reference quarter from the same period of 2019.

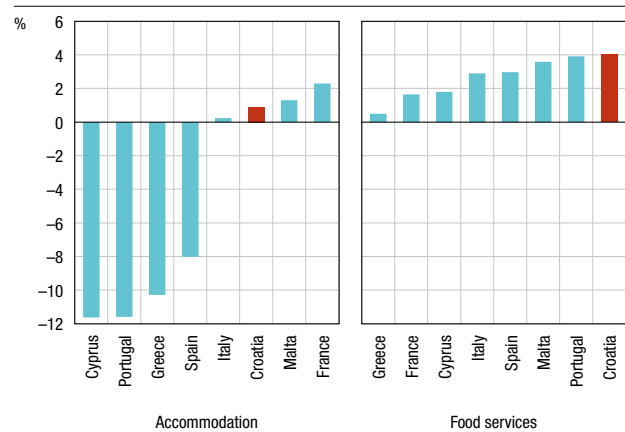
Source: CNB.

**Figure 6 Revenues from tourism in the Mediterranean countries**



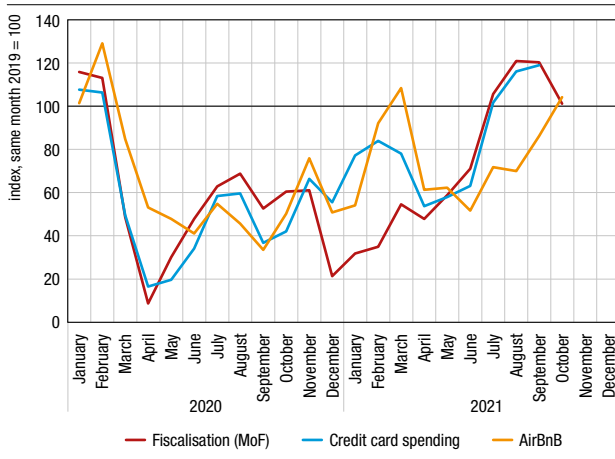
Sources: CNB and national central banks.

**Figure 8 Average rate of change in the consumer price index in the category of accommodation and food services in the first nine months of 2021 from the same period of 2019**



Source: Eurostat.

**Figure 7 Selected financial indicators in Croatia**



Sources: MoF, AirDNA and CNB.

In the second quarter of 2021, the fall in revenues from the same period of 2019 was noticeably smaller than in the year before (46% and 76%, respectively). With vaccination and the use of COVID certificates, the CNB expected to see more favourable results in the peak tourist season, with revenues reaching some 80% of tourism revenues in the third quarter of 2019. The results achieved by far surpassed initial expectations, with the revenues in the three summer months, which halved on an annual level in 2020, outperforming those in the record-setting 2019 by 2% (Figure 5).

With the financial results achieved in tourism on the entire 2021 level, and particularly in the third quarter of the year, Croatia stands out even more in terms of positive results compared to the competition countries, although other Mediterranean countries also witnessed a considerably smaller contraction of

financial than volume indicators (Figure 6).

The high growth rate of revenues from tourism in Croatia this year is attested by a line of relevant high-frequency financial indicators related to developments in tourism. Thus data on the amount of fiscalised receipts in the accommodation and food service activities show that they were up 15% in the third quarter of 2021 from the same period of 2019 (Figure 7), while spending per credit cards of foreign issuers rose by 11.4% in the same period. However, data on revenues generated in private accommodation through Airbnb and Vrbo platforms suggest a somewhat slower recovery, even though cumulatively, by end-September, this segment neared the pre-crisis level and had even surpassed it by end-October.

A sharp growth in tourism revenues also reflects a higher average tourism consumption of tourists than in the pre-pandemic period, partly caused by a growth in prices. Figure 8 shows Croatia in a group of countries that witnessed an increase in accommodation prices in the first nine months of 2021 from 2019, with Croatia standing out with the most prominent increase in the prices of food services. The growth in tourism revenues may also be explained by the greater propensity for spending during the summer holidays than in the pre-pandemic period, possibly owing to forced savings generated during the pandemic.

Future developments in tourist activity are exposed to numerous risks. Thus, any normalisation in the epidemiological situation on a global level might make distant and intercontinental tourist destinations that usually attract higher income visitors or visitors with a greater propensity to spend competitive again. This may lay bare the structural limitations of the domestic tourist sector posed by limited accommodation capacity and its unfavourable structure in comparison to other Mediterranean countries, price and non-price competitiveness and availability of skilled labour. The normalisation of tourism flows also carries the risk of loss of the advantage gained in conditions in which tourist flows were diverted to locations in geographical proximity.

## 7 Private sector financing

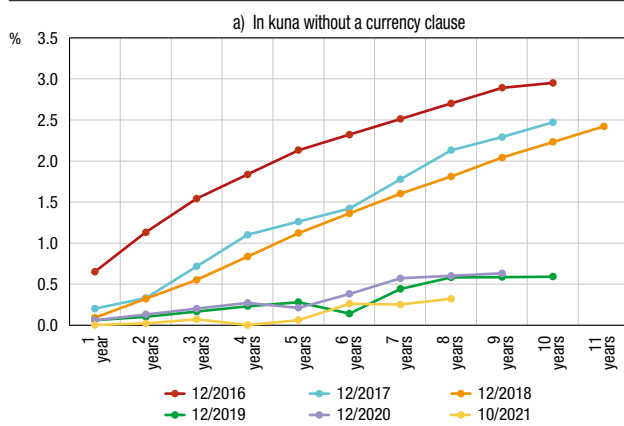
The financing costs of domestic sectors generally decreased in the second half of 2021, with some interest rates hitting their record lows. In addition, in the course of the third quarter banks intensified the easing of credit standards for corporate and household loans. Corporate borrowing from banks was subdued, while total corporate financing trended up on an annual basis due to the increase in domestic borrowing, primarily from the CBRD and HAMAG BICRO, whereas external debt edged down. After a significant slowdown last year, the annual growth in household placements continued to gain momentum, mostly driven by the continued several-year acceleration in the growth of housing loans, and to a lesser extent also due to a mild recovery in the growth of general-purpose cash loans.

Government borrowing costs, one of the determinants of borrowing costs for other domestic sectors, generally trended down from the end of the previous year. The already very low interest rates on short-term borrowing dropped further. The

interest rate on one-year kuna T-bills in the domestic market edged down from 0.06% in late 2020 to 0.00% in October (Figure 7.1a), which resulted in the first-ever interest-free kuna debt financing. The interest rate on one-year euro T-bills also fell in October to its record low of -0.15% (Figure 7.1b), having stood at -0.05% in May 2021 and October 2020. Long-term yields on government bonds were in October close to pre-pandemic levels, whereas costs of long-term financing in kuna without a currency clause were generally more favourable. Following the issue of domestic bonds in early July, in the second half of the year the government issued no bonds in either the domestic or the international market.

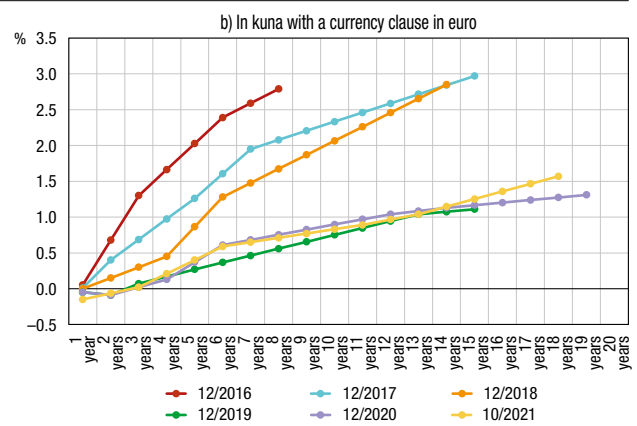
With regard to credit rating, the credit rating agency Fitch upgraded Croatia's credit rating in November from BBB- to BBB with a positive outlook, two notches above speculative rating. Standard & Poor's kept Croatia's BBB- rating with a stable outlook from March 2019, while Moody's was the only agency

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.

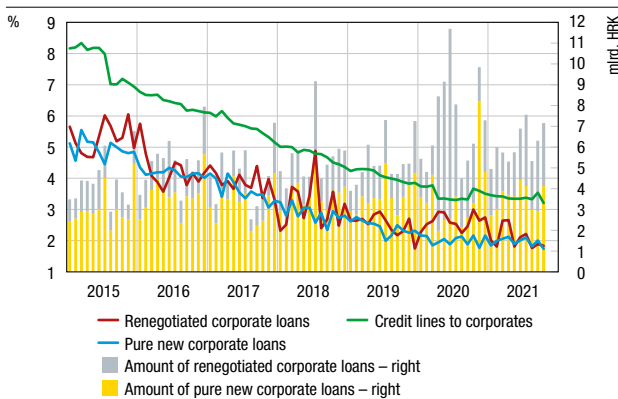
Source: CNB.



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 T-bills with a currency clause in euro. Data for the end of 2016 refer to November and for the end of 2017, 2019 and 2020 refer to October.

Source: CNB.

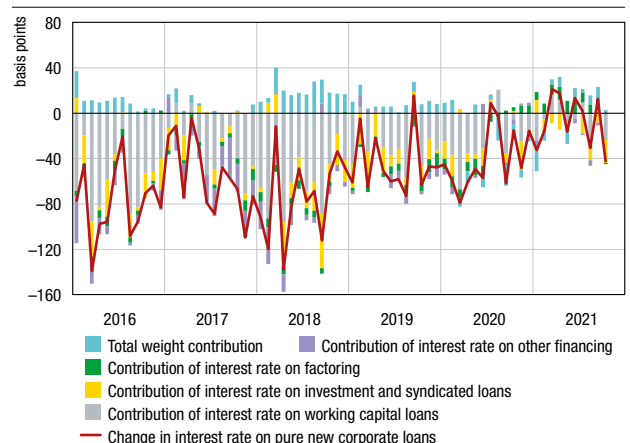
Figure 7.2 Interest rates and amounts of loans to corporates



Note: Data on pure new loans are not available for credit card loans, overdrafts, revolving loans and receivables on charge cards since their new business volume (for other instruments, this includes both pure new loans and renegotiated loans) is equal to balances and thus included in the credit line category.

Source: CNB.

Figure 7.3 Contributions to the annual change in interest rate on pure new corporate loans



Note: Calculated by applying the Bennet index, according to which total contribution is divided into interest rate effect and weight effect.

Source: CNB.

to maintain Croatia's rating one notch below investment grade (Ba1 rating with a stable outlook).

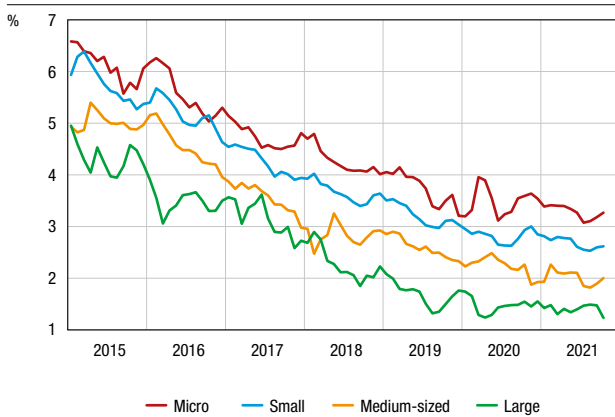
Having dipped below 2% in March 2020 for the first time, the interest rate on pure new corporate loans was relatively stable, mostly ranging between 1.8% and 2.2% (Figure 7.2). It dropped to its record low of 1.75% in October 2021, largely due to the monthly fall in the interest rate on loans to large enterprises. The interest rate on pure new corporate loans was 42 basis points lower in October (Figure 7.3) than in the same month of the previous year, which was mostly due to the decrease in interest rates on loans for working capital (by 24 basis points) and on investment and syndicated loans (by 20 basis points). Broken down by the size of enterprises, this annual drop was mostly due to the decline in the interest rate on loans to large enterprises (by 35 basis points).

The quarterly average of financing costs was lower in October than in the last quarter of the previous year for most categories of enterprises in terms of size (Figure 7.4). Interest rates were lower for larger enterprises, since they are generally perceived as less risky (for more information, see Box 5 Survey on the access to finance of small and medium-sized enterprises).

The quarterly weighted interest rate on pure new loans to micro enterprises was 2 percentage points higher in October from that on such loans to large enterprises, similar to the average difference over the past year.

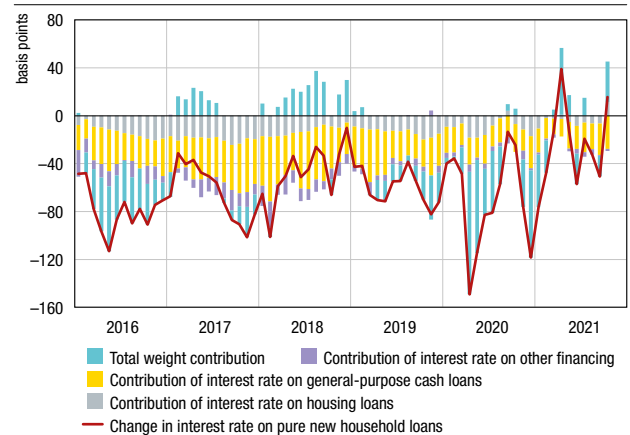
The interest rate on pure new household loans was 4.23% in October (Figure 7.5). However, this rate has shown volatility in the past years, which is, on the one hand, the result of large amounts of housing loans granted under the government housing loans subsidy programme combined with a further drop in the interest rate on housing loans and, on the other hand, of considerably higher interest rates on the general-purpose cash loans that account for a large share of newly granted household loans. The interest rate on pure new household loans was 16 basis points higher on an annual level (Figure 7.6) as the result of the government housing loans subsidy programme in October last year, which is mostly reflected in the contribution of the change in weight to the rise in the interest rate (by 34 basis points). As opposed to the positive weight contribution to the change in the interest rate on total household loans, the interest rate contribution to such change was negative, primarily due to the decrease in the interest rate on general-purpose cash loans

**Figure 7.4 Interest rates on pure new loans by the size of enterprises**



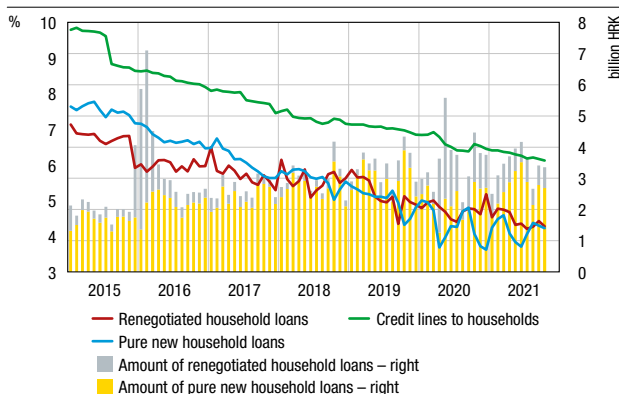
Note: Quarterly weighted moving averages.  
Source: CNB.

**Figure 7.6 Contributions to the annual change in interest rate on pure new household loans**



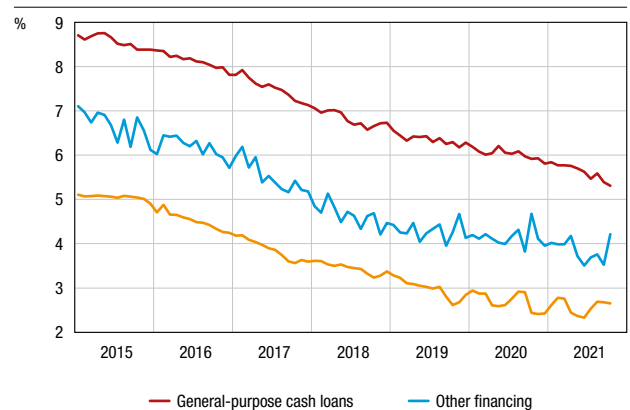
Note: Calculated by applying the Bennet index, according to which total contribution is divided into interest rate effect and weight effect.  
Source: CNB.

**Figure 7.5 Interest rates and amounts of household loans**



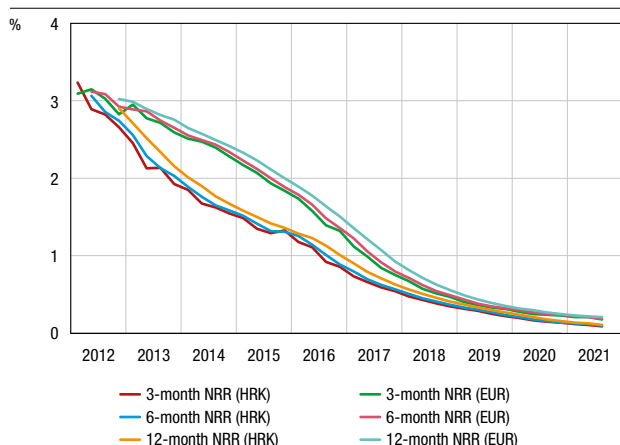
Note: Data on pure new loans are not available for credit card loans, overdrafts, revolving loans and receivables on charge cards since their new business volume (for other instruments, this includes both pure new loans and renegotiated loans) is equal to balances and thus included in the credit line category.  
Source: CNB.

**Figure 7.7 Interest rates on pure new household loans by purpose**



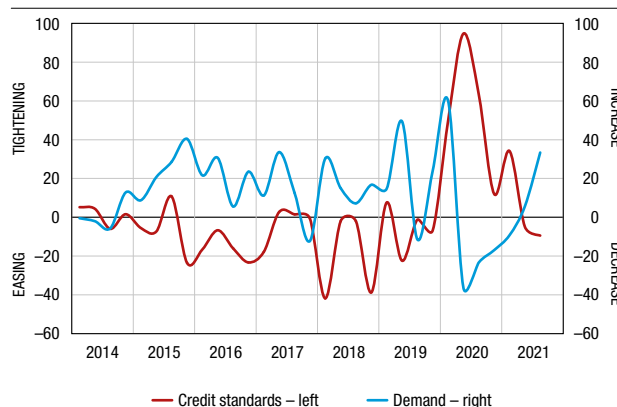
Source: CNB.

Figure 7.8 National reference rate (NRR)



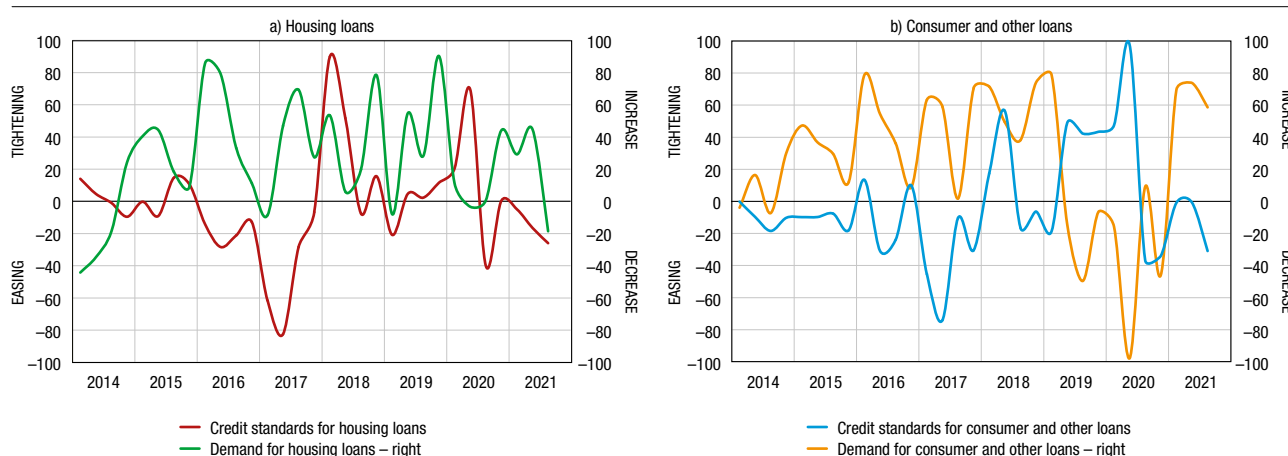
Note: The rates shown are the rates for all natural and legal persons.  
Sources: CNB and HUB.

Figure 7.9 Credit standards and corporate demand for loans



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

Figure 7.10 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.

(by 28 basis points), with the rise in the costs of housing financing on an annual level in the absence of the subsidy programme in October 2021.

The interest rate on general-purpose cash loans fell to its all-time low of 5.31% in October (Figure 7.7), but still remained noticeably higher than the costs of housing financing which stood at 2.65%. The bulk of household lending activity was accounted for by these two instruments, since in the first ten months of 2021 general-purpose cash loans and housing loans accounted for 48% and 42% respectively of the total amount of pure new household loans.

The decrease in the funding costs of the Croatian banking system in conditions of the exceptionally expansionary monetary policy and historically high surplus liquidity contributed to the maintenance of the favourable financing conditions of the private sector. The national reference rate<sup>21</sup> (Figure 7.8) and EURIBOR

(Figure 2.9) continued to decrease in the third quarter.

According to the bank lending survey, the improvement in credit standards for corporate loans and the recovery in demand, which started in the second quarter of 2021, intensified in the third quarter (Figure 7.9). The loosening of the credit standards for total loans to corporates was slightly stronger in the third than in the second quarter, and was several times more pronounced for small and medium-sized enterprises and long-term loans. The relaxation of the standards was largely driven by competition among banks and improved expectations regarding overall economic trends. Overall demand for corporate loans also grew considerably in the third quarter, with a particularly robust recovery in the demand of large enterprises and demand for long-term loans, these two categories having previously recorded a drop in demand in the second quarter. According to bank responses, the need of enterprises for financing of working capital, debt restructuring and mergers, acquisitions and corporate restructuring led to the growth in total demand in the third quarter of 2021. On the other hand, demand was still adversely affected, if much less so than in the previous quarter, by the reduced corporate needs for financing of investments.

21 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).

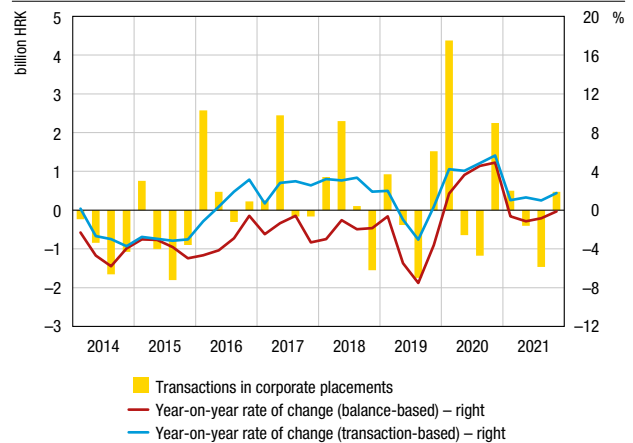
The easing of credit standards for the household sector intensified in the third quarter (Figure 7.10), especially for consumer and other loans, which had seen almost unchanged credit standards in the previous quarter. The relaxation of standards for housing, consumer and other loans in the third quarter was mostly fuelled by competition among banks and positive expectations related to overall economic trends, as well as by a slight improvement in the creditworthiness of clients in the case of consumer and other loans. Demand for consumer and other loans remained relatively strong in the third quarter due to the effect of consumption of durable consumer goods and consumer confidence. On the other hand, demand for housing loans dropped for the first time in a year as a result of the increased need for financing of non-housing expenses and the discontinuation of the government housing loans subsidy programme.

Following a sharp growth in total corporate debt in the first half of 2021, mostly due to foreign borrowing, total corporate financing trended down in the third quarter (Figure 7.11), also largely influenced by external debt developments. If viewed on an annual level, total corporate debt increased by 1.1% in late September (transaction-based), primarily due to the increased borrowing from the CBRD and HAMAG BICRO, while the slight annual growth in placements of domestic credit institutions was fully the result of a single large transaction in December 2020. External debt edged down on an annual level.

Following strong lending activity in the previous year, corporate borrowing from banks was subdued. Corporate placements of credit institutions dropped by HRK 0.9bn (1.0%) in the first ten months of 2021, while the end of October witnessed a positive annual growth of 1.8% (transaction-based, Figure 7.12). The growth in corporate lending was again determined by demand for investment loans, which were 7.3% higher in late October on an annual basis (Figure 7.13), about half the growth rate seen in the previous year. Loans for working capital dropped on an annual basis, and other loans also decreased significantly (-6.7%). Lending to micro, small and medium-sized enterprises continued to grow in October at an annual rate of 2.0% (Figure 7.14), while large enterprises continued to deleverage.

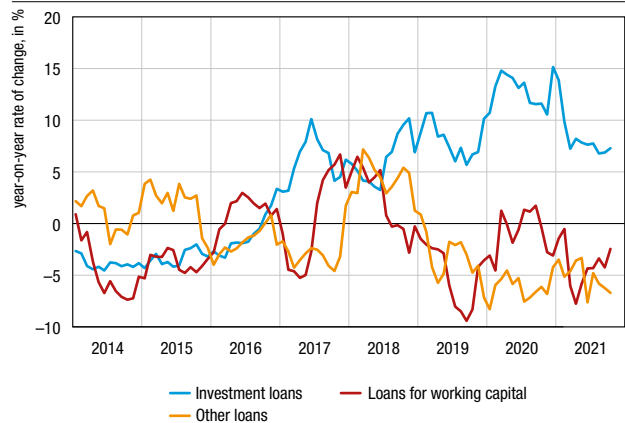
Broken down by activities, the drop in placements in the first ten months of 2021 was particularly seen in trade and other activities, with professional, scientific and technical activities witnessing the strongest deleveraging. On the other hand, a modest rise in placements was recorded in construction, real estate

Figure 7.12 Corporate domestic placements of credit institutions



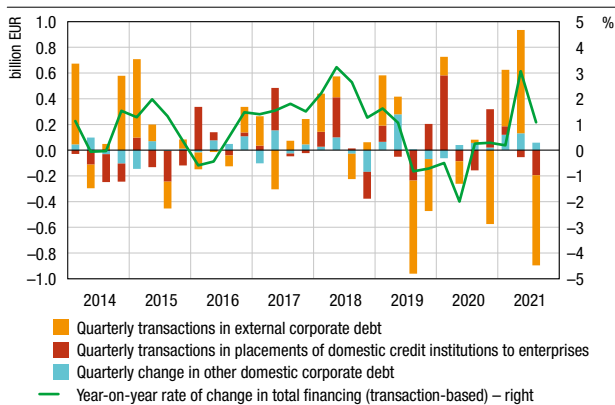
Note: Data for the fourth quarter of 2021 refer to October.  
Source: CNB.

Figure 7.13 Growth in corporate loans by purpose transaction-based



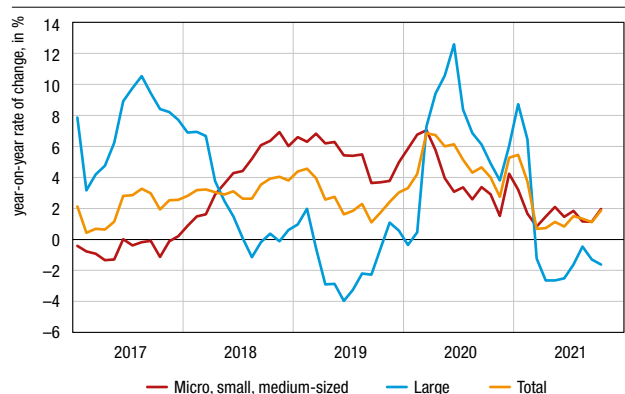
Source: CNB.

Figure 7.11 Corporate financing



Notes: Other domestic financing includes borrowing from domestic leasing companies, the CBRD and HAMAG-BICRO. External debt excludes the effect of debt-equity swaps. All changes were calculated on the basis of transactions (except for leasing companies).  
Sources: HAMAG-BICRO, HANFA, CNB and CNB calculations.

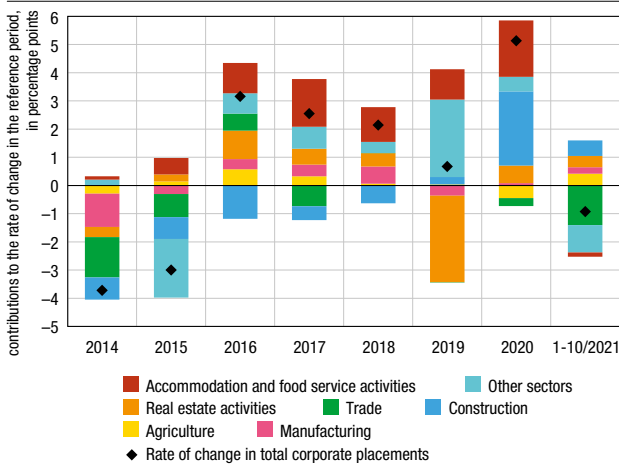
Figure 7.14 Growth in corporate placements by size transaction-based



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.



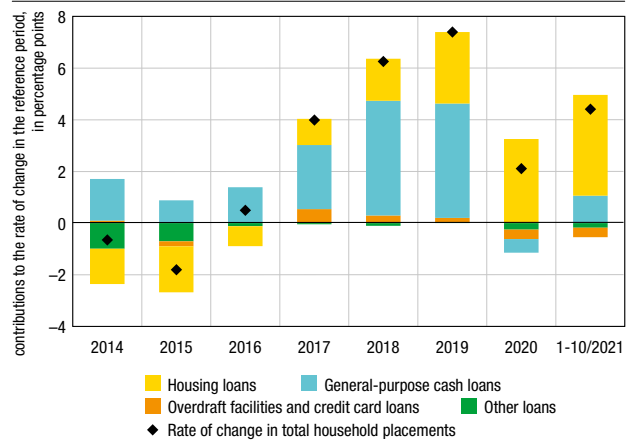
**Figure 7.15 Growth in corporate placements by activity transaction-based**



Notes: In October 2019, a large corporation switched from Section L (Real estate activities) to Section E (Water supply, sewerage, waste management and remediation activities). This is why in 2019 a sharp decrease in placements was recorded in Real estate activities, and a substantial rise was seen in Other sectors, which include Water supply activity.

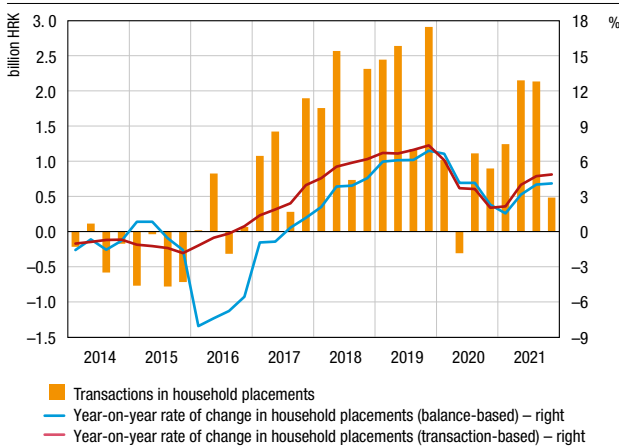
Source: CNB.

**Figure 7.17 Growth in household placements by loan type transaction-based**



Source: CNB.

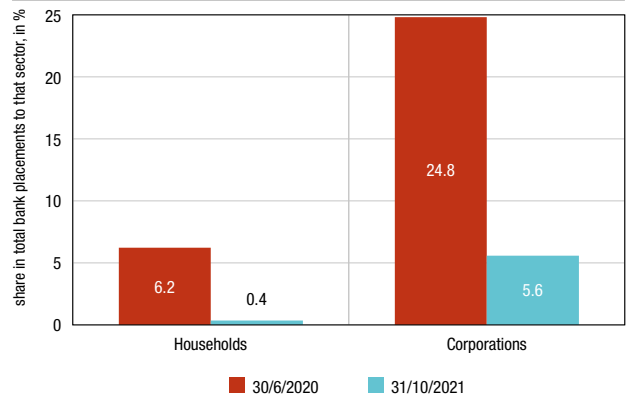
**Figure 7.16 Household placements**



Note: Data for the fourth quarter of 2021 refer to October.

Source: CNB.

**Figure 7.18 Placements under payment deferral or restructuring measures**



Note: Since June 2021, data on approved loan payment deferral or restructuring applications have been collected according to a new methodology, but this has not led to significant deviations from the data collected by the old methodology.

Source: CNB.

activities, agriculture and manufacturing (Figure 7.15).

After much slower growth in 2020, mostly due to lower demand for general-purpose cash loans, the rise in household placements started to accelerate in 2021, their annual growth rate going up from 2.1% in late 2020 to 4.9% in October 2021 (transaction-based, Figure 7.16). The several-year upward trend in housing loans (Figure 7.17) continued to gain momentum, spurred also by the implementation of the government subsidy programme. The annual growth in housing loans reached 11.3% in late October, up from 7.5% in the year before. After falling steadily for several months, the annual growth in general-purpose cash loans accelerated moderately, from -1.3% in 2020 to 1.6% in October.

Total amount of bank placements covered by payment deferral or restructuring measures decreased in late October 2021 to a record low, which is largely attributable to the expiry of granted moratoria. At end-October, 5.6% of bank placements

to corporates and 0.4% of placements to households were covered by the measures (Figure 7.18), considerably less than in mid-2020.

### Projected developments

Total placements (government excluded) might record an annual growth rate of 3.4% (transaction-based) in 2021. Such growth is mostly driven by the increase in household lending which might grow by 4.9% by the end of the year relative to the year before, largely influenced by the rise in housing loans spurred by the government subsidy programme. A notably smaller, albeit positive contribution might come from general-purpose cash loans. In contrast with the anticipated acceleration in the growth of household placements, growth in corporate placements is expected to slow down to only 0.2% in 2021, as a result of poorer results and base effect, i.e. a sharp increase in placements to this sector in December 2020. The growth in household placements is expected to decelerate in 2022, with a rise in corporate lending. Total placements (government excluded) might thus grow at the same pace as in 2021 (by 3.4%).

## Box 5 Survey on the access to finance of small and medium-sized enterprises

The results of the third round of the Survey on the access to finance of small and medium-sized enterprises indicate that the unfavourable regulatory environment, resulting from the frequent changes in regulations and their complexity and inconsistency, remains the principal obstacle to doing business. By contrast, access to finance was among the least reported hindrances to business activity. Only a third of the surveyed enterprises used bank loans, while the rest reported sufficient own funds or the availability of other external sources of financing as the main reason for not using loans. The proportion of enterprises that singled out financing costs, such as interest and fees, as an obstacle to obtaining a bank loan, shrank considerably. The findings of the Survey also suggest that small enterprises have been exposed to a more challenging business and financial environment than medium-sized enterprises.

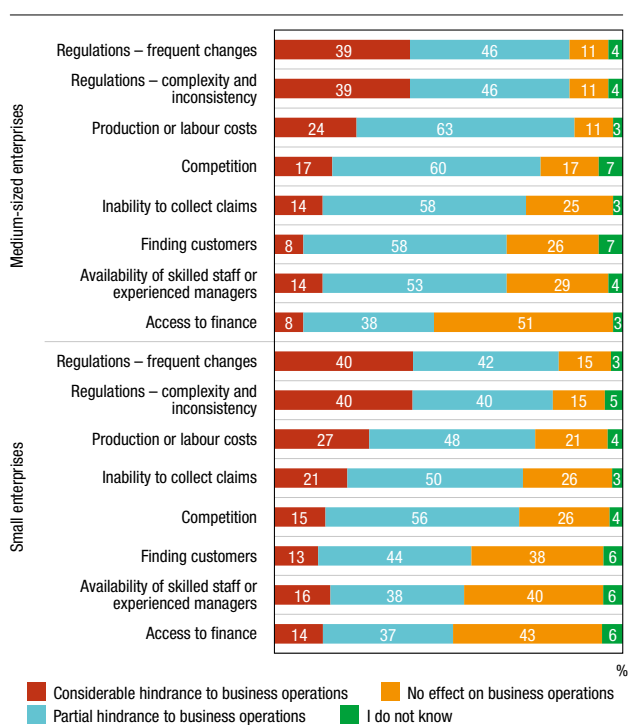
The growth of a part of small and medium-sized enterprises is the key driver of employment, innovation and investments. Consequently, having insight into their financial situation and plans is very important to the economic policymakers. Following the previous survey rounds in 2015 and 2017, the third round<sup>22</sup> of the Survey on the access to finance of small and medium-sized enterprises (SMEs) was carried out by the CNB in the second half of 2021, on a sample of around 1,200 small and medium-sized economic entities. The enterprises responded to questions about business environment, performance indicators, financing modalities and conditions, and growth projections.

As in the previous survey rounds, the unfavourable

institutional and business environment, mirrored in a complex regulatory framework subject to frequent changes, was once again singled out as the greatest factor impeding business operations, although to a lesser extent than in 2017. Approximately two-fifths of the enterprises reported that the frequent changes in regulations, their complexity and inconsistency made it very difficult for them to do business (Figure 1), as opposed to the previous survey round when this was true of more than one half of the surveyed enterprises. Production or labour costs were the third major hindrance to business activity, while the inability to collect claims and competition took the fourth place among the obstacles to doing business for small and medium-sized enterprises respectively. On the other hand, access to finance was among the least reported obstacles to doing business, according to more than a half of medium-sized enterprises and two-fifths of small enterprises, stating that this factor had no impact on their operations.

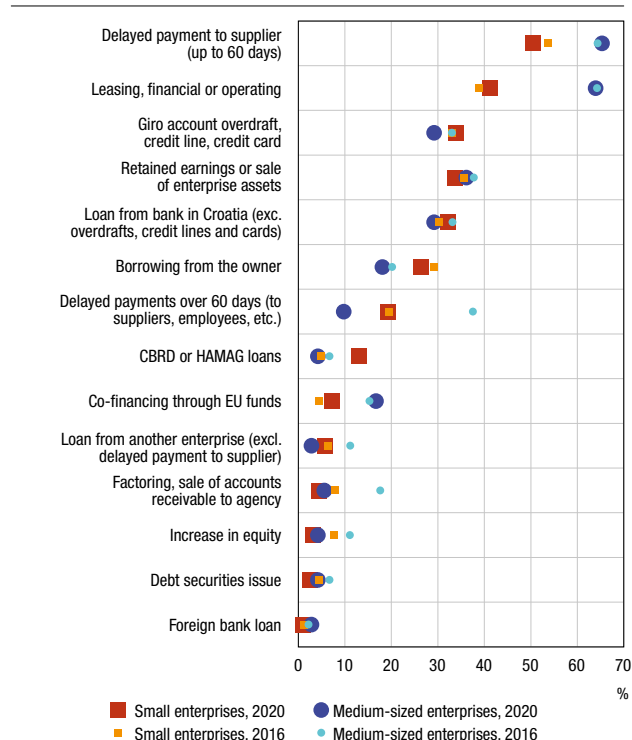
With regard to financing, delayed payment to supplier (up to 60 days) and leasing<sup>23</sup> remained the most frequently used sources of financing (Figure 2), with medium-sized enterprises relying more on them than small enterprises. A third of small enterprises used domestic bank financing, while this share was somewhat smaller for medium-sized enterprises. Retained

**Figure 1** How do the reported problems affect your operations?



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

**Figure 2** Which of the following sources have you used for financing your operations?



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

22 Questions about previous developments refer to the year preceding the survey (2016 for the second round and 2020 for the third round), while questions about expectations refer to the current year and the upcoming period.

23 Although the share of enterprises using leasing was larger than the share of those using loans, the total amount of bank financing was considerably higher. In late September 2021, the total amount of financial and operating leases extended by leasing companies to non-financial corporations stood at HRK 12.5bn, while bank placements came to HRK 86.8bn, of which HRK 56.8bn was accounted for by micro, small and medium-sized enterprises.

earnings or sale of enterprise assets, as well as borrowing from the owner were also often used, especially by small enterprises. Delayed payments over 60 days, as a source of financing of medium-sized enterprises, decreased significantly compared to the previous round and was used by around 10% of medium-sized enterprises, whereas the share of small enterprises using such a source of financing remained almost unchanged from the last wave, standing at 20%. The proportion of small enterprises borrowing from the CBRD or HAMAG BICRO increased manifold from the last survey round, while co-financing through EU funds also trended up. The shares of enterprises using other forms of financing were mostly below 5%.

The enterprises that did not use domestic bank loans in the previous year mostly signalled that they did not need a loan because they either had sufficient own funds or had access to other external sources of financing (Figure 3). The years-long downward trend in interest rates made way for borrowing from banks, and thus the share of enterprises that reported high financing

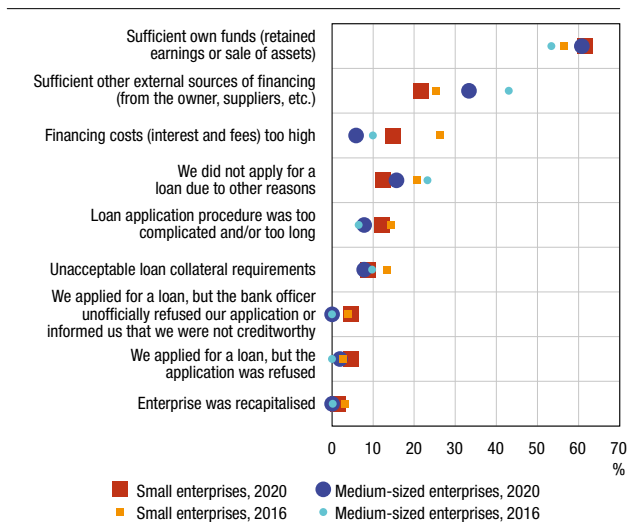
costs, such as interest and fees, as the reason for not using loans, decreased by more than 40% from the previous survey round. The share of small enterprises that reported high costs as the reason for not using a loan exceeded that of medium-sized enterprises by two and a half times, suggesting that small enterprises were exposed to a more challenging financial environment. Other reasons for not using a loan mostly point to a slight relaxation of financing conditions.

Enterprises that used a loan in 2020 in most cases obtained the full amount requested or most of the amount requested (Figure 4), with application success rate on average being slightly better for medium-sized enterprises relative to small enterprises. The largest deviations in terms of the amounts of financing sought were seen with debt restructuring loans, most probably due to their riskier nature, which was especially pronounced last year when the economic downturn was at its worst due to the pandemic. Relative to the previous survey round, banks were more willing to grant loans, as evident from the slight increase in the availability of the loan amounts sought.

With regard to late payments, around 30% of enterprises responded that they regularly or occasionally faced problems in operations due to late payments from public entities, with approximately twice as high percentage of enterprises experiencing such problems due to late payments from private entities (Figure 5). The most reported problem flowing from late payments for goods and services sold was delayed payment to suppliers (Figure 6). In addition, small enterprises faced more difficulties in collection than medium-sized enterprises, since the share of small entities reporting problems with investments or new recruitment due to late payments was twice as high as the share of medium-sized entities, while delayed repayments of loans or the need for additional financing were three times as frequent for small enterprises.

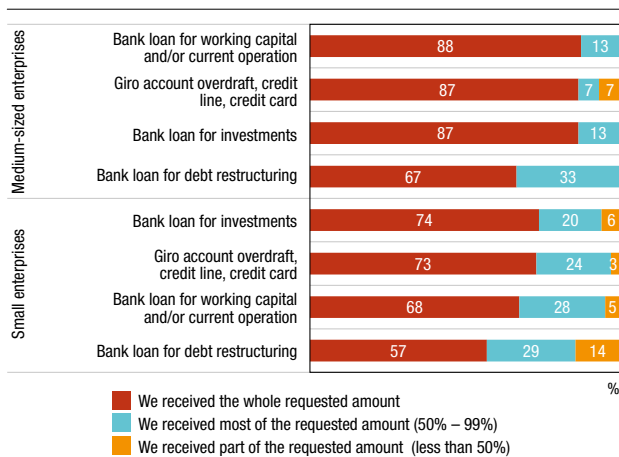
There were generally no changes in what the enterprises perceived to be important for future operations from the previous survey round (Figure 7). More than four-fifths of enterprises still considered the improvement of business environment, tax reliefs and a more flexible labour legislation important for doing business in the future. There was mostly a slight decrease in the proportion of small enterprises and a more pronounced drop in the share of medium-sized enterprises perceiving access to EU funds and loans or exports guarantees as important for future operations. The proportion of medium-sized enterprises

Figure 3 Reasons for not using domestic bank loans



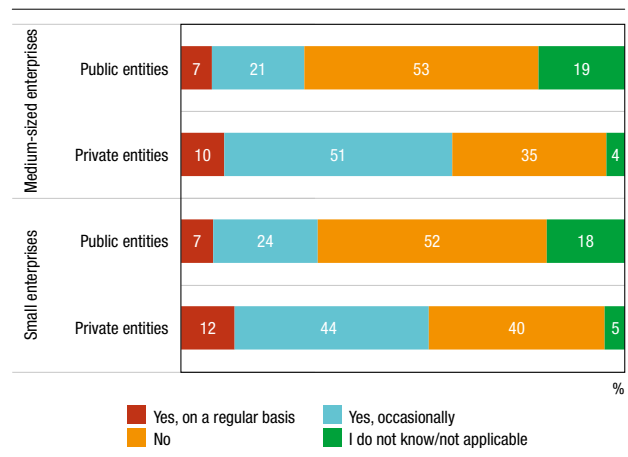
Note: Up to five answers can be selected.  
Sources: Survey on the access to finance of SMEs, CNB and Ipsos.

Figure 4 Can you provide an estimate as to how much of the requested funds you actually obtained?

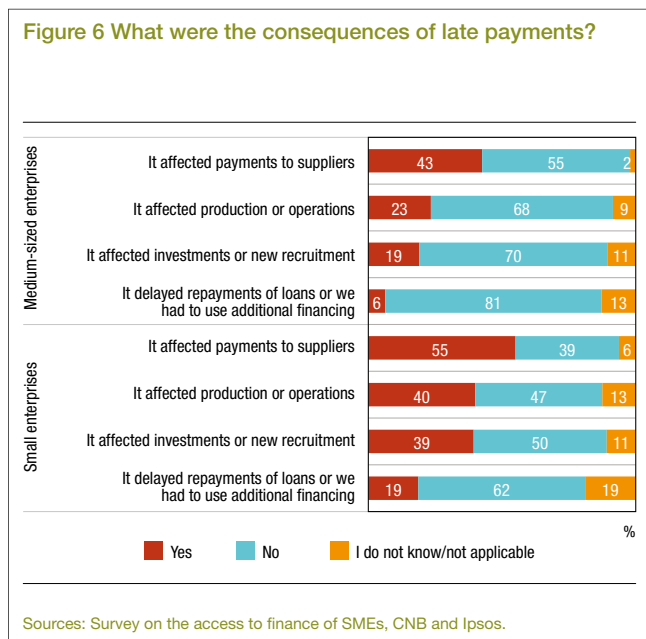


Note: The figure shows the enterprises that reported the use of a bank loan in 2020.  
Sources: Survey on the access to finance of SMEs, CNB and Ipsos.

Figure 5 Did you face any problems due to late payments from private or public entities in 2020?



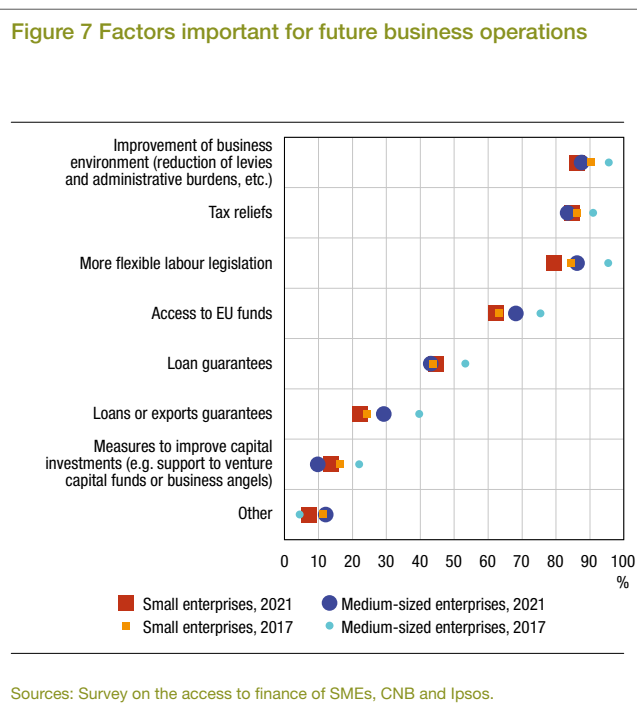
Sources: Survey on the access to finance of SMEs, CNB and Ipsos.



assigning importance to measures to improve capital investments more than halved from the previous survey round. Shares dropped for most factors, which was more pronounced for medium-sized enterprises, indicating a slight improvement in business conditions.

If the findings of the CNB's survey are compared to the results of the survey conducted by the European Central Bank and the European Commission on the level of the EU-27<sup>24</sup>, it may be observed that European enterprises face other major problems in their business operations. According to the latest survey round conducted in September and October 2021, only 11% of European SMEs reported the regulatory burden to be the dominant concern affecting their business activity, while they were largely concerned about the availability of skilled staff or experienced managers (27%), followed by the difficulty in finding customers (18%).

The most frequently used sources of financing available to European enterprises were giro account overdrafts, credit lines



or credit cards (29%), leasing or hire-purchase (22%) and grants or subsidised bank loans (16%). As regards applications for loans and their success rates, the trends are similar to those in Croatia, since 71% of all bank loan applications and 73% of applications for giro account overdraft, credit line or credit card were granted in full. Moreover, 76% of European enterprises that did not use a bank loan reported that they had no need for this type of financing.

Late payments were less pronounced in the EU than in Croatia, with 42% of enterprises having reported experiencing such problems regularly or occasionally. The consequences of late payments were also less frequent – 32% of enterprises reported its effect on payments to suppliers, while 22% reported effect on investments or new recruitment and the effect on production or operations.

## 8 Foreign capital flows

The financial account of the balance of payments, changes in gross international reserves and liabilities of the CNB excluded, saw a sharp net capital outflow of EUR 2.6bn in the third quarter of 2021, as a result of a noticeable decrease in domestic sectors' net debt liabilities (Figure 8.1). This primarily involved the improvement in the net external position of credit institutions, while non-financial corporations also reduced their net debt

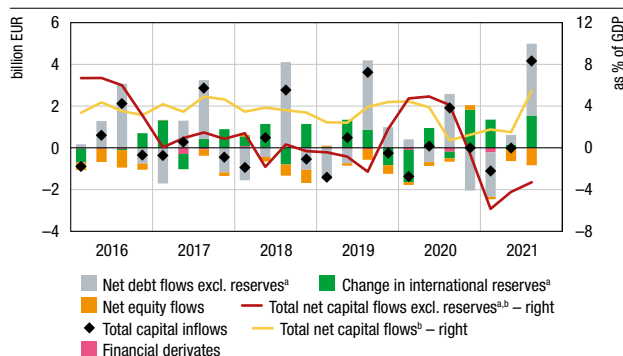
liabilities, albeit to a significantly lesser extent. The growth in net equity liabilities stemmed from reinvested earnings of banks and enterprises in foreign ownership, and to a considerably lesser extent, from the growth in direct equity investments in Croatia. As the international reserves of the central bank surged in the same period, total net capital outflow was even sharper, standing at EUR 4.2bn.

Net inflow from equity investments of EUR 0.8bn generated in the third quarter of 2021 was for the most part the result of reinvested earnings of banks and enterprises in foreign ownership, growing sharply from the same period last year due to economic recovery. New direct equity investments in Croatia, debt-to-equity transactions excluded, were approximately the same as in the same period last year, and mostly took place in the real estate sector (Figure 8.2). On the other hand, foreign assets increased as a result of the growth in reinvested earnings of foreign enterprises in resident ownership.

A major decline in net external debt liabilities (by EUR 3.4bn,

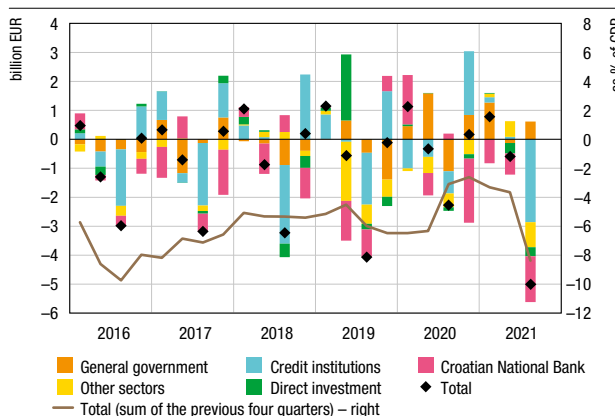
<sup>24</sup> The CNB's survey on the access to finance of small and medium-sized enterprises is an abbreviated version of the survey by the European Central Bank and the European Commission, conducted twice a year. More precisely, the survey is conducted once a year by the ECB covering euro area countries, and once in cooperation with the European Commission covering all EU countries plus some neighbouring countries. The results of the CNB's survey are more reliable since in 2021 the number of Croatian SMEs responding was 4.5 times larger than in the survey conducted by the ECB and the EC in September and October 2021, whose main findings are described here. In addition, the samples vary in terms of distribution of enterprises by size – the CNB's survey covered a larger share of enterprises with fewer than 50 employees (91%) compared to the survey conducted by the ECB and the EC (73%).

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



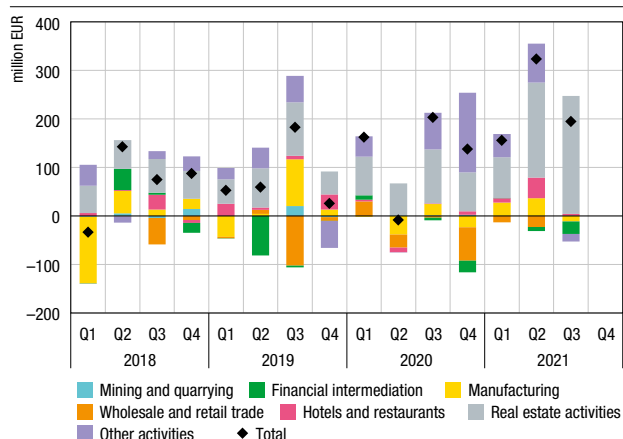
<sup>a</sup> Changes in gross international reserves net of CNB liabilities.  
<sup>b</sup> Sum of the previous four quarters.  
 Notes: Net flows are the difference between changes in assets and liabilities. Equity flows comprise changes in foreign direct equity investments, reinvested earnings and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

**Figure 8.3 Net external debt transactions by sectors**



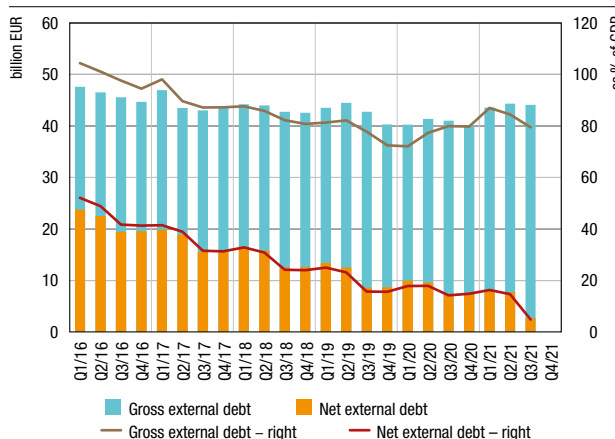
Notes: Transactions refer to the change in debt excluding cross-currency changes and other adjustments. Net external debt is calculated as the gross external debt stock net of external debt claims.  
 Source: CNB.

**Figure 8.2 Foreign direct equity investment in Croatia by activities**



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

**Figure 8.4 Stock of gross and net external debt**



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

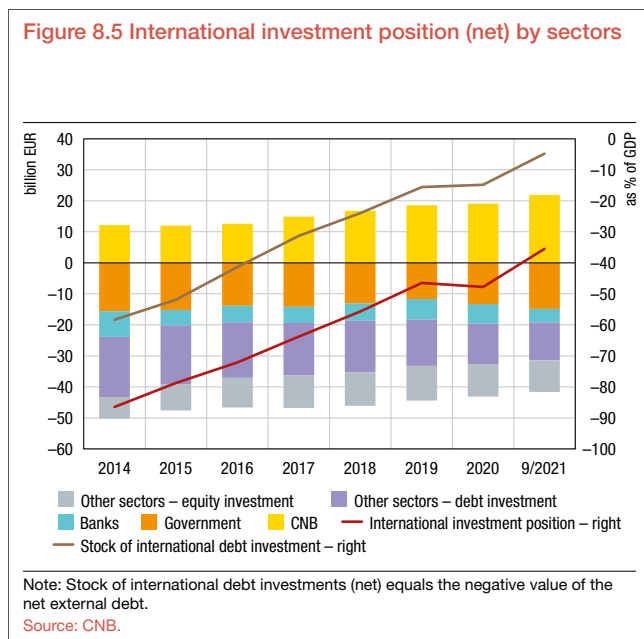
excluding the change in gross international reserves and CNB liabilities) seen in the third quarter of 2021 was the result of a noticeable growth in assets, accompanied, to a lesser extent, by a decrease in liabilities. All domestic sectors except the government improved their net debt position, especially credit institutions (Figure 8.3) owing to a sharp rise in foreign assets resulting from foreign currency inflows during the peak tourist season. Net debt liabilities of other domestic sectors decreased, including liabilities based on direct investments. This is true primarily of private non-financial corporations which significantly reduced their mostly short-term liabilities, followed by a growth in claims under loans granted to affiliated borrowers abroad. By contrast, the net debt position of the government worsened as the fall in claims exceeded the decrease in liabilities. External debt claims of the government decreased noticeably since the amount of funds received from the EU budget exceeded the amount of funds distributed to end beneficiaries. The decline in government liabilities was mostly due to the July repayment of a bond issued on the domestic market, which was partly owned by non-residents.

The perceptible improvement in the net external position of

the central bank in the third quarter of 2021 stemmed from the rise in the government foreign currency deposit in its account with the CNB, associated with larger inflows of EU funds and funds from the European Commission’s pre-financing payment made under the National Recovery and Resilience Plan (NRRP). The allocation of special drawing rights with the International Monetary Fund (IMF) and the bigger volume of repo transactions reinforced the growth in gross international reserves, albeit to a considerably lesser extent. However, given that the external liabilities of the central bank grew by the same amount, they had not influenced its net external position.

Gross international reserves thus stood at EUR 24.4bn at the end of September 2021, having risen by 28.6% from the end of the previous year. Since a part of this increase was accounted for by factors increasing the CNB’s liabilities, net usable reserves grew at a weaker rate (10.3%), reaching EUR 19.5bn.

Relative indicators of external debt improved in the first nine months of 2021 (Figure 8.4). The stock of gross external debt was EUR 44.1bn (79.4% of GDP) in late September 2021, down by 0.3 percentage points from the end of 2020. The improvement in the relative indicator of gross external debt was



due exclusively to the rise in nominal GDP, while gross debt increased in absolute terms (mostly of the central bank and the government). Foreign assets of domestic sectors, especially of the central bank and credit institutions, increased even more in the same period. Accordingly, net external debt decreased sharply, standing at only EUR 2.7bn or 4.8% of GDP in late September 2021, down by 10.0 percentage points from the end of 2020.

The significant decrease in net external debt contributed to the considerable improvement in the international investment position (Figure 8.5), which stood at -35.5% of GDP at the end of September 2021, compared with -47.7% of GDP at the end of 2020. In addition to the continued decline in net debt liabilities of domestic sectors, the improvement in the relative indicator of the international investment position was also due to a favourable impact of price, exchange rate and other adjustments, as well as the rise in nominal GDP.

### Projected developments

The net capital outflow in the whole of 2021 might be considerably larger than last year's results, which reflects the significantly bigger estimate of the current and capital account surplus. The estimated net capital outflow mirrors the sharp fall in net debt liabilities of domestic sectors, which might be more pronounced than in the previous year. The net external position of the central bank could improve the most, with a perceptible improvement in reserve adequacy indicators. Despite the usual seasonal deterioration at the turn of the year, the net external position of credit institutions is also expected to improve on the entire year level, although to a much lesser extent. By contrast, external liabilities of the government sector are expected to grow for the second year in a row.

The net inflow from equity investments might be larger in

2021 than in the previous year, mostly due to the larger amount of reinvested earnings of banks and enterprises in foreign ownership. A strong rise in the profitability of banks and enterprises in foreign ownership, amid restrictions on credit institutions' distributions in force until 1 October 2021, is reflected in the growth in reinvested earnings, which is a constituent part of foreign direct investments. Although to a much lesser extent, at the level of the whole year the direct equity investments in Croatia might be considerably larger than in the year before, mostly owing to a relatively favourable performance in the first nine months.

After the years-long upward trend in the relative indicator of gross external debt was temporarily interrupted last year due to the fall in nominal GDP, the gross external debt to GDP ratio is expected to decline again in 2021. This improvement is the result of economic recovery, i.e. the rise in nominal GDP, while the stock of total gross external debt could increase in absolute terms due to the growth in liabilities of the central bank and the government. The relative indicator of gross external debt might come to around 75% of GDP at the end of 2021, as against the 80% of GDP in late 2020 and 72% of GDP in late 2019. Due to the mentioned rise in external debt claims, especially of the central bank and credit institutions, the improvement in the relative indicator of net external debt might be even more pronounced.

Capital flows might be marked by a further fall in net debt liabilities of the domestic sectors in 2022, with a sharp growth in the central bank's international reserves. International reserves might continue to increase noticeably in 2022, although at a slower pace than in the year before, with further improvement in reserve adequacy indicators. Net foreign assets of credit institutions are expected to continue growing, with the improvement in the net external position of other domestic sectors. By contrast, the government might continue to borrow in the foreign markets, albeit with a slower increase in liabilities relative to the previous two years.

In line with the projected fall in total gross external debt, accompanied by the increase in external debt assets and the further rise in nominal GDP, the relative indicators of gross and net external debt might continue to improve. At the end of the year, the gross debt to GDP ratio might stand around the level last recorded in late 2005. The trends in net external debt reflect even more the intensity of the downward trend in external imbalances, since the value of external debt claims might exceed the value of external debt liabilities at the end of the projection horizon.

Projection of capital flows and the decrease in net external debt liabilities are related to the estimate of the current and capital account surplus, which is exposed to significant risks. In addition, it should not be disregarded that the external liabilities accumulated earlier continue to make Croatia prone to risks of a deterioration in financing conditions and the worsening of the global investment climate. However, these risks declined considerably with the strengthening of Croatia's external position, which contributed to enhancing the resilience of the domestic economy.

## 9 Monetary policy

In the second half of 2021, the CNB continued to pursue an expansionary monetary policy, mostly by purchasing foreign exchange inflows from the Ministry of Finance (MoF). As in the first half of the year, no additional monetary policy measures were taken by the central bank owing to stable financing conditions in the domestic financial markets.

The exchange rate of the kuna against the euro was relatively stable during the second half of the year, with no significant pressures in the foreign exchange market. Consequently, after having sold to the banks a net total of EUR 70m in April and June through foreign exchange interventions, the CNB made no further interventions in the second half of the year. On the other hand, on several occasions the CNB purchased foreign exchange inflows from the Ministry of Finance, mostly related to EU funds. Having purchased EUR 1.8bn in the first half of the year, from July to end-November the CNB purchased a net of EUR 1.4bn. If total foreign exchange transactions are observed,

from the beginning of the year to November 2021 the CNB purchased net EUR 3.1bn, creating a total of HRK 23.5bn in reserve money (Figure 9.1).

In contrast with the first half of 2020, when the CNB purchased government bonds in order to preserve the stability in the government securities market, in the first eleven months of 2021 there was no need for this monetary policy measure. Certain bonds having fallen due, the stock of total subscribed bonds of the Republic of Croatia decreased by HRK 1.4bn from the end of the previous year. As regards other kuna operations, the CNB continued to conduct regular weekly operations at a fixed rate of 0.05%. However, in the conditions of large kuna liquidity surpluses in the monetary system, there was such little interest on the part of banks that the CNB did not place any funds through this instrument of monetary policy in the first eleven months of 2021. No structural operations were used to create additional kuna liquidity, and their stock stood at HRK 3.1bn at end-November, down by HRK 1.5bn from the end of 2020 owing to early repayments.

After the average daily surplus liquidity of the domestic banking system reached a record high of HRK 72.0bn in June, banks' free reserves decreased in the second half of the year, mostly due to a strong growth in government kuna deposits with the CNB, standing at HRK 66.4bn in November. However, surplus liquidity increased from the end of 2020, when it stood at HRK 54.7bn (Figure 9.2), which is largely the result of the purchase of foreign exchange from the government.

Gross international reserves of the Republic of Croatia were EUR 24.2bn at the end of November 2021 (Figure 9.3), up by EUR 5.3bn (27.8%) from the end of 2020. Net usable reserves grew by EUR 3.3bn (18.4%) in the same period, to EUR 20.9bn at end-November. The growth in gross reserves was mostly due to purchases of foreign exchange from the government, a higher level of agreed repo transactions and a new allocation of Croatia's special drawing rights with the International Monetary Fund. Both gross and net reserves continued to be higher than reserve money (M0). It should be noted that, if needed, the CNB can create additional foreign exchange liquidity through a swap line agreed for the first time in April 2020 with the European

Figure 9.1 Flows of reserve money (M0) creation

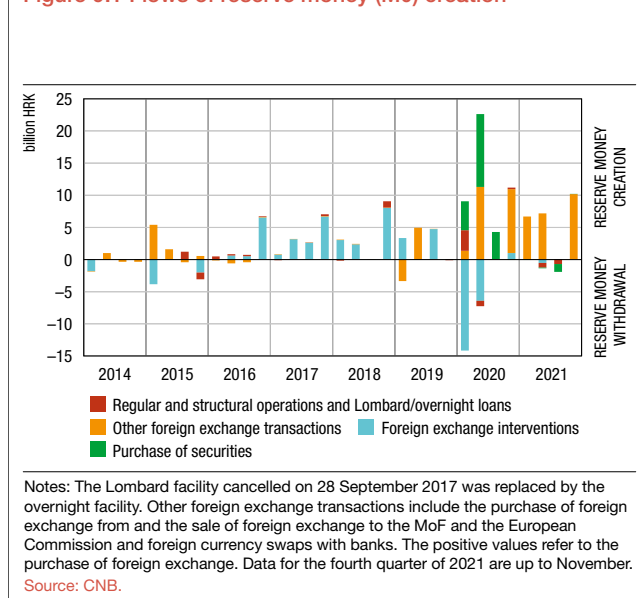


Figure 9.2 Bank liquidity and reserve money

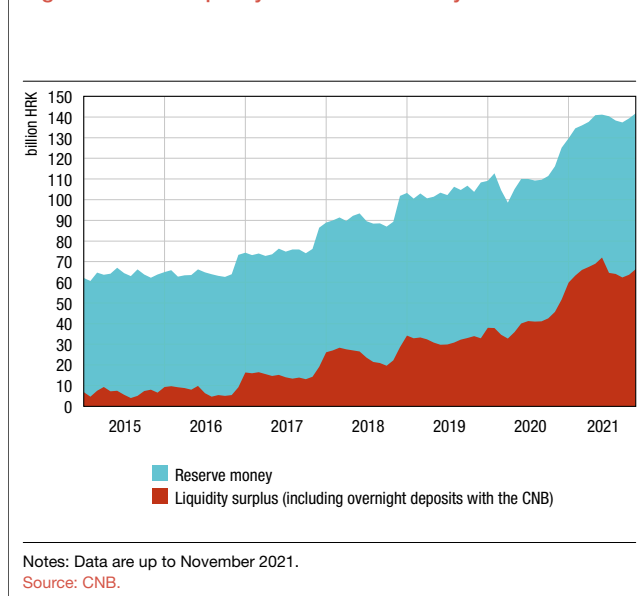
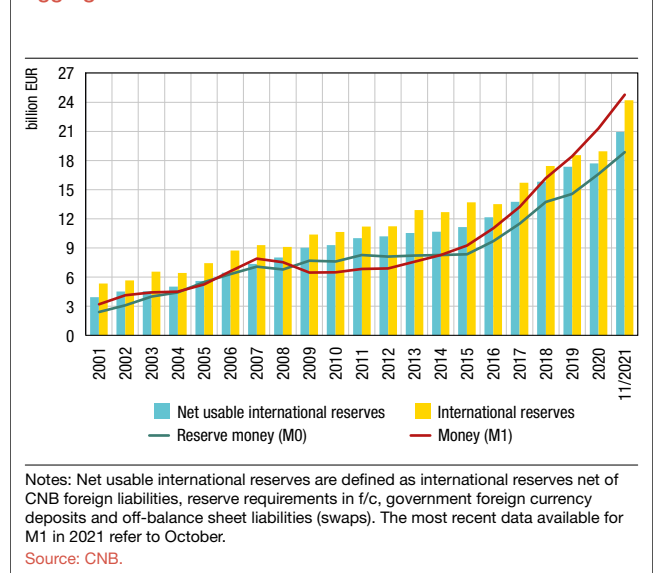
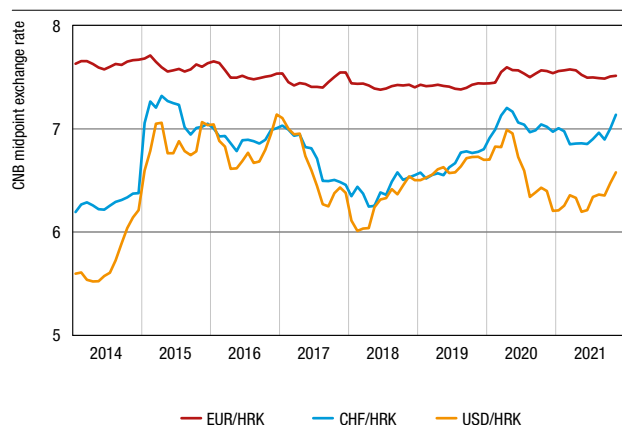


Figure 9.3 International reserves of the CNB and monetary aggregates



**Figure 9.4 Nominal exchange rates of the kuna against selected currencies**



Source: CNB.

Central Bank, allowing for the exchange of the kuna for the euro up to EUR 2bn.

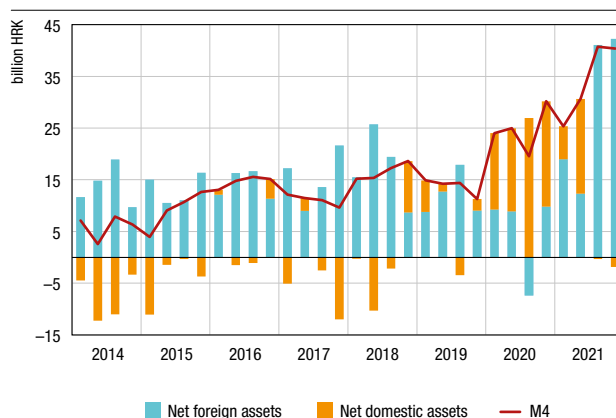
The kuna/euro exchange rate was stable in 2021. Following a slight depreciation in the first quarter, the appreciation of the nominal exchange rate of the kuna against the euro, which began in May and June, continued until mid-July when the exchange rate started to depreciate due to the rising epidemiological uncertainty and a pronounced demand for foreign currency by the financial and corporate sectors. The exchange rate appreciated mildly in August due to the stronger inflow of foreign currency at the peak of the tourist season. It started depreciating slightly in September and continued to do so during the following two months. The exchange rate of the kuna against the euro stood at EUR/HRK 7.52 at the end of November 2021, down by 0.4% relative to the end of the same month in 2020, while the average exchange rate in the first eleven months of 2021 also stood at EUR/HRK 7.52, having decreased by 0.1% from the same period in 2020 (Figure 9.3). Compared to the central rate<sup>25</sup>, in the period from Croatia's entry to the European Exchange Rate Mechanism to the end of November 2021, the average exchange rate moved within a very narrow range of  $-1.0\%$  to  $+0.8\%$ . The exchange rate of the kuna against the US dollar and the Swiss

## 10 Public finance

According to the quarterly data on the execution of the consolidated general government budget (ESA 1010), the budget recorded a deficit of HRK 9.3bn in the first half of 2021. This is an improvement from the deficit of HRK 15.2bn generated in the same period of the previous year, reflecting milder measures against the pandemic, economic recovery and the reduced need for fiscal stimuli. Observed on a quarterly basis, the first quarter witnessed a deficit of HRK 4.6bn, comparable with that of the same period last year, while in the second quarter the deficit stood at HRK 4.7bn, which was a marked improvement from

<sup>25</sup> Croatia entered the Exchange Rate Mechanism in July 2020, with the central rate of the kuna being set at 1 euro = 7.5345 and the standard fluctuation band at  $\pm 15\%$  around this rate.

**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 2021 refer to end-October.

Source: CNB.

franc was higher in late November 2021 than at the end of November 2020, reflecting the weakening of the euro against these two currencies on global financial markets.

The strong upward trend in monetary aggregates continued in the second half of 2021 at a stronger intensity than in the first six months. The annual rate of growth in total liquid assets (M4) was 11.2% (transaction-based) at end-October 2021, an acceleration relative to the growth of 8.7% in June and 9.1% at end-2020 (Figure 9.5). The growth in M4 was driven by the strong rise in the net foreign assets (NFA), primarily stemming from the seasonal inflow of foreign exchange from tourism, but also from the purchase of foreign exchange inflows from the MoF, mostly related to EU funds. Net domestic assets (NDA) decreased as a result of the decline in net claims on the central government, with a rise in government deposits with the CNB and a slight increase in claims.

Having regard to the anticipated rise in the current and capital account surplus, it may be expected that the CNB will continue to use foreign exchange transactions to boost international reserves and create reserve money, thus preserving the stability of the exchange rate of the kuna against the euro. For this reason, monetary policy will remain expansionary.

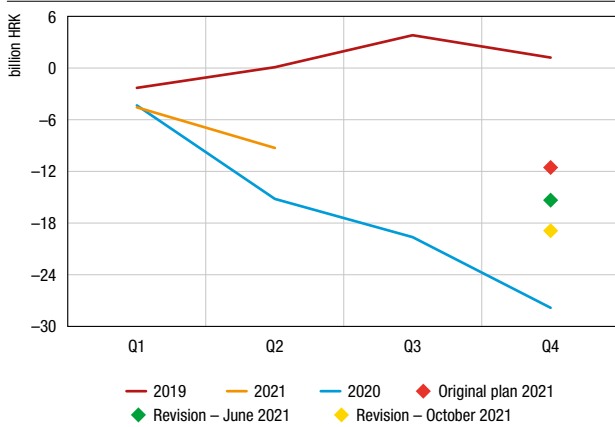
the HRK 10.8bn deficit generated in the same period of 2020.

At the end of October, the Government of the Republic of Croatia adopted, and in mid-November the Croatian Parliament voted in favour of, a proposal of amendments to the state budget and financial plans of extrabudgetary users for 2021 to raise the planned level of the deficit of the consolidated general government by HRK 3.6bn, compared to the budget revision adopted in June. Thus, the budget deficit is now planned at HRK 18.9bn (4.5% of GDP) from the previous HRK 15.3bn (3.6% of GDP). The widening of the deficit mostly resulted from higher expenditures at the level of the state budget, while the expected extrabudgetary funds and local government balance did not change significantly.

As concerns the movement of total revenues according to the

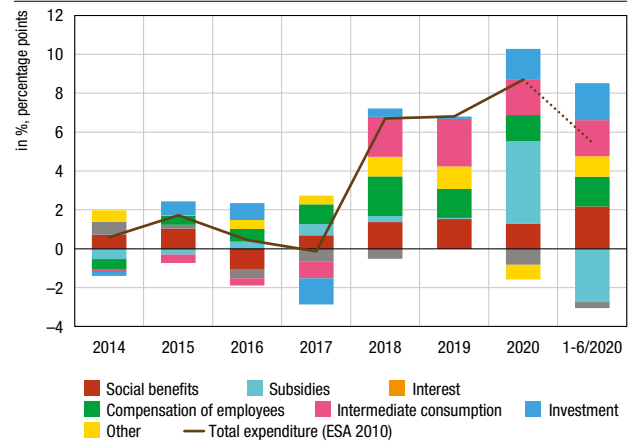


**Figure 10.1 General government cumulative balance by quarters (ESA 2010)**



Sources: Eurostat and MoF (CNB calculations).

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



Source: Eurostat (CNB calculations).

ESA methodology, total revenues grew considerably in the first half of 2021, from the comparable period of the previous year (13.7%). The growth of total revenues was mostly driven by the strong increase in revenues from indirect taxes, which was primarily the reflection of the recovery of personal consumption and tourist activity as well as changes in regulations in the excise system with regard to the increase in excise duties on tobacco and tobacco products. Other revenues also worked in the same direction, having grown largely due to the consequences of the increase in the absorption of EU funds. Revenues from social contributions also made a positive contribution to the movement of total revenues, reflecting favourable developments in the labour market, i.e. the increase in wages and employment.

In contrast to the above, revenues from direct taxes made a negative contribution to the movement of total revenues, mostly reflecting the effect of the fifth round of the tax reform, that is the changes (lower tax rates) in the profit and income tax system, which had been applied since 1 January 2021.

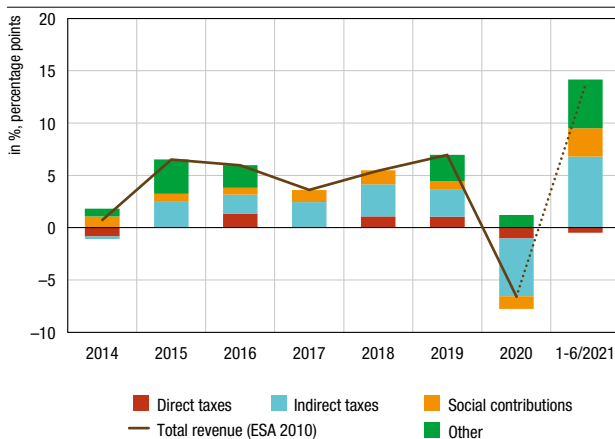
As regards the expenditure side of the budget according to the ESA methodology, total expenditures grew moderately in the first half of 2021 from the same period of the previous year

(5.5%). The decrease in pandemic-related grants paid to the economy largely offset the increase in the expenditure side of the budget. The growth of total expenditures was also mitigated by a further decrease in interest expenditures, thus reflecting still very favourable financing conditions in the capital market.

By contrast, social benefits, which in addition to benefits in cash also include goods and services provided to the citizens by the government, grew in the first half of the year as a result of the increase in expenditures on health care and higher social support, including the supplement to pensions due to the COVID-19 pandemic. Expenditures on employees grew at a similar pace as in the previous year. In 2021, this was mostly due to the increase in the base for the calculation of wages of civil servants and government employees of 4%, which entered into force in the beginning of the year. Marked growth was also perceived in general government investments as a result of a considerable use of EU funds and expenditures on intermediate consumption, apparently also partly reflecting the increase in material expenditures related to the pandemic.

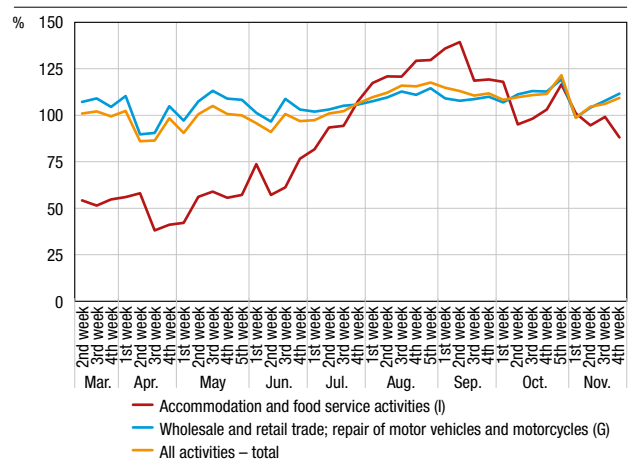
Favourable developments in public finance continued during the third and in the beginning of the fourth quarter. According

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

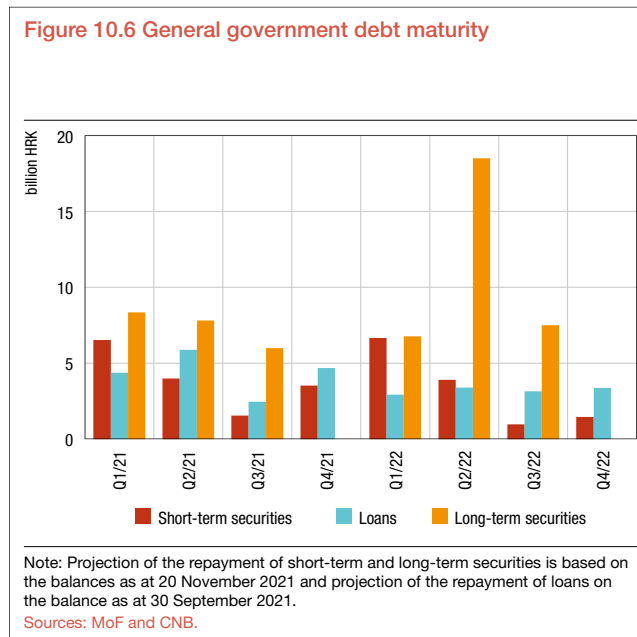
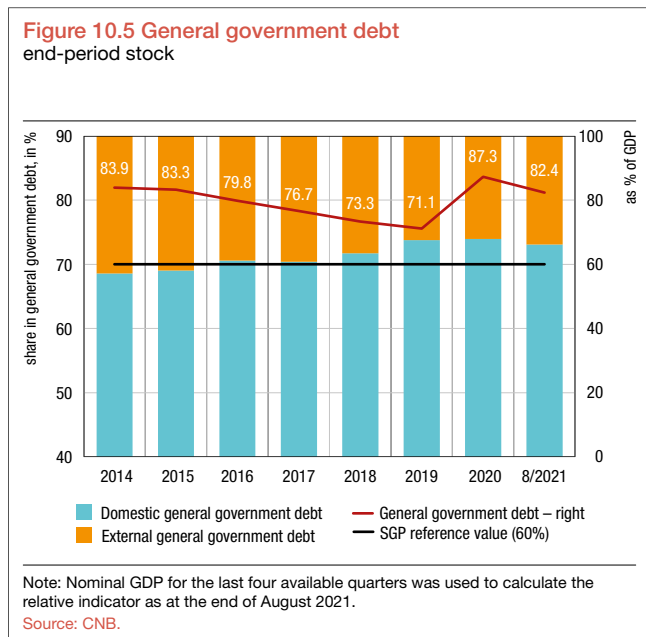


Source: Eurostat (CNB calculations).

**Figure 10.4 Index of the amount of fiscalised receipts relative to the comparable period in 2019**



Sources: MoF and Tax Administration (CNB calculations).



to preliminary MoF data for the central government under Directive 2011/85/EU, the central government generated a budget surplus of HRK 3.8bn in the third quarter of 2021. This surplus is an improvement of HRK 2.4bn from the surplus of HRK 1.4bn generated in the same period of the previous year. If MoF government budget data under the chart of accounts are analysed, indirect taxes (VAT and excise duties) and social contributions recorded more favourable trends on the revenue side in the third quarter of 2021 than in the same period of the previous year. By contrast, direct tax revenues fell perceptibly from the same period of the previous year. On the expenditure side of the budget, expenditures on the use of goods and services, assistance, employee compensations and subsidies, though growing at a slower pace, recorded perceptible annual growth in the third quarter of 2021, reflecting the smaller amounts paid out in job preservation grants. In addition, expenditures on the acquisition of non-financial assets also increased, while only interest expenditures acted in the opposite direction.

As regards the developments in revenues and expenditures, according to MoF data<sup>26</sup>, a negative central government budget balance of HRK 1.8bn was recorded in October 2021, which is an improvement of HRK 0.7bn from the same period in 2020, caused by a stagnation of revenues and a decrease in expenditures. At the same time, available recent data from the

fiscalisation system in November point to a slight improvement in the performance of some activities from October.

Consolidated general government debt stood at HRK 344.7bn at the end of August 2021, an increase of HRK 14.5bn from the end of 2020. The relative indicator of public debt decreased to 82.4% of GDP in August 2021 from 87.3% of GDP at the end of 2020, largely reflecting a favourable effect of the growth of economic activity.

As regards issues in financial markets, in late February the Croatian Government issued bonds worth EUR 2bn (two euro issues worth EUR 1bn each) on the international market, and in early July a HRK 9bn-worth bond on the domestic market. The first bond issued in February is maturing in 2033 with an annual coupon interest rate of 1.125% and a yield of 1.257%, while the second bond issued in February is maturing in 2041 with an annual coupon interest rate of 1.750% and a yield of 1.788%. The funds raised by the issued bonds were used to refinance the matured eurobond worth USD 1.5bn with a coupon interest rate of 6.375% as well as to refinance the budget deficit. A domestic bond maturing in 2028 was issued in July, with an annual coupon interest rate of 0.500% and a yield of 0.533%. The funds raised were used to refinance the bond which matured in July 2021 in the nominal amount of HRK 6bn.

## 11 Deviations from the previous projection

The estimates of global economic growth for 2021 are slightly less favourable than anticipated in the July 2021 projection. Thus, according to the most recent IMF projection, global economic growth in 2021 might be merely 0.1 percentage point lower than in the previous projection cycle. However, the anticipated growth of Croatia's main trading partners might be slightly faster than anticipated in the previous projection, which

is primarily the reflection of a more favourable performance in the last two quarters. The prices of crude oil and other raw materials as well as estimated inflation in the euro area exceeded earlier expectations. At the same time, the monetary policy of major central banks remained extremely accommodative in 2021, providing support to the continuation of the recovery of the economy from the crisis caused by the pandemic, combined with somewhat changed expectations with regard to normalisation dynamics.

The real GDP growth rate in 2021 might stand at 10.8%, perceptibly higher than anticipated in July, when the projected annual growth rate stood at 6.8%. The revision of the expected growth rate predominantly reflects better expectations with

<sup>26</sup> Monthly data for the central government, state government and social security sub-sectors, which are required, under Council Directive 2011/85/EU to be published before the end of the following calendar month. The published data refer to general government units according to the scope of ESA 2010 statistical methodology, except for data pertaining to local government, which are published on a quarterly basis.

Table 11.1 Basic assumptions, deviations from the previous projection

	2021		
	Previous projection (7/2021)	Current projection	Deviation
<b>GDP (real rate of change, in %)</b>			
Rest of the world	6.0	5.9	-0.1
Euro area	4.4	5.0	0.6
USA	6.4	6.0	-0.4
Developing countries and emerging market countries	6.7	6.4	-0.3
Central and Eastern European countries	4.4	6.0	1.5
Main trading partners of the Republic of Croatia	3.7	4.3	0.6
<b>Prices</b>			
Euro area HICP <sup>a</sup>	1.5	2.2	0.7
Oil prices (USD/barrel) <sup>b</sup>	66.1	70.9	4.8
<b>Key interest rates</b>			
EURIBOR 3M (end of year) <sup>c</sup>	-0.50	-0.51	0.0
ECB main refinancing rate <sup>c</sup>	0.00	0.00	0.0
US federal funds target rate <sup>c</sup>	0.30	0.25	-0.1

<sup>a</sup> ECB, September 2021. <sup>b</sup> Bloomberg, Brent crude oil futures. <sup>c</sup> Bloomberg.

Source: IMF (WEO, October 2021).

regard to the contribution of net foreign demand to total economic growth. Total exports might thus increase by 31.1% from 15.0% as anticipated in July. The upward revision reflects better expectations with regard to the exports of both goods and services. Tourist season results were notably better than the projections, reflected positively in the exports of services. At the same time, the performance of goods exports was also above the earlier expectations. As regards domestic demand, personal consumption in 2021 might increase by 9.4%, higher than estimated in July (6.3%). The upward revision relative to the July projection reflects more favourable outturns in the second and the third quarter than previously expected as well as more favourable developments with regard to the growth of employment and wages. By contrast, capital investments might grow at a slightly decelerated rate than previously expected and increase by 7.9% (previously 8.4%). The downward correction is the result of a slightly poorer performance in the second quarter. Government consumption might also increase at a somewhat slower pace than previously expected (1.0% from the previous 1.9%), with the downward correction reflecting the performance in the third quarter. Total imports might increase by 19.0% in 2021, more than projected in July, when growth was expected to stand at 12.8%. The faster growth of total imports reflects the previous performance as well as stronger expected growth in total exports and personal consumption. To a certain extent, the correction was offset by slightly less favourable expectations concerning the growth in investment activity. The revision of the growth of imports is less pronounced than the revision of the growth of exports, so that the contribution of net foreign demand to the total real GDP growth might be positive (3.8 percentage points, relative to the neutral contribution expected in the previous projection).

The projected average annual consumer price growth rate of 2.4% in 2021 is 0.7 percentage points higher than that projected in July. This is a result of the continued growth of the prices of refined petroleum products, due to which the estimated average annual rise in energy prices at the level of the whole of 2021 increased from 5.9% in the previous projection to 7.2% in the current one. Furthermore, the estimated average annual rate

of change in food prices increased to 1.2%, from the previously projected anticipated change of -0.2%. To a lesser extent, the increase in projected inflation in 2021 was also the consequence of a somewhat higher projected annual CPI growth, excluding food and energy (1.5% in the current from 1.3% in the previous projection). The increase in the estimated average annual rates of change of all components relative to the previous projection may be attributed to the factors on the supply side (reduced production, disturbances in the supply chains and the increase in freight charges) and to the recovery of demand due to the reopening of the Croatian and other economies worldwide.

The estimate of the current and capital account surplus in 2021 was raised from the previous projection by 1.8 percentage points. The above correction was primarily due to the much more favourable results of tourism revenues during the summer months, which exceeded the pre-crisis level. Goods exports and imports results during the first nine months of 2021 were also considerably better than expected in the previous projection. Accordingly, their estimate for the whole year was perceptibly revised. The correction was slightly larger on the imports than on the exports side, so that the estimated foreign trade deficit was larger than previously expected. The primary and secondary income account balance projections are not comparable because of methodological changes that occurred in the meantime on the above-mentioned sub-accounts<sup>27</sup>. If these changes are excluded, the balance in the primary income account deteriorated due to the raised estimate of the profitability of foreign-owned banks and enterprises, which was only partially offset by a slightly more favourable estimate of the growth in compensation of persons temporarily employed abroad. At the same time, the sum of the secondary income account balance and capital transactions increased moderately due to the more favourable estimate of net inflows from personal transfers. As regards external debt, gross external debt is expected to exceed the July projection until the end of 2021, mainly due to the larger debt of the central bank resulting from the increased amount of IMF special drawing

27 For more information, see <https://www.hnb.hr/en/-/revizija-statistike-odnosa-s-inozemstvom>.

Table 11.2 Domestic indicators, deviations from the previous projection

	2021			2022		
	Previous projection (7/2021)	Outturn	Deviation	Previous projection (7/2021)	Current projection	Deviation
<b>National accounts (real rate of change, in %)</b>						
GDP	6.8	10.8	4.0	4.4	4.1	-0.3
Personal consumption	6.3	9.4	3.0	2.9	3.7	0.7
Government consumption	1.9	1.0	-0.9	2.3	2.8	0.5
Gross fixed capital formation	8.4	7.9	-0.5	6.9	7.8	0.8
Exports of goods and services	15.0	31.1	16.1	11.0	8.1	-2.8
Imports of goods and services	12.8	19.0	6.2	9.5	7.8	-1.8
<b>Labour market</b>						
Number of employed persons (average rate of change, in %)	1.6	2.2	0.7	1.2	1.5	0.3
Registered unemployment rate	8.2	8.2	0.0	7.5	7.5	0.0
ILO unemployment rate	6.9	6.8	-0.1	6.3	6.2	-0.1
<b>Prices</b>						
Consumer price index (rate of change, in %)	1.7	2.4	0.7	1.5	2.4	0.9
<b>External sector</b>						
Current account balance (as % of GDP)	-0.1	2.0	2.1	-0.9	1.4	2.4
Current and capital account balance (as % of GDP)	2.7	4.6	1.8	2.9	5.0	2.2
Gross external debt (as % of GDP)	76.0	74.6	-1.4	69.9	68.1	-1.9
<b>Monetary developments (rate of change, in %)</b>						
Total liquid assets – M4	4.9	10.1	5.3	5.4	8.0	2.6
Total liquid assets – M4 <sup>a</sup>	4.9	10.0	5.1	5.4	8.0	2.6
Placements (excl. central government)	2.9	2.8	-0.1	3.4	3.3	-0.2
Placements (excl. central government) <sup>a</sup>	3.4	3.4	0.0	3.5	3.4	-0.2

<sup>a</sup> Rates of change are calculated on the basis of data on transactions (see Annex 1 Introduction of data on transactions in monetary developments analysis in the CNB Bulletin No. 221).  
Source: CNB.

rights and the volume of repo transactions. It is noteworthy that both positions have a neutral effect on net external debt because the CNB's gross international reserves are raised by the same amount. Despite the higher gross debt level, the relative indicator of gross external debt might be slightly lower than previously expected, thanks to a more favourable estimate of nominal GDP.

The projection for 2021 growth in credit institutions' placements (government excluded) remained the same as in the previous projection (3.4%). Lending to households was stronger, while lending to non-financial corporations in the previous part of the year was smaller than previously expected. The base effect or the strong increase in placements to the corporate sector

in 2020 might also be reflected in the slowdown of placements to this sector. Household lending was mostly affected by the growth in housing loans, which was also attributed to the continuation of the government housing loans subsidy programme, accompanied by the increase in general-purpose cash loans.

The growth in total liquid assets (M4) in 2021 is projected at 10.0% and has been revised considerably upward from the previous projection, when it stood at 4.9% (transaction-based). In the structure of this broadest monetary aggregate, the accumulation of funds in transaction accounts increased much more than previously expected, coupled with a larger rise in foreign currency deposits.

## 12 Annex A: Macroeconomic projections of other institutions

**Table 12.1 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	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
<b>Croatian National Bank (December 2021)</b>	<b>10.8</b>	<b>4.1</b>	<b>9.4</b>	<b>3.7</b>	<b>7.9</b>	<b>7.8</b>	<b>31.1</b>	<b>8.1</b>	<b>19.0</b>	<b>7.8</b>	-	-	<b>1.7</b>	<b>1.5</b>
Eastern Europe Consensus Forecasts (November 2021)	7.7	4.5	7.2	3.9	8.3	7.5	-	-	-	-	6.7	3.5	2.3	2.4
European Bank for Reconstruction and Development (November 2021)	8.4	4.2	-	-	-	-	-	-	-	-	-	-	-	-
European Commission (November 2021)	8.1	5.6	7.8	3.5	2.7	1.1	22.1	15.0	15.1	11.9	-	-	2.2	2.0
Raiffeisen bank* (November 2021)	7.0	4.4	7.5	3.5	8.5	11.0	20.7	14.5	13.3	9.0	6.7	4.2	2.3	2.2
International Monetary Fund (October 2021)	6.3	5.8	-	-	-	-	-	-	-	-	-	-	2.0	2.0
Ministry of Finance (October 2021)	9.0	4.4	8.4	3.2	6.9	12.1	23.9	10.7	15.3	10.7	-	-	2.4	2.6
World Bank (October 2021)	7.6	6.0	-	-	-	-	-	-	-	-	-	-	-	-

<sup>a</sup> 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 2021 and 2022.

Sources: Publications of the respective institutions.

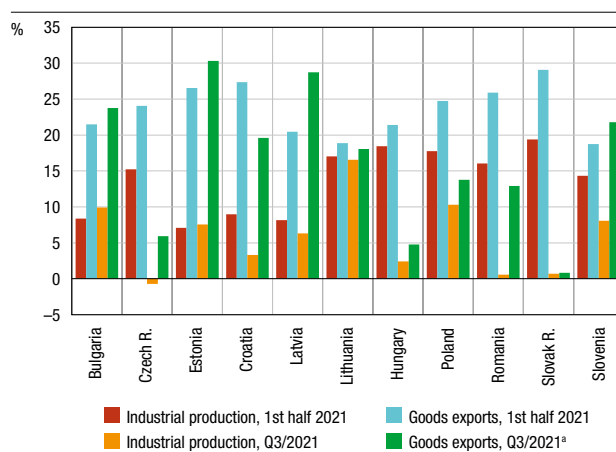
## 13 Annex B: Comparison of Croatia and selected countries

**Table 13.1 Gross domestic product**

	Year-on-year rate of change, original data			Quarter-on-quarter rate of change, seasonally adjusted data			
	2018	2019	2020	Q4/2020	Q1/2021	Q2/2021	Q3/2021
Bulgaria	3.1	3.7	-4.2	-0.2	-0.1	-0.3	-
Czech R.	3.2	2.3	-5.6	0.7	-0.4	1.0	-0.3
Estonia	4.4	5.0	-2.9	2.6	3.9	4.3	-
Croatia	2.9	3.5	-8.1	4.0	7.3	0.8	2.7
Latvia	4.0	2.0	-3.6	1.5	0.5	2.6	-
Lithuania	3.9	4.3	-0.9	1.8	2.1	2.0	0.0
Hungary	5.4	4.6	-5.0	1.9	1.6	2.9	-
Poland	5.4	4.7	-2.7	-0.4	1.4	1.6	-
Romania	4.5	4.1	-3.9	3.8	2.2	1.5	0.3
Slovak R.	3.7	2.5	-4.8	0.4	-1.3	1.9	0.4
Slovenia	4.4	3.2	-5.5	-0.2	1.5	1.9	-
<b>Average<sup>a</sup></b>	<b>4.1</b>	<b>3.6</b>	<b>-4.3</b>	<b>1.4</b>	<b>1.7</b>	<b>1.8</b>	<b>0.6</b>

<sup>a</sup> Simple average.

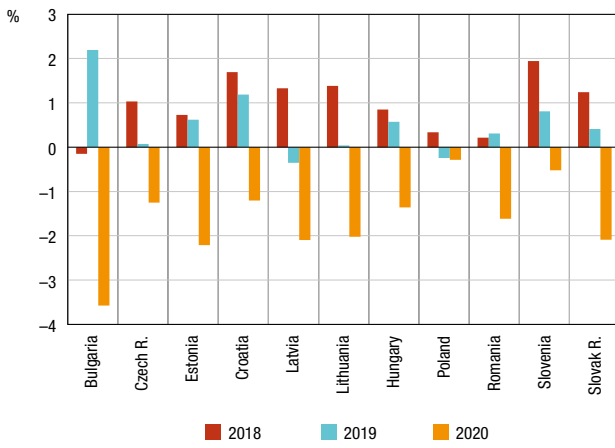
Sources: Eurostat, EC, CBS and CNB.

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


<sup>a</sup> Data for Estonia refer to July and August 2021.

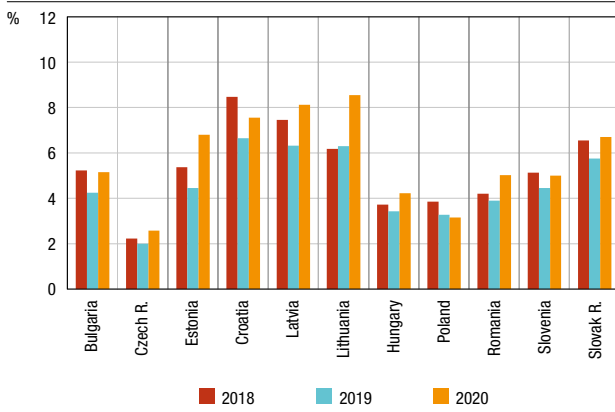
Sources: Eurostat and CBS.

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



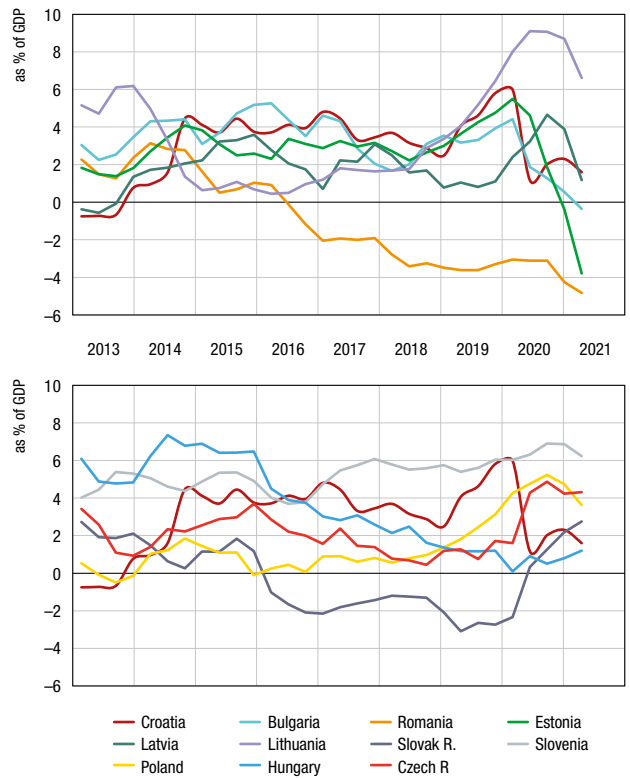
Source: Eurostat.

**Figure 13.3 Labour Force Survey unemployment rate**



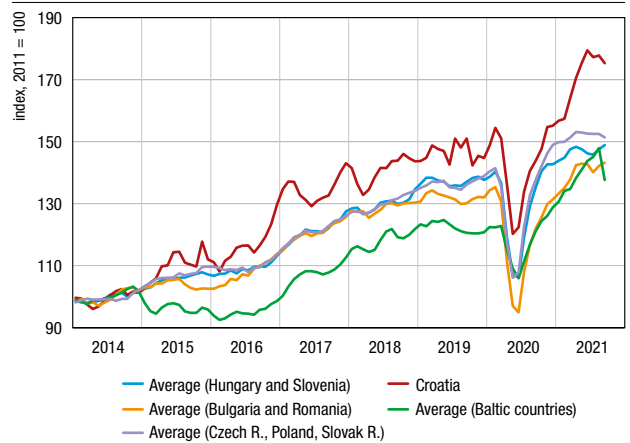
Source: Eurostat.

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



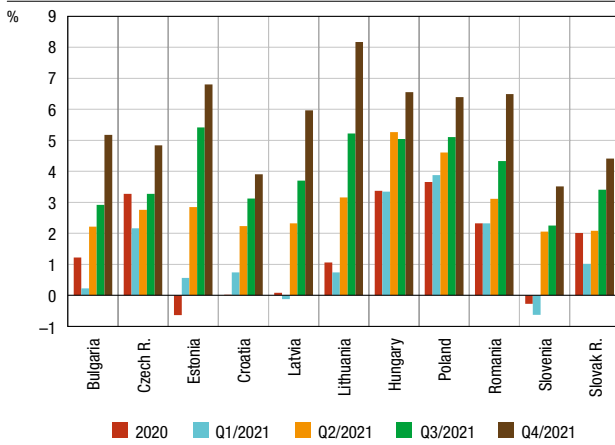
Sources: Eurostat and CNB.

**Figure 13.5 Goods exports**  
quarterly moving average, seasonally adjusted data



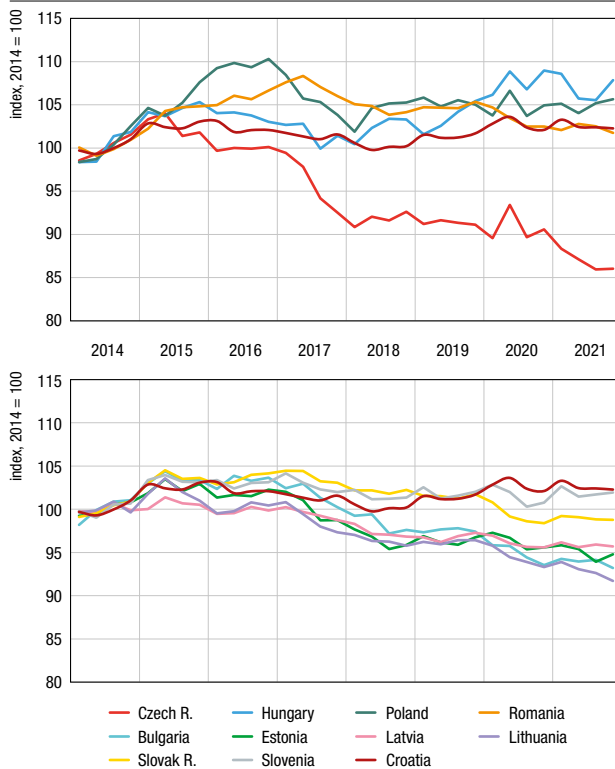
Sources: Eurostat and CNB.

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



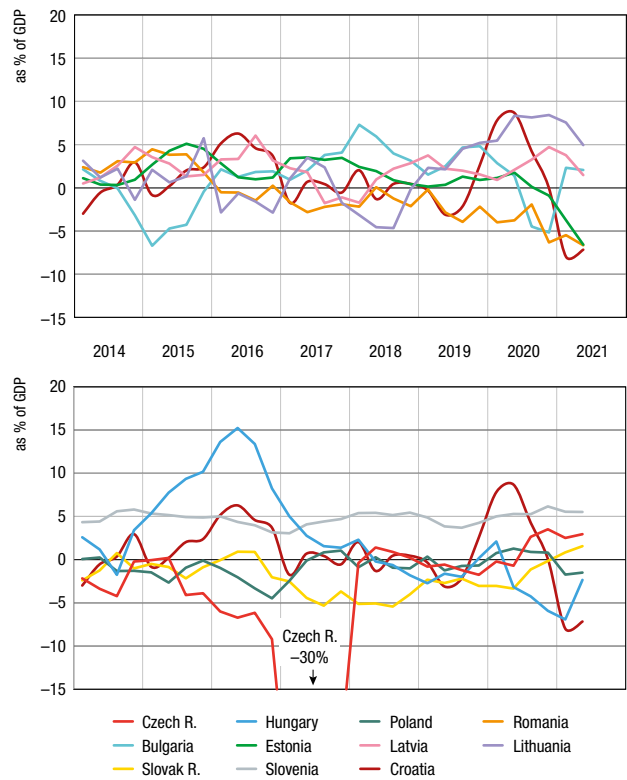
Note: Data for the fourth quarter of 2021 refer to October.  
Source: Eurostat.

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



Notes: Data for 2021 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



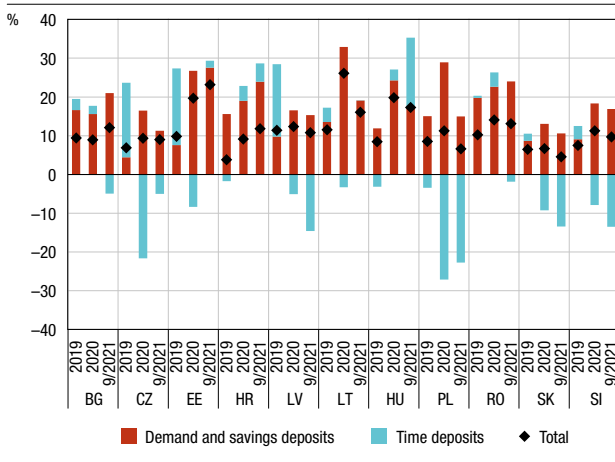
Sources: Eurostat and CNB.

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



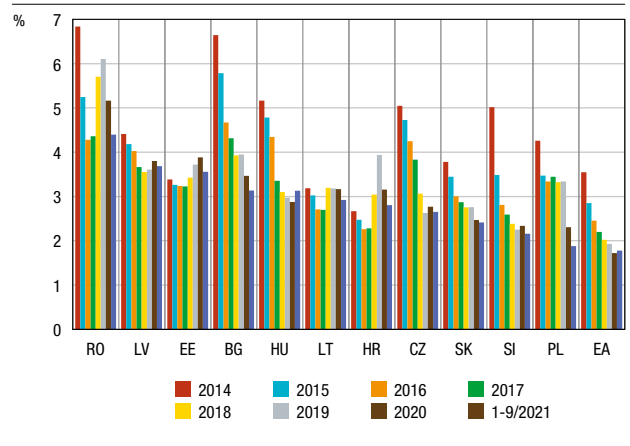
Sources: ECB and CNB.

**Figure 13.10 Private sector deposits**  
year-on-year rate of change, transaction-based



Sources: ECB and CNB.

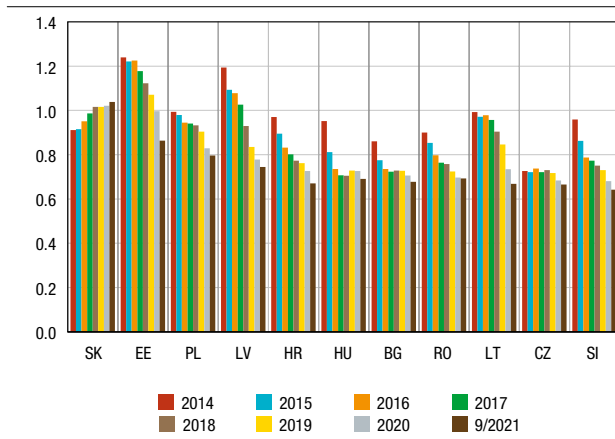
**Figure 13.13 Short-term interest rates on corporate loans**



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

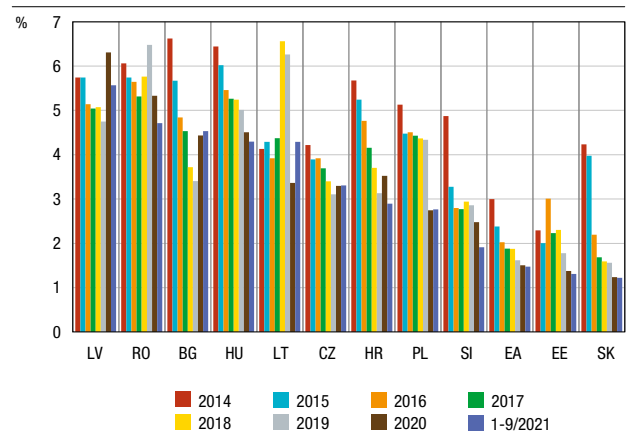
Source: ECB.

**Figure 13.11 Placement to deposit ratio of the private sector**



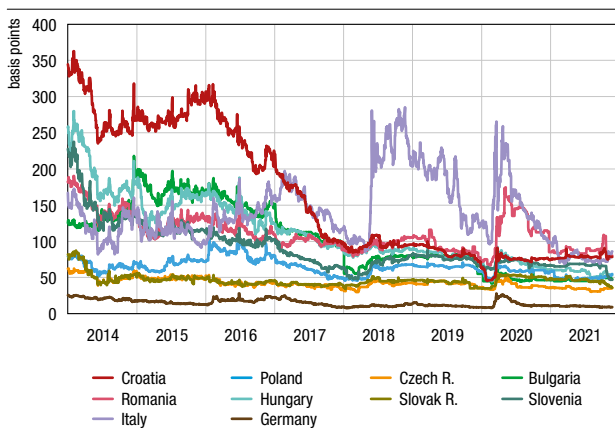
Sources: ECB and CNB.

**Figure 13.14 Interest rates on housing loans**



Sources: ECB and NCBS.

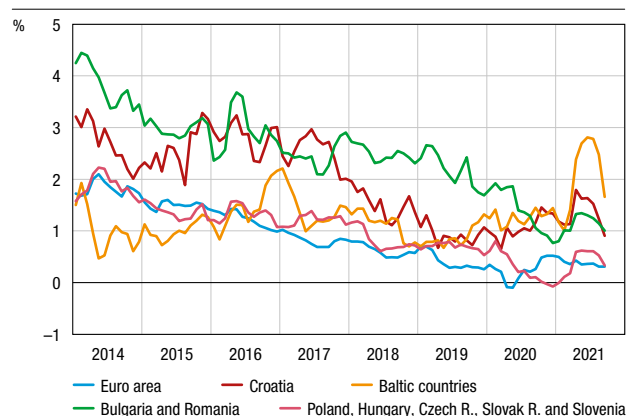
**Figure 13.12 CDS spreads for 5-year government bonds of selected countries**



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**

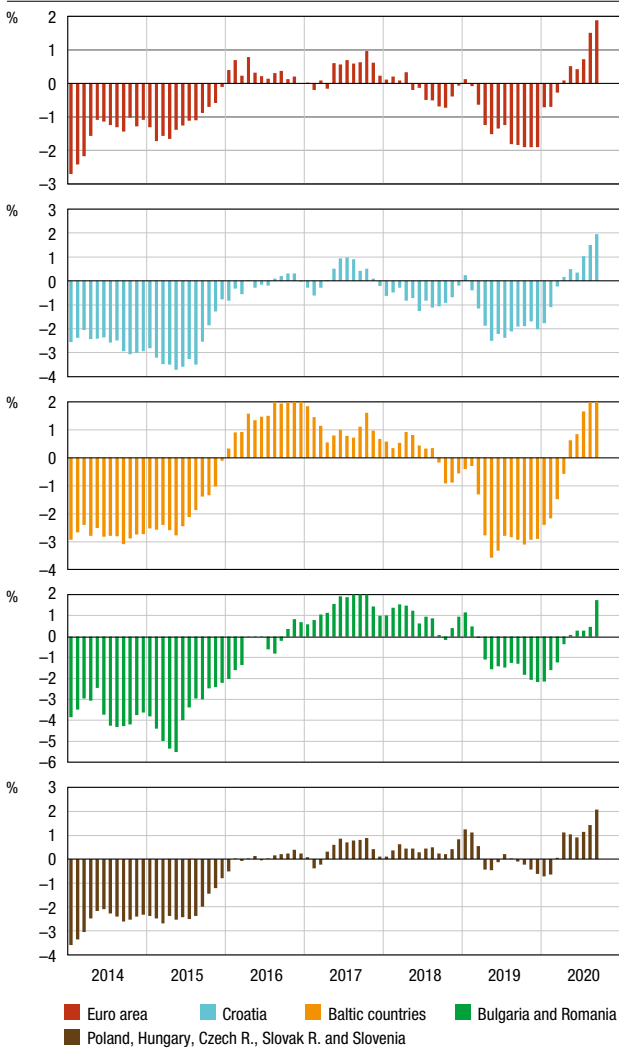


Notes: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts. Country group averages are not weighted.

Sources: ECB and Consensus Forecasts.



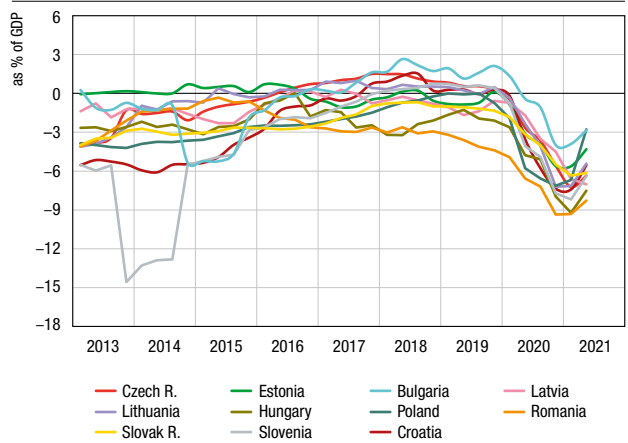
**Figure 13.16 Spread between expected and achieved real interest rate on corporate loans up to EUR 1m and with maturity up to 1 year**



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

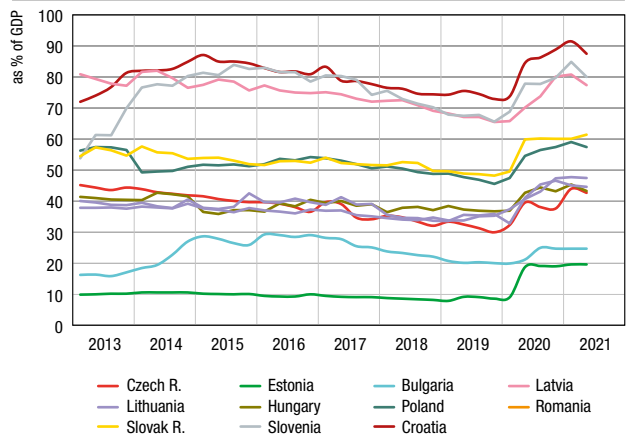
Sources: ECB and Consensus Forecasts.

**Figure 13.17 Consolidated general government balance four-quarter moving sums**



Sources: Eurostat and CNB.

**Figure 13.18 General government debt end-quarter stock**



Sources: Eurostat and CNB.



SK – Slovak Republic  
UK – United Kingdom

### Symbols

– – no entry  
.... – data not available

0 – value is less than 0.5 of the unit of measure being used  
Ø – average  
a, b, c,... – indicates a note beneath the table and figure  
\* – corrected data  
( ) – incomplete or insufficiently verified data

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