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# Semi-annual Information

**Semi-annual Information on the Financial Condition, the Degree of Price Stability Achieved and the Implementation of Monetary Policy in the Second Half of 2022**

Zagreb, May 2023

**CROATIAN NATIONAL BANK**  
EUROSYSTEM





## SEMI-ANNUAL INFORMATION 2022

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PUBLISHER

Croatian National Bank  
Trg hrvatskih velikana 3  
10000 Zagreb

[www.hnb.hr](http://www.hnb.hr)

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

ISSN 1849-3483 (online)

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## Introduction of the euro: lower inflation and more favourable financing conditions for citizens and corporations

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Inflation in Croatia is lower than in the new EU member states that did not introduce the euro and the financing conditions for Croatian citizens and corporations are more favourable. One of the largest benefits of the introduction of the euro in Croatia is the reduction of currency risk, which is now clearly visible and precisely measurable (Box 1). The whole of 2022 was marked by intensified activities on the introduction of the euro and the EU Council Decision of 12 July 2022 determined that the Republic of Croatia had fulfilled all the required conditions for the introduction of the euro, marking the beginning of the final leg of the Croatian journey to the euro area, which began with the adoption of the [Strategy for the Adoption of the Euro as the Official Currency in Croatia](#) in 2018.

The formal procedure preceding the introduction of the euro was completed on 12 July 2022, when the EU Council adopted the [Decision](#) on the adoption by Croatia of the euro on 1 January 2023. At the same time, by amending the relevant Regulation, the EU Council determined that the fixed conversion rate between the kuna and the euro was to be 7.53450 kuna per 1 euro, which corresponded to the then current central rate determined on the occasion of the Croatian kuna joining the exchange rate mechanism (ERM II) two years earlier. The EU Council Decision on the adoption by Croatia of the euro was based on the [Convergence Report of the European Commission and the Convergence Report of the ECB](#) published on 1 June 2022, in which it was established that Croatia fulfilled all of the nominal convergence criteria – the price stability criterion, the criterion of stability and sustainability of public finances, the criterion of exchange rate stability and the criterion of long-term interest rates – as well as on the fact that Croatian legislation was fully aligned with the relevant EU regulations. It is worth noting that in the beginning of the year, amid heightened inflation both in Croatia and the broader environment, there was some uncertainty about whether Croatia was going to fulfil the price stability criterion. Nevertheless, since the inflation rate in Croatia was comparable to inflation rates in other EU member states, the average domestic inflation rate in the period under consideration was lower than the reference value, and Croatia successfully fulfilled that nominal convergence criterion as well.

Following the EU Council Decision, the CNB Council adopted the decisions in the area of monetary policy in order to gradually align the CNB's monetary policy instruments with those applied in the Eurosystem. This included lowering the reserve requirement rate from 9% to 5% as of August and from 5% to 1% as of mid-December 2022 and cutting the rate of minimum required foreign currency claims from 17% to 8.5% as of August and entirely revoking the measure as of December. The reduction in the reserve requirement rate increased kuna liquidity by HRK 31bn, and the total effect of the revocation of minimum required foreign currency claims stood at EUR 5.4bn.

The banking system could thus dispose of a further EUR 9.5bn of liquidity and this, so far the highest reached liquidity level, mitigated the transposition of stricter financing conditions, spurred by the normalisation of the ECB monetary policy in the euro area, to the domestic financial market relative to the euro area members.

With regard to operational preparations for the currency changeover, the CNB was involved in all segments of these activities in the course of the year. The CNB participated in the adjustment of the legislative framework, managed the preparations for cash changeover and intensively cooperated with banks on IT and other adjustments that the banks were obliged to carry out before the adoption of the euro. In addition, CNB experts were involved in the work of coordination committees that led and supervised adjustments in the government sector and the non-financial corporate sector, as well as in the work of the Coordination Committee for Communication that was responsible for informing citizens in a timely manner about all important issues related to the adoption of the euro in Croatia.

In 2021 and 2022, CNB experts participated in drafting the **Act on the Introduction of the Euro as the Official Currency in the Republic of Croatia**, which was enacted by the Croatian Parliament on 13 May 2022. In addition to drafting the framework law, the CNB was also involved during the year in the preparation of amendments to current laws in the area of payment operations, foreign exchange operations and credit institutions, which were necessary to maintain legal certainty after the adoption of the new official currency. In the second half of the year, the CNB also adopted a set of by-laws based on the Act on the Introduction of the Euro, including by-laws in the area of monetary policy in order to fully align the framework for the implementation of monetary policy with that of the Eurosystem.

In 2022, procurement procedures for initial quantities of euro banknotes and coins were carried out, while euro banknotes and coins were frontloaded to banks. After the motifs for the Croatian side of euro coins were selected with the participation of Croatian citizens, the selection of the design for the national side of euro coins was completed in May, and minting of the euro coins commenced on 18 July 2022, just a few days after the adoption of the EU Council Decision on the adoption by Croatia of the euro. By the end of the year, the Croatian Mint had minted around 405 million euro coins with Croatian symbols on the national side. For the purposes of the adoption of the euro, euro banknotes were not produced separately, but the CNB secured the necessary initial quantities by borrowing from the Austrian central bank. As part of the frontloading, which took place in the period from early October to late December, banks took over 388 million euro coins and 62 million euro banknotes from the CNB. With regard to the withdrawal of kuna banknotes and coins, it should be noted that in the second half of the year citizens acted in accordance with the recommendations of the Government of the Republic of Croatia and the CNB and deposited a significant amount of kuna banknotes and coins in their bank accounts. Therefore, in late December 2022, the value of banknotes and coins in circulation was as much as 60% lower than in late 2021.

In December 2022, 877,952 euro coin starter kits for consumers and 37,295 euro

coin starter kits for business entities were sold at about 2,000 locations of banks, the Financial Agency and Croatian Post.

The Croatian Large Value Payment System (CLVPS), the payment system for the settlement of interbank payments in kuna in real time on a gross basis in central bank money, ceased to operate on 30 December 2022 at about 8 p.m. Kuna funds in the accounts of banks and other participants in the CLVPS were converted to euros and transferred to the euro accounts of the participants in TARGET2-HR. In the new system, interbank payments are made in euros in central bank money, monetary operations are executed, the supply of banks with cash is enabled, etc. This very complex operation was also conducted by the Croatian National Bank.

The Croatian National Bank and the Government jointly launched a comprehensive information campaign to inform Croatian citizens of all ages and educational backgrounds, those living in urban centres as well as in small places and rural communities, the digitally literate and those using traditional means of communication in a timely manner and completely about all key facts of the changeover of the Croatian kuna to the euro. The results of the survey on campaign results conducted by Ipsos agency showed that in December, 90% of citizens rated their level of information as good, very good or excellent, and in September the rating was at the level of 81.5%. The campaign accomplished the set informative objectives and it was the advertising agency's assessment that through the contribution of all media a total reach of almost 95% of the citizens aged 15 and over was achieved, which means that more than 3.2 million people were reached.

In addition to activities related to cash changeover, during the year the CNB also intensively cooperated with banks on the adjustment of their information systems and monitored whether the banks complied with the provisions of the Act on the Introduction of the Euro as the Official Currency in the Republic of Croatia. The adjustment of banks' information systems was a sensitive operation due to the complexity of those systems and the negative consequences that could arise if there were disruptions or errors in their operation. Namely, the success of these adjustments depended on whether kuna deposits and loans would be correctly recalculated and whether cashless payment operations in the country would function smoothly after the euro changeover. The CNB also monitored whether credit institutions complied with the dual display obligation and other provisions of the Act on the Introduction of the Euro through a special working body. By the end of 2022, almost 400 on-site inspections of dual display were carried out at branch offices of credit institutions. In a smaller number of cases minor irregularities were detected, which were mostly eliminated during the inspections themselves. The following activities also include approximately 140 inspections of the exchange of cash and the control of the conversion related to consumer loans.

After a longer period when inflation in Croatia largely followed trends in the euro

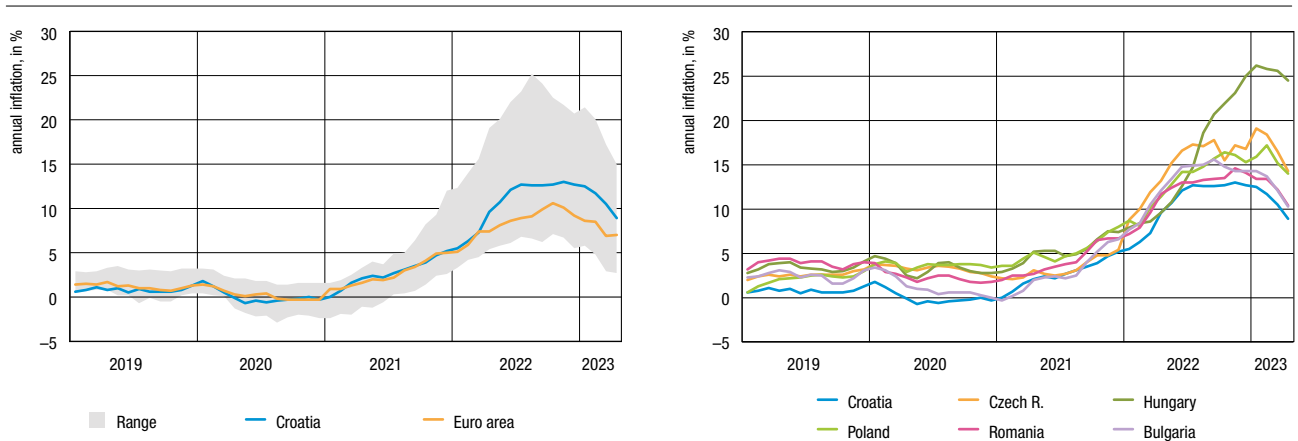
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1 The Group for Monitoring of the Implementation of the Act on the Introduction of the Euro as the Official Currency in the Republic of Croatia was established in July 2022, and its mandate expires on 31 March 2024.  
2 This accounts to 46% of the total number of branch offices of credit institutions in the Republic of Croatia.



area, in mid-2022 a certain increase in inflation in Croatia was noticed relative to the euro area (Figure 1, left panel). Higher inflation in Croatia was, among other things, attributable to the stronger cyclical position of the domestic economy, the pronounced

Figure 1 The adjustment of overall inflation in Croatia and the euro area (left panel) and a comparison of inflation in Croatia and CEE countries that have not adopted the euro (right panel)

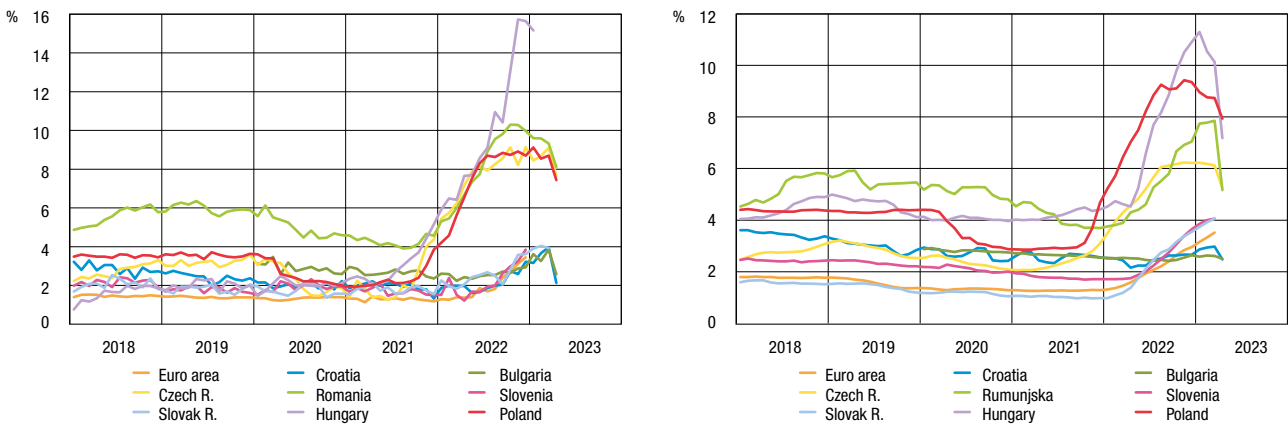


Note: The grey shaded area shows the range of performance of individual member states.  
Source: Eurostat.

recovery of tourist demand by non-residents, smaller competition on the domestic market compared to large euro area economies, as well as the differences in the consumer basket structure with a larger share of food and accommodation services, the prices of which increased particularly sharply. At the same time, inflation in Croatia was constantly lower than in the Central and Eastern European countries that had not introduced the euro (Figure 1, right panel). In those countries inflation increased more strongly and reached higher levels, although their central banks tightened monetary policy faster and stronger than the European Central Bank. Among those countries, the highest average annual inflation rate in 2022 was recorded in Hungary (15.3%) and the Czech Republic (14.8%) and slightly lower inflation in Poland (13.2%), Bulgaria (13.0%) and Romania (12.0%). In addition to the mentioned effect of the consumer basket structure, in which products with a particularly sharp increase in prices, such as food, are represented to a larger extent than in the developed western European countries, in some of those countries the pressures on the weakening of the domestic currency exchange rate also contributed to inflation. However, not even the countries in which the domestic currency exchange rate strengthened significantly (such as the Czech Republic) managed to bring inflation down to levels comparable with the average of the euro area.

In contrast, Croatia completely avoided pressures on the depreciation of the domestic currency. This was particularly contributed to by the successful maintenance of the stability of the exchange rate during the participation in the exchange rate mechanism (ERM II) and the adoption of the Decision on the adoption of the euro by which the conversion exchange rate of the kuna at the time of the introduction

Figure 2 Interest rates on corporate loans (left panel) and housing loans (right panel) interest rates on pure new loans



Note: Data for Hungary refer to January 2023.  
Source: European Central Bank.

of the euro was set at the level of the historical average, which completely anchored expectations of the further exchange rate movement.

The central banks of EU member states that still have their own currencies, due to the considerable acceleration of inflation, which was more pronounced than the average movements in the euro area, as well as the intensity of the rise in prices in Croatia, raised their key interest rates much faster and stronger than the European Central Bank. The increase in key rates spilled over fast and strongly to financing conditions for corporations and households in those countries. The interest rate on corporate loans in those countries at the end of 2022 ranged from 8.7% in Poland to 15.6% in Hungary, which is considerably above the interest rate on corporate loans in Croatia, which stood at 3.2% (Figure 2, left panel). The interest rate on housing loans ranged between 6.2% in the Czech Republic and 10.9% in Hungary, compared to 2.7% in Croatia (Figure 2, right panel). Interest rates in Bulgaria were similar to those in Croatia, in which the Bulgarian participation in the exchange rate mechanism (ERM II) probably played a role.

The procedure of adopting the euro was initiated by the Government of the Republic of Croatia and the CNB, motivated by the significant economic benefits that will accrue to Croatia, as a small, open and highly euroised country. The adoption of the euro permanently removes currency risk, facilitates business operations, further strengthens the competitive position of Croatian tourism, improves financing conditions for the government, enterprises and citizens, and guarantees the Croatian economy as a whole greater resistance to financial crises and external shocks in the future. In this way, the membership in the euro area will permanently support economic growth and macroeconomic stability in Croatia, and thus enable faster convergence towards the income levels that prevail in the advanced euro area member states.

# 1 Summary

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After the strong recovery in 2021, the level of economic activity surpassing the pre-pandemic level, the economy continued its relatively strong growth in 2022, despite strong inflationary pressures and the deterioration of trade conditions related to the significant rise in energy prices. Croatia's real gross domestic product increased by 6.3% on an annual level, with an increase in all foreign and domestic demand components. Consumer price inflation accelerated considerably in 2022, partly resulting from the spillover of the high prices of raw materials and other input costs in the world market to domestic prices. In addition, profit margins increased and inflationary pressures also came from the domestic labour market, resulting from strong tourism-related demand. The surge in energy prices also contributed to a deeper foreign trade deficit, which resulted in a noticeable fall in the current and capital account surplus. In 2022, the character of the CNB's monetary policy was predominantly marked by the preparations for the introduction of the euro, which to a large extent offset the pressures of external shocks on the domestic financial market. The adjustment of the monetary policy instruments resulted in a record-high liquidity level in the banking system, which mitigated the transfer of tighter financing conditions spurred by the ECB's monetary policy normalisation. Irrespective of the gradual rise in interest rates on loans and stricter standards, bank lending activity was exceptionally strong in 2022, so that the growth in loans also accelerated significantly on an annual level. The strong real growth and the increase in the price level had a favourable impact on budget revenues, enabling the general government to run a surplus, with a considerable reduction in the public debt-to-GDP ratio. In 2022, international reserves reached their record high. Liquidity and safety of investment, the main objectives of international reserves management, were successfully accomplished. Despite one of the largest annual increases in yields in history, both in euros and in US dollars, which resulted in a large drop in bond prices and despite the high level of uncertainty in financial markets, investment and tactical decisions adopted in 2022 as well as in the previous years, the CNB foreign currency portfolios recorded a positive financial result. In addition, in 2022, adjustments were implemented for the accession to the euro area as of 1 January 2023. Strong capitalisation and high liquidity characterise the banking system in the Republic of Croatia and support safe and stable operations amid continued uncertainty attendant on geopolitical instability and macroeconomic pressures.

## 2 Aggregate supply and demand and labour market

### Strong recovery in real economic activity in 2022

Following the strong recovery in 2021, when the level of economic activity surpassed the pre-pandemic level, in 2022 the economy also continued its relatively strong growth, despite strong inflationary pressures and the deterioration of trade conditions related to the significant rise in wholesale energy prices. The increase in real gross domestic product by 6.3% was attributable to all foreign and domestic demand components. Notably favourable developments were recorded in foreign demand, in particular exports of services, due to exceptionally good performance during the tourist season. Household consumption increased by a relatively strong 5.2% on an annual level, spurred by the continuation of growth in employment and consumer lending, although the rise in consumption was subdued in the second half of the year due to inflationary pressures and the resulting fall in real wages, which had an unfavourable impact on the levels of consumer optimism. Investment activity grew by approximately 6%, reflecting the growth in private sector investments, while government investments declined on an annual level. Domestic demand was also supported by fiscal measures for the alleviation of the negative social and economic effects of the rise in energy prices and overall inflation. Government consumption also grew (3.0%). The recovery in foreign and domestic demand spurred the growth in imports, so that the contribution of net foreign demand to total economic growth was slightly negative (Figure 2.1).

Economic developments during the year were uneven. The strong growth in the beginning of the previous year was subdued by unfavourable developments in the external environment caused by the Russian invasion of Ukraine. Thus, after solid growth in the first and the second quarter, in the period from July to September real GDP fell relative to the previous three months, primarily because of the deterioration in net exports. In the last three months of 2022, real GDP rose again on a quarterly level, reflecting good performance in exports of services and investments, and government consumption also increased. On the other hand, exports of goods declined, and personal consumption also decreased notably.

In 2022, employment grew at an intensity (2.4%) similar to that in 2021 (2.2%). The mentioned growth was completely generated by the

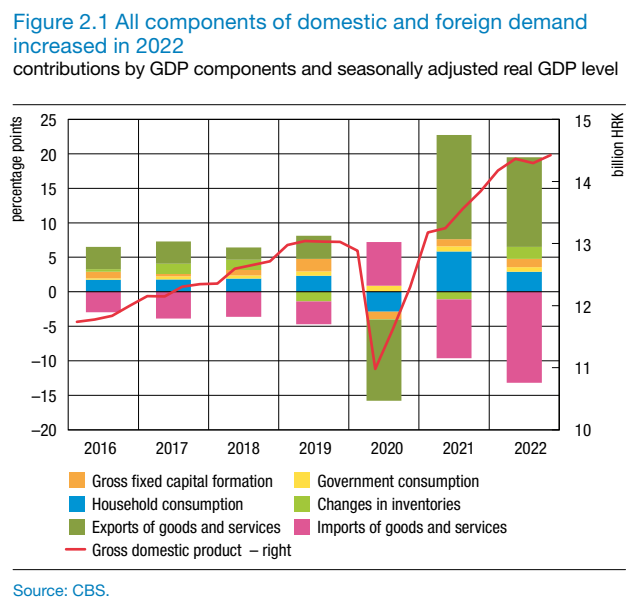
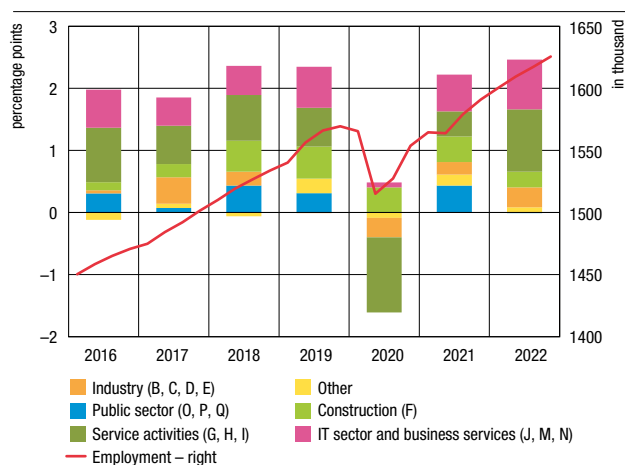
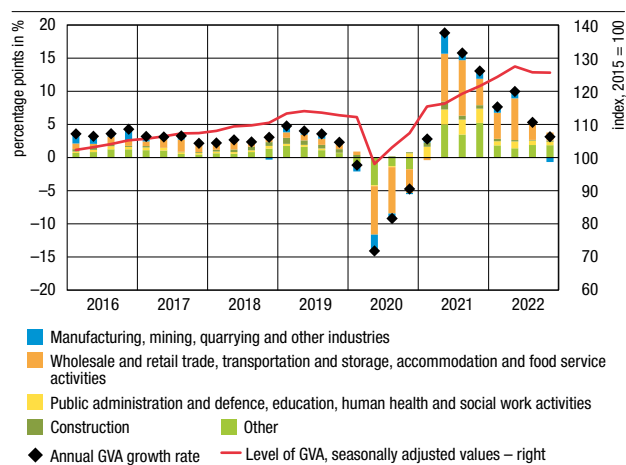


Figure 2.2 Growth in employment in 2022 was mostly attributable to employment in the service sector  
seasonally adjusted data, contributions to the annual rate of change



Source: CPII (seasonally adjusted by the CNB).

Figure 2.3 Strong annual growth in real GVA slowed down in the second half of 2022  
contributions by activities



Source: CBS.

private sector, mostly by service activities. Thus the growth in total employment was mostly attributable to trade, transportation and accommodation activities as well as the IT sector and business services (Figure 2.2). At the same time, the registered unemployment rate fell to 6.8% in 2022 (from 8% in 2021). The decline in the unemployment rate is also evident from the latest available data from the Labour Force Survey, according to which it stood at 7% on average in 2022 from 7.7% in 2021. In 2022, part of the demand for the labour force was met by employment of third-country workers (from non-EU countries), primarily in construction and service activities. At the same time, growth in nominal gross wages accelerated considerably (to 7.9% from 4.1% in 2021), predominantly mirroring the more dynamic increase in wages in the private sector, while public sector wages grew more moderately. Nominal net wages increased in 2022 at the rate of 7% (from 5.5% in 2021). However, due to accelerating inflation real net wages fell by 3.4% (after having grown by 2.9% in 2021).

Real gross value added increased at a similar pace as real GDP (6.4%) in 2022. The strongest increase in GVA was in activities closely related to tourism (wholesale and retail trade, transportation and storage, accommodation and food service activities), in the information and communication sector and in the sector of professional, scientific, technical, administrative and ancillary services. A positive contribution to growth in total GVA, albeit at a smaller intensity, also came from all other activities. Following a sharp increase in the first half of the year, real GVA fell in the third and the fourth quarter on a quarterly basis, which was mostly the result of unfavourable performance in manufacturing, so that the annual growth in GVA slowed down notably in the second half of the year (Figure 2.3).

## 3 Inflation

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Inflation accelerated under the impact of external and domestic factors.

The average inflation in Croatia measured by the harmonised index of consumer prices (HICP) increased sharply from 2.7% in 2021 to 10.7% in 2022, thus reaching the highest level in the last 28 years. In 2022, inflation rose considerably on a global level, including in the euro area countries, or Croatia's major trading partners, thus continuing the trend started in mid-2021. The recovery of demand following the reopening of economies around the world triggered a global growth in the prices of energy products and other raw materials and intermediate goods. Surging inflationary pressures partly stemmed from the difficulties in global supply chains then still present, due to which the supply of individual semi-finished and finished goods was limited and demand amid the pandemic moved from services to goods, which triggered a rise in their prices. The already high global prices of energy products (above all, crude oil and natural gas) surged further following the outbreak of the Russian aggression against Ukraine. In addition, the prices of food raw materials supplied by Russia and Ukraine to the world market also increased, as did the mineral fertilisers that are an important input component in agricultural production. Russia is also an important exporter of iron, steel and non-ferrous metals. The reduced supply of these raw materials due to sanctions and a ban on exports of individual raw materials from Russia sharply increased the prices of metals on the world market following the outbreak of the war. The considerable increase in consumer price inflation in Croatia in 2022 was to a large extent the result of these imported inflationary pressures, that is, the spillover of the high prices of raw materials and other input costs in the world market to producer and consumer prices. In addition, higher inflation can also be partly linked to profit margins, which increased in the circumstances of uncertainty with regard to the prices of raw materials and future price developments. Inflationary pressures also came from the domestic labour market, on which the demand for workers was strong and unemployment was low and falling, which led to a relatively strong growth in nominal wages. On the other hand, the intensity of the acceleration of inflation in 2022 was to a certain extent softened by the price caps on some energy products and basic food products. The base effect related to the significant acceleration of inflation from mid-2021 also helped in stabilising the annual growth rate of consumer prices in the second half of the previous year.

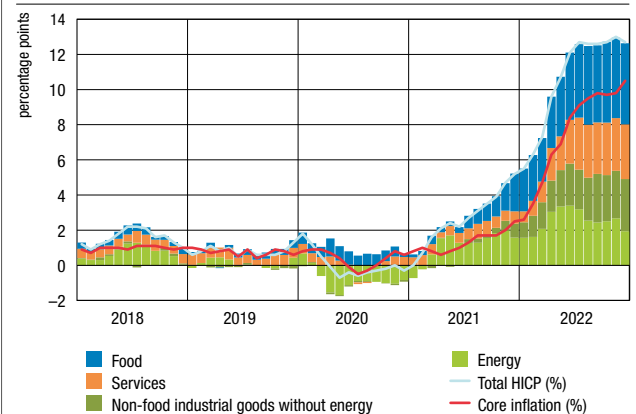
Consumer price inflation accelerated strongly in Croatia in the first seven months of 2022 (to 12.7% from 5.2% in December 2021) as a result of continuous monthly price increases in a large number of products and services from the consumer basket, mainly in the period from March to July. Such developments reflected the increase in the prices of energy products and other raw materials after the outbreak of the war in Ukraine, as well as strong tourist demand. In the second half of the year, price increases

were significantly less pronounced and were at the level of those in the previous year, so that total annual inflation stabilised around the level reached in July. Contributions to the acceleration of inflation were made by all of the main components of inflation. Thus, the annual rate of the growth of food prices increased from 7.3% in December 2021 to 16% in December 2022, which was mainly the result of the spillover of imported cost pressures, i.e. the increase in the prices of energy products, food raw materials and mineral fertilisers in the world market.

Price caps on several basic food products offset the intensity of the acceleration of the increase in food prices.<sup>1</sup> The considerable increase in the annual rise in energy prices from 12.4% in December 2021 to 25.8% in mid-2022 largely reflected the increase in the price of refined petroleum products, which accompanied the movements of the prices of crude oil in the world market. Also, administered prices of natural gas and electricity rose in April due to their considerable increase in the European market, which additionally accelerated the annual increase in energy prices. In the rest of the year, the annual rate of the increase in energy prices dropped to 14.7% in December, mostly due to the deceleration of the annual rate of the growth in the prices of refined petroleum products, which was contributed to by the noticeable decrease in the prices of crude oil in the world market and favourable base effects, while consumer prices of electricity and natural gas held steady<sup>2</sup>.

Furthermore, the annual rate of the increase in services prices accelerated from 2.3% in December 2021 to 9.9% in December 2022. This was mostly attributable to hotel and restaurant and accommodation services, the prices of which increased significantly amid the recovery of domestic and foreign demand for these services after the lifting of epidemiological measures. The growth of prices in restaurants and coffee shops was generated by rising input costs (the prices of food and beverages as well as energy products) and inflationary pressures stemming from wage increases (due to labour shortages in hotels and restaurants). Due to ongoing delays in supply chains and the spillover of an earlier increase in the prices of energy and industrial raw materials, the annual growth in consumer prices of industrial products also accelerated significantly (up from 2.9% in December 2021 to 11.2% in December 2022). Due to the increase in the annual growth of prices of both main components (industrial products and services) in 2022 core inflation also accelerated noticeably from 2.5% in December 2021 to 10.5% in December 2022, which was significantly higher than the long-term

Figure 3.1 Consumer price inflation accelerated significantly



Note: Core inflation is measured by the harmonised index of consumer prices that excludes energy, food, alcoholic beverages and tobacco prices.  
Sources: Eurostat and CNB calculations.

3 Sunflower oil, long-life milk, flour, sugar, whole chicken and some kinds of pork.

4 Electricity prices increased slightly in October due to the growth of these prices for households whose consumption exceeds the threshold up to which prices are fixed at a lower level.

average (1.5%), to a considerable extent indicating the presence of postponed effects of previous increases in the costs of energy and other raw materials and intermediate goods. It is also noticeable in the movement of industrial producer prices of consumer goods, whose annual growth in 2022 accelerated significantly. A relatively sharp rise in nominal wages made an additional contribution to keeping core inflation elevated.

In 2023, the average inflation of consumer prices in Croatia is expected to slow down to 7.0%, in key with the considerable decrease in the annual growth in the prices of energy and food. The expected decrease in the prices of energy products and other raw materials in the world market and the elimination of the remaining bottlenecks in global supply chains should largely result in a decrease in imported inflationary pressures. The slowdown in inflation in 2023 is also affected by the favourable base effect, i.e. the waning effect of the considerable increase in the prices of numerous goods and services in 2022. The largest contribution to the slowdown in inflation in 2023 should come from energy, amid the expected decrease in the prices of refined petroleum products and the unchanged administered prices of natural gas and electricity. Furthermore, due to the reduced cost pressures, i.e. the prices of food raw materials, energy products, fertilisers and freight rates, the growth of food prices is also expected to slow down. In contrast, the average annual rate of core inflation (measured by HICP excluding food and energy) might hold steady in 2023 at the high level reached in the previous year because a certain spillover of the previous increases in the prices of energy products and other raw materials and intermediate goods to core inflation are further expected. Also, in 2023, nominal gross wages are expected to rise sharply, which might contribute to keeping core inflation elevated. Nevertheless, while the trend of increasing core inflation was present in 2022, in 2023, it is expected to decrease from 10.2% in the first quarter to 6.4% in the last quarter, which is in line with the expected gradual decline of the effect of the spillover of the previous increases in the prices of energy and other raw materials, delays in supply chains and the re-opening of the economy to the growth in consumer prices towards the end of the year. In addition, domestic inflationary pressures on the demand side are expected to weaken in 2023. A continued slowdown in inflation is expected in 2024 and 2025, when consumer price inflation might come close to targeted levels.

The risks related to the gradual return of inflation towards the targeted levels at the currently expected pace are still pronounced, but the risks of heightened inflation are less dominant and their relationship is becoming more balanced. On the one hand, inflation might be higher in the case of higher prices of energy products in the world market, for example, due to any more pronounced impact of the re-opening of China. The possibility of wage growth exceeding expectations quite significantly poses an additional risk. On the other hand, the lower prices of energy products and other raw materials in the world market, a slowdown in economic growth more pronounced than currently expected, entry in recession as well as lower than expected inflation in major trading partners might contribute to a faster and more intensified weakening of inflationary pressures.



## 4 Current and capital account

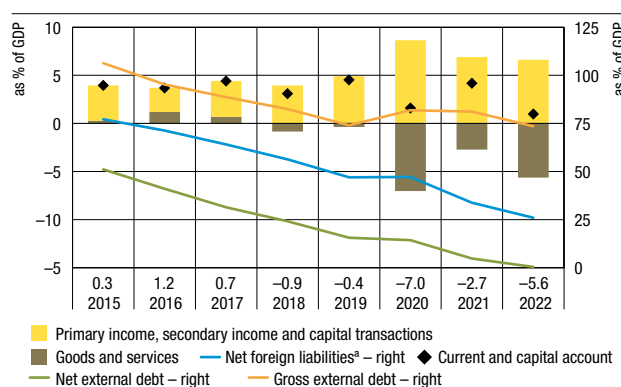
A strong rise in the prices of energy products had a negative impact on the current and capital account of the balance of payments of Croatia in 2022.

The current and capital account of the balance of payments deteriorated by 3.2 percentage points in 2022 from 2021, reducing the surplus to 1.0% of GDP. The deterioration of the balance reflects a strong growth in the prices of energy products in the world market, additionally pronounced after the Russian aggression against Ukraine, which resulted in a substantial increase in net imports of all categories of energy products, in particular natural gas. Net imports of energy products thus reached almost 9.0% of GDP in 2022, in contrast to the slightly less than 3.0% of GDP the year before; this rise was the main reason for the increase in the foreign trade deficit of 57.7% on an annual level.

Unfavourable trends in the goods account were offset by a significant rise in net exports of services in 2022, primarily owing to the increase in tourism revenues, which were EUR 2.6bn or 24.4% higher than the previous highest level, recorded in 2019. This was a reflection of the continued rebound in demand for services that had been largely subdued during the coronavirus pandemic, and the considerably higher prices of accommodation and hotel and restaurant services. In addition to international trade in services, a positive contribution to the overall current and capital account balance also came from developments in other sub-accounts. Thus, although to a much smaller extent, the overall surplus in the secondary income and capital transaction accounts increased as a result of the simultaneous greater disbursements from EU funds to end beneficiaries and a further growth in revenues from personal transfers. The surplus in the primary income account also grew moderately as the increase in revenues from compensation of persons (Croatian residents) temporarily employed abroad exceeded the increase in expenditures on equity investments in Croatia due to the greater profitability of domestic enterprises in foreign ownership.

Reflecting the deterioration of the balance in the current and capital account of the balance of payments, there was a net capital inflow in the financial account of the balance of payments last year, 2022, following a noticeable net capital outflow in 2021. Thus, the net inflow from equity investments increased, while net debt liabilities of domestic sectors continued to decrease. However, the relative indicators of external debt improved noticeably as

Figure 4.1 Decline in the current and capital account surplus in 2022



\* Net foreign liabilities are defined as the difference between total foreign liabilities and total foreign assets (based on debt instruments, financial derivatives, equity investments and similar), which is equal to the negative value of the net international investment position (-25.9% of GDP at the end of 2022).

Note: Current and capital account and the balance of foreign liabilities.  
Source: CNB.

a result of the strong growth in nominal GDP, so that gross and net external debt at the end of 2022 stood at 73.5% of GDP and 0.4% of GDP relative to 81.1% of GDP and 4.8% of GDP at the end of 2021 respectively. The improvement in the relative net international investment position was even more pronounced, from –33.8% of GDP at the end of 2021 to –25.9% at the end of 2022.

## 5 Monetary policy and private sector financing

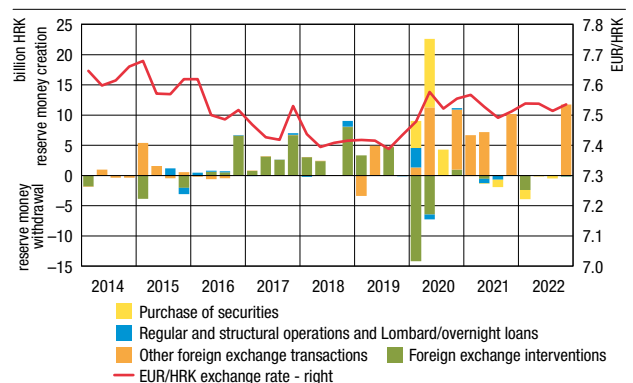
### Monetary policy towards the introduction of the euro

In 2022, small open economies were faced with strong global inflationary pressures and the start of the tightening of financing conditions in international markets. In such circumstances, membership in the exchange rate mechanism ERM II and plans for the introduction of the euro stabilised the exchange rate of the kuna, while the harmonisation of the CNB's set of monetary policy instruments with the requirements of euro area membership significantly increased liquidity in the banking system. This has alleviated pressures for an increase in interest rates prompted by the ECB's tighter monetary policy.

In 2022, the CNB only carried out three interventions in the foreign exchange market of a relatively modest amount (the sale of EUR 385m to banks) in order to mitigate the consequences of the short-term disruption caused by Sberbank's problems following the Russian invasion of Ukraine. The CNB also withdrew reserve money (M0) based on the maturity of individual government bonds of the Republic of Croatia from the CNB's portfolio, which reduced the balance of reserve money by about HRK 2.1bn. However, reserve money was at the same time created by the purchase of foreign exchange funds from the Ministry of Finance in the amount of EUR 1.6bn, mostly the funds related to different EU financial instruments. Positive net flows of reserve money thus indicate an expansionary monetary policy stance based on the operations of the purchase of foreign exchange (Figure 5.1).

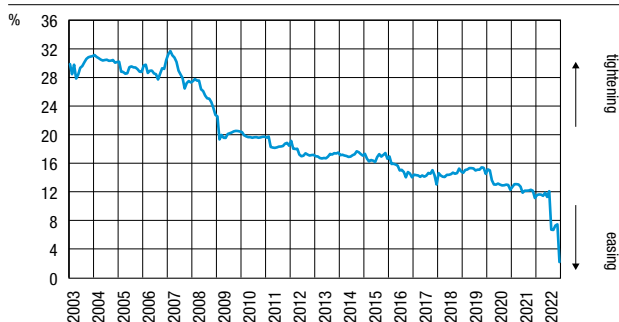
As part of the preparations for the introduction of the euro, the CNB significantly adjusted monetary policy instruments, which resulted in the loosening of monetary conditions and a considerable increase in liquidity in the banking system (Figure 5.2). Following the EU Council's decision on Croatia's joining the euro area in July 2022, the Council of the CNB adopted decisions on lowering the reserve requirement from 9% to 5% as of August and from 5% to 1% as of mid-December and on cutting the rate of minimum required foreign currency claims from 17% to 8.5% as of August and entirely revoking the measure as of December. The reduction in the reserve requirement increased kuna liquidity by HRK 31bn and the total effect of the revocation of minimum required foreign currency

Figure 5.1 In anticipation of the introduction of the euro the exchange rate in 2022 held steady



Notes: The Lombard facility cancelled on 28 September 2017 was replaced by the overnight facility. Other foreign exchange transactions include the purchase of foreign exchange from and the sale of foreign exchange to the MoF and the EC and foreign currency swaps with banks. The positive values refer to the purchase of foreign exchange.  
Source: CNB.

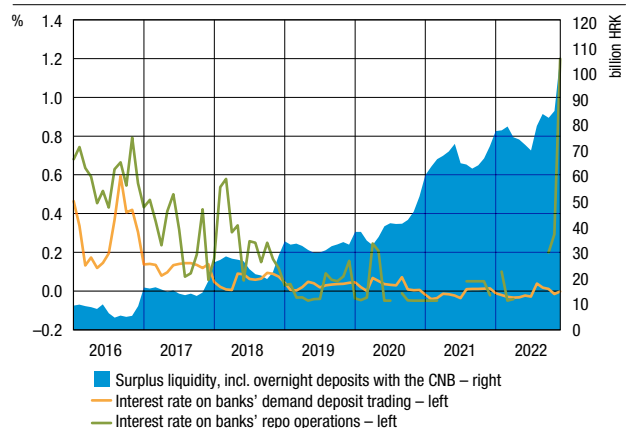
Figure 5.2 Banks' regulatory cost fell to the lowest level since the beginning of measurement



Notes: Monetary policy indicator = credit institutions' assets held due to regulations/credit institutions' total assets. Credit institutions' assets held due to regulations (minus surplus liquidity) includes reserve requirements in kuna, foreign currency reserve requirements set aside, marginal reserve requirement, CNB bills and minimum required foreign currency claims.

Source: CNB.

Figure 5.3 Kuna liquidity surplus at an all-time high



Note: The interest rate on bank demand deposit trading by the end of 2015 refers to the overnight interbank interest rate.

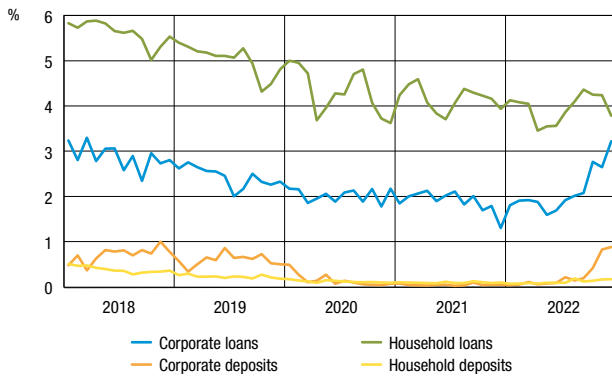
Source: CNB.

claims was EUR 5.4bn. Liquidity in the amount of EUR 9.5bn was thus released in the banking system, reaching a record high. This offset the transfer of tighter financing conditions driven by the normalisation of the ECB's monetary policy in the euro area to the domestic financial market relative to the euro area members (Figure 5.3).

Although the sharp increase in liquidity offset the intensity of the spillover of tighter financing conditions from international markets to domestic banks' interest rates, in the second half of 2022, and in particular towards its end, interest rates on loans started to increase at a slow pace. This increase was more pronounced for interest rates on loans to non-financial corporations than on loans to households. Interest rates on pure new corporate loans thus reached 3.2% in December, the highest level since 2017, while interest rates on pure new household loans were around 4%, which corresponds to the average level from 2021 (Figure 5.4). Average interest rates on housing loans were around 2.5% and interest rates on general-purpose cash loans stood at about 5.4%. A similar ratio of corporate and household interest rates was also recorded in deposit interest rates, which increased for corporate deposits from about 0% in 2021 to about 0.9% in December 2022, while interest rates on household deposits remained almost unchanged.

The results of the bank lending survey for 2022 suggest the tightening of financing conditions in the segment of corporate loans, mostly resulting from risk perception in the economy, and to a lesser extent from factors connected with funding costs and balance sheet restrictions. On the other hand, the survey results also showed a considerable increase in demand for loans in the corporate sector, primarily due to the need for the financing of inventories and working capital, which was also confirmed by the indicators of the corporate lending structure. Credit standards for households were also tightened in the second half of the year under the impact of the same factors, i.e. risk perception and, to a lesser extent, funding costs, but at a weaker intensity than credit standards for corporations. At the same time, the demand for consumer loans weakened, while the demand for housing loans strengthened when compared with 2021.

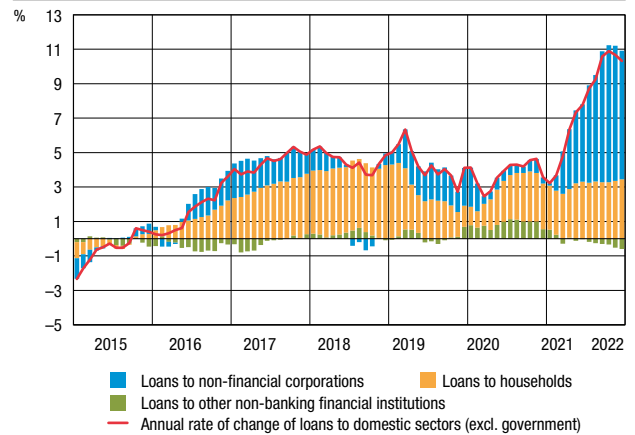
Figure 5.4 Increase in interest rates was particularly pronounced in the corporate sector



Note: The interest rate on corporate time deposits was corrected in 2022 for short-term foreign currency deposits in the US dollar and the forint of several large enterprises carrying a much higher interest rate than the average interest rate on deposits of other enterprises, which are predominantly in the euro and the kuna.

Source: CNB.

Figure 5.5 Total credit activity was dominantly determined by corporate lending



Source: CNB.

Banks' credit activity in 2022 accelerated despite the rise in interest rates on loans and stricter lending conditions. The increase in loans to non-financial corporations accelerated from 1.0% to 20.8%, which should be interpreted in the context of the energy crisis and increases in the prices of a number of raw materials, which raised corporate demand for working capital. The rate of increase in household loans in the same period also accelerated from 4.5% to 5.8%, which was particularly attributable to the increase in housing loans, driven among other things by the government subsidy programme: in 2022, there were record numbers of applications. Finally, in 2022, the movement of total loans was dominantly determined by a strong increase in corporate loans, which differed significantly from the previous years, when credit activity was determined by household lending (Figure 5.5).

## 6 Public finance

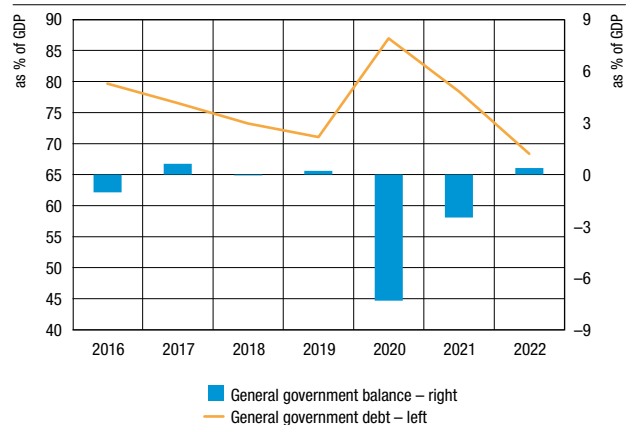
Strong real growth and acceleration of inflation had a favourable effect on public finance indicators in 2022.

Fiscal indicators in 2022 were favourable due to realised real economic growth, as well as the increase in price levels. According to the internationally comparable methodology of the European System of National and Regional Accounts (ESA 2010), in 2022, the general government ran a surplus of 0.4% of GDP, which is a considerable improvement from the deficit in 2021 (2.5% of GDP). At the same time, the general government debt-to-GDP ratio dropped noticeably.

A significant improvement in the general government balance in 2022 reflects the growth in budget revenues primarily due to the nominal increase in the related macroeconomic bases. The growth in revenues exceeded the increase in expenditures partly determined by the adopted package of measures to offset inflationary pressures on citizens' living standards and businesses. Total revenues thus grew by 13.3% annually and total expenditures rose at about half of the rate of 6.6%.

The increase in real economic activity and the GDP deflator, in addition to a favourable budget outturn, resulted in a considerable decrease in the public debt-to-GDP ratio on an annual level. The relative indicator of public debt at the end of 2022 stood at 68.4% of GDP, which corresponds to the annual decrease of 10 percentage points.

Figure 6.1 Improvement in fiscal indicators  
fiscal indicators as % of GDP



Sources: CBS and CNB.

## 7 International reserves management

In 2022, international reserves reached their record high, and despite of one of the largest annual increases in yields in history, CNB foreign currency portfolios had a positive financial performance.

### 7.1 International reserves in 2022

At the end of 2022, international reserves amounted to EUR 27,876.4m, up by EUR 2,855.2m or 11.4% from the end of 2021 (Figure 7.1). In the same period, net reserves, excluding the funds of the Ministry of Finance and the European Commission, the funds with the IMF, special drawing rights, and investments in repo operations, increased by EUR 1,266.8m, or 6.1%, reaching EUR 22,177.1m.

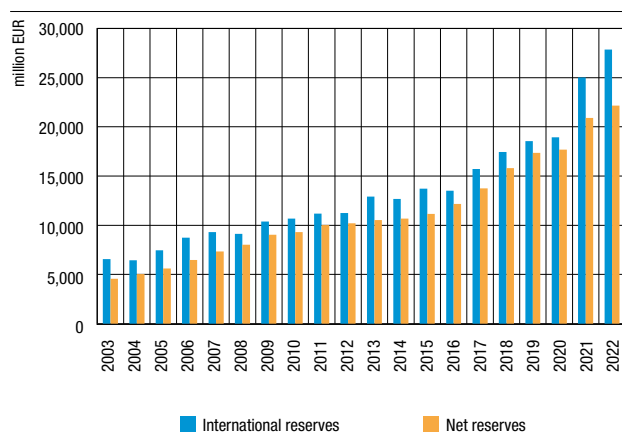
The growth in international reserves in 2022 was mostly fuelled by the purchase of foreign exchange from and inflows of foreign exchange into the account of the Ministry of Finance and a higher level of agreed repo transactions. By this growth, international reserves reached their record high shortly prior to the introduction of the euro.

In 2022, the CNB purchased EUR 1,579.9m from the Ministry of Finance, while in foreign exchange transactions with banks the CNB sold a net worth of EUR 385.0m. Thus, net purchases of foreign exchange by the CNB during the year amounted to EUR 1,194.9m, creating HRK 8,989.8m.

### 7.2 Structure of international reserves investment

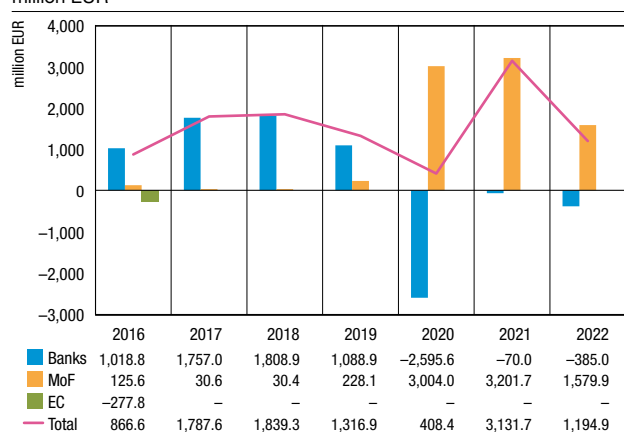
Securities of governments and government institutions accounted for the largest share in the structure of international reserves investment at the end of 2022 (Figure 7.3), followed by reverse repo agreements and deposits with international financial institutions. A portion of international reserves was also made up of sustainable ESG

Figure 7.1 Record high international and net reserves end of period, in million EUR



Source: CNB.

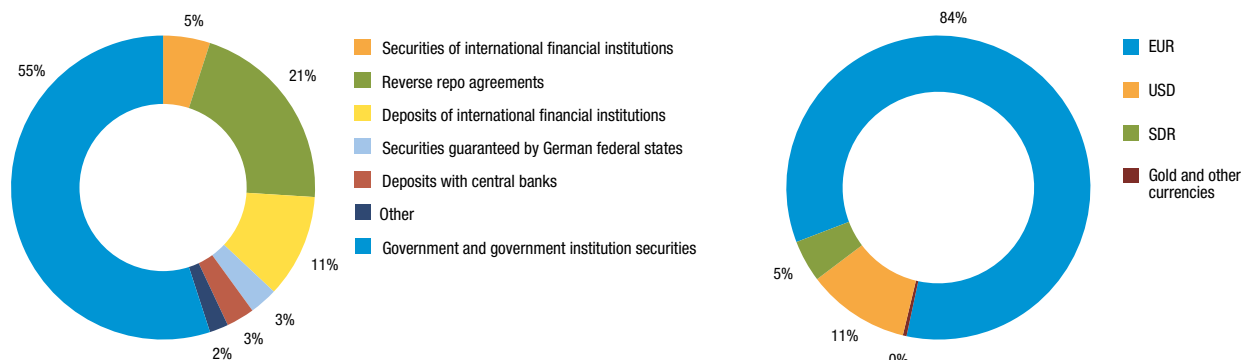
Figure 7.2 High purchases of foreign exchange from the MoF, the third year in a row the CNB's net purchases of foreign exchange, from 2016 to 2022, in million EUR



Note: Positive values refer to the purchase and negative to the sale of foreign exchange by the CNB.

Source: CNB.

Figure 7.3 In the structure of investments of international reserves, investments in the safest instruments accounted for the largest share (left panel), and by currency structure those in the euro (right panel) shares in percentage, at the end of 2022



Source: CNB.

(environmental, social, governance) investment in green bonds, social bonds and sustainability bonds, whose share in reserves amounted to 5.8% at the end of 2022.

International reserve funds are invested in instruments with an investment grade rating, with investments in individual financial institutions and countries and in individual instruments being limited, which diversifies credit risk. At the end of 2022, about 57% of international reserves was invested in the safest investments – instruments by issuers within the two highest credit rating categories and BIS and IMF instruments.

### 7.3 Currency structure of international reserves

The euro dominates the currency structure of international reserves. At the end of 2022, the share of the euro accounted for 84.2%, the share of the US dollar 10.9% and the share of SDRs 4.5%. Gold, which on the last day of 2022 accounted for 0.4% of the international reserves, was obtained in December 2022 for the purposes of the transfer of foreign exchange reserves to the ECB in early 2023.

### 7.4 Financial markets and international reserves management results in 2022

Financial markets in 2022 were marked by a strong growth in yields and fast hikes in key interest rates of major central banks, in an environment, what is more, characterised by very high inflation and the unfavourable geopolitical situation due to the outbreak of the war in Ukraine. The increase in yields was one of the largest in history in general. The Fed started the cycle of raising its benchmark interest rates before the ECB, which followed suit in the second half of the year. The tightening of monetary policies also meant the discontinuation of the securities repurchase programmes and the start of the scaling back of the central banks' balance sheets from record high levels. Euro yields completely came out of negative territory after a period of several years. The shift in curves for government bonds of euro area countries of maturities up to ten years on average in 2022 stood at about 310 basis points, the largest



in the case of Italy (342 basis points). The yield curve for US bonds of maturities up to ten years rose in 2022 from the end of 2021 by 319 basis points on average. Bond markets thus recorded one of the worst years ever, as when yields rise, bond prices fall. In addition, equity markets were also falling, so that 2022 was one of the rare years with the same trend directions in equity and bond markets.

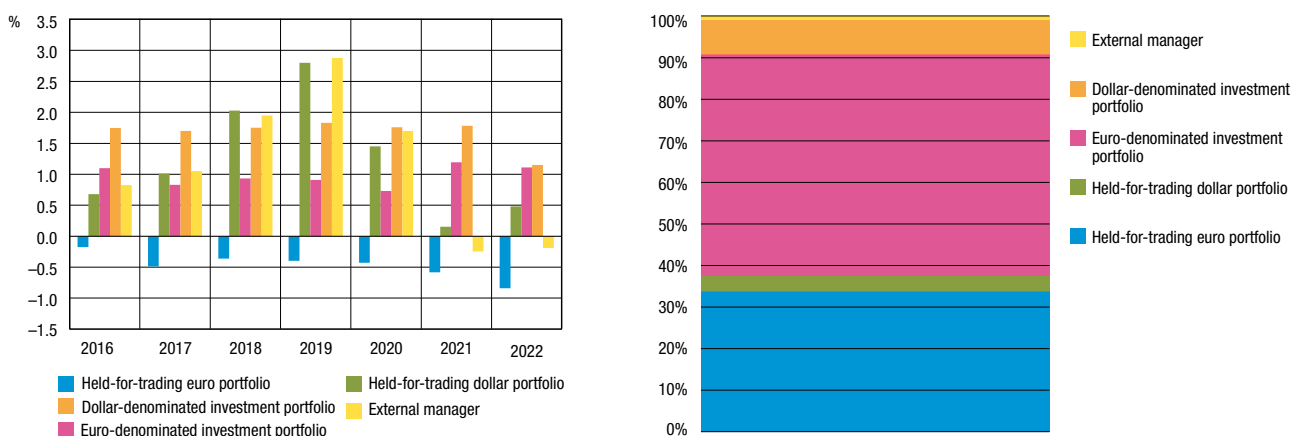
Although the strong increase in yields also had a direct impact on international reserves portfolios carried at market prices, in 2022, in all, CNB foreign currency portfolios performed positively. For such a performance, the key was the structure of all international reserves portfolios set up in advance and a set of investment and tactical decisions that were adopted in the course of 2022 as well as in the previous years. The key task in international reserves management – liquidity and safety – was successfully fulfilled. Income from investment in 2022 amounted to EUR 1,237.8m or EUR 164.2m.

In 2022, the rate of return on the entire euro portfolio of net reserves was 0.48% and the rate of return on the entire dollar portfolio totalled 1.17%. If held-for-trading and investment portfolios are observed separately, the euro held-for-trading portfolio generated a rate of return of –0.84%, while the dollar held-for-trading portfolio generated a rate of return of 0.48% in 2022. In 2022, the euro-denominated investment portfolio and the dollar-denominated investment portfolio yielded returns of 1.11% and 1.15% respectively. In 2022, the rate of return on the US dollar funds entrusted for management to an international financial institution was –0.19% (Figure 7.4).

The held-for-trading portfolios, which account for approximately 37% of net reserves, are used to maintain foreign currency liquidity. Investment portfolios account for approximately 62% of net reserves and, as in the last few years, generated the bulk of the CNB's earnings.

In 2022, a large number of activities and decisions in international reserves management was also linked to the preparations and adjustments that had to be implemented for the introduction of the euro as of 1 January 2023. By applying the capital key, the CNB transferred to the ECB foreign exchange reserves in the amount of

Figure 7.4 International reserve investment portfolios secure adequate rates of return in a period of historically low yields as well as in a period of one of the largest increases in yields (left panel), with the key portfolio structure set up in advance (right panel) year-on-year rates of return, in percentage (left panel) and the structure in percentages (right panel)



Source: CNB.

EUR 639.9m, 85% of which was in the US dollar and 15% in gold. By this transfer, these funds did not vanish from the CNB's balance sheet because, based on this transaction, the CNB kept an equivalent amount of claims on the ECB on the assets side. The management of the reserves transferred to the ECB is decentralised and the management tasks are carried out jointly by the European Central Bank and national central banks.

After the transfer to the ECB, the funds of the remaining previous international reserves that were denominated in euro as at the date of introduction of the euro, are completely held by the CNB that still has the right to dispose of such assets in accordance with certain rules and obligations. Such funds are called CNB's non-monetary financial assets and consist of its own assets in the euro as the domestic currency and financial assets in foreign currency or the remaining international reserves in the US dollar and IMF's special drawing rights. The CNB, like all other national central banks in the Eurosystem, continues to manage financial assets completely independently, according to its own criteria, primarily in accordance with the principles of liquidity and safety of investment, as prescribed in Article 100 of the Act on the Croatian National Bank.

## 8 Business operations of credit institutions

Strong capitalisation and high liquidity characterise the banking system of the Republic of Croatia and support safe and stable operations amid the continued uncertainty in the face of geopolitical instability and macroeconomic pressures.

### 8.1 System structure

At the end of 2022, there were 21 credit institutions operating in the Republic of Croatia: 20 banks and one housing savings bank. Two housing savings banks merged with their parent banks in the course of the year<sup>3</sup>. In addition, there was one branch of an EU credit institution operating in the country, of BKS Bank AG, Main Branch Croatia, while more than 200 institutions from the EU and the European Economic Area had notified the CNB of their intentions regarding the direct provision of mutually recognised services in the territory of the Republic of Croatia.

The merger of the housing savings banks and the change in the ownership structure of Nova hrvatska banka d.d.<sup>4</sup> slightly changed the features of the ownership structure of the banking system. The number of credit institutions in the majority ownership of foreign shareholders fell from 14 to 11, thus also reducing the share of their assets in the total banking system assets. However, their share remained dominant, accounting for 88.8% of total assets of the banking system.

The years-long moderate decline in the number of employees continued, and at the end of 2022 the credit institutions system had 18,363 employees.

### 8.2 Performance indicators of credit institutions

The assets of credit institutions increased to a record high of HRK 572.2bn in 2022. The largest component source of their growth was an increase in deposits in the current accounts of households, enhanced by deposits of surplus funds prior to the introduction of the euro, and deposits of non-financial corporations also increased. Assets mostly increased in the form of highly-liquid monetary assets, in particular by the end of the year as a result of the larger inflow of deposits and the end of the adjustments of monetary measures to the monetary policy instruments in the euro area. The increase in the share of cash in total assets of credit institutions raised the value of the liquidity coverage ratio (LCR) to the record high level of 242.4%, almost two and a half times larger than the prescribed minimum of 100%. Long-term liquidity and the requirements for stable funding sources, in light of the increase in assets, were predominantly

<sup>3</sup> Raiffeisen stambena štedionica merged with Raiffeisenbank Austria on 2 May 2022 and PBZ stambena štedionica merged with Privredna banka Zagreb on 15 June 2022.

<sup>4</sup> On 1 March 2022, resolution proceedings were opened against Sberbank and the bank's ownership structure was changed by acquiring a qualifying holding by Hrvatska poštanska banka. Resolution proceedings ended on 13 April 2022 and the bank started to operate on 14 April 2022 under the name of Nova hrvatska banka d.d.

supported by the mentioned increase in the deposits of households and non-financial corporations, so that the value of the net stable funding ratio (NSFR) increased and amounted to as much as 179.0%.

Cash also had a favourable impact on the improved quality of total assets and contributed to the high total capital ratio of all credit institutions of 24.6%. Although the total capital ratio decreased under the impact of unrealised losses based on bonds carried at fair value, it is still among the highest when compared with other EU member states. All credit institutions reported a total capital ratio above the

prescribed minimum of 8% and eight of them, which accounted for two thirds of the total system assets, boasted a total capital ratio of above 20%.

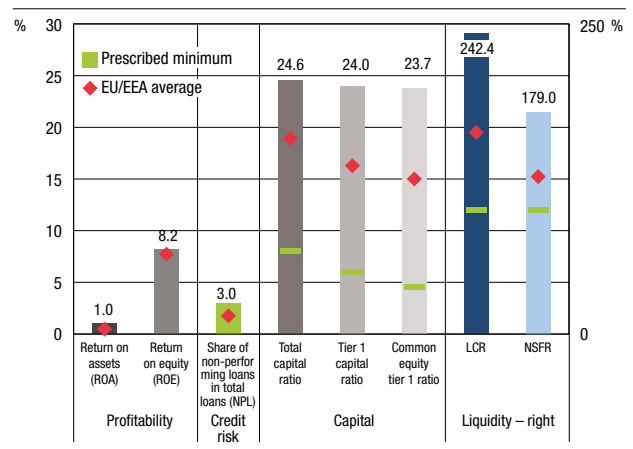
Credit activity in 2022 resulted in a 5.5% increase in loans. The increase in loans was mostly directed at non-financial corporations, in particular at the financing of corporations in the activities of energy supply, trade and real estate operations. Housing loans to households continued to increase, further supported by the participation of credit institutions in the government programme for subsidising these loans, and a moderate growth in general-purpose cash loans also continued.

The quality of credit institutions' assets measured by the non-performing loans (NPL) ratio continued to improve. Despite the decline in the value of this ratio to 3.0%, its level was still less favourable than the EU average (1.8%). However, non-performing loans continued to decline in all more important activities of the non-financial corporations sector, which resulted in the decrease in the NPL share in total loans to non-financial corporations to 6.4%. The share of NPLs in total loans to households fell to 5.0%, with the value of this share being primarily influenced by difficulties in the collection of general-purpose cash loans.

The positive development in the non-performing share of the credit portfolio is contrasted with the situation in the performing share of the credit portfolio that is still not in default. The level of credit risk in this share of the portfolio is still higher than before the period of the COVID-19 pandemic and has yet to show signs of declining.

Business operations of credit institutions in 2022 generated HRK 5.3bn in profits, 4.9% down from the profits generated in 2021. The value of profitability indicators also decreased – the return on assets (ROA) totalled 1.0% and the return on equity ROE was 8.2%. The decrease in profits was mostly the consequence of the higher level of general operating costs, which was certainly considerably contributed to by the costs related to the introduction of the new currency. As a result, the cost effectiveness of the banking system was reduced moderately because credit institutions used a larger share of net income to settle these costs. Net operating income grew due to the increase

Figure 8.1 Key banking system indicators, as at 31 December 2022



Source: CNB.

in net interest income following a long period in which they declined as well as to the continued growth in net income from fees and commissions.

### **8.3 Business operations of credit unions**

At the end of 2022, 16 credit unions had assets of HRK 627.7m at their disposal. The number of credit unions decreased by one from 2021, and their total assets rose by 1.2%. Total assets of credit unions are equivalent to 0.1% of the total assets of all credit institutions.

## Box 1 Has the decision on Croatia's accession to the euro area had an impact on the cost of borrowing?

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The reduction of currency risk arising from a high level of euroisation is one of the largest benefits of euro adoption for Croatia. The near elimination of currency risk should lead to a decline in country risk premium, and consequently to a reduction in Croatia's borrowing costs, which usually also spills over to the costs of borrowing of corporations and households. This Box thus shows that beneficial effects of the euro introduction on the cost of government borrowing were becoming noticeable as early as in mid-2022, immediately after the making of the decision on Croatia's accession to the euro area. This is particularly important in the present conditions of the tightening of global financing conditions, which may have a significant effect on the cost of borrowing of countries like Croatia.

The experiences of countries that have introduced the euro and empirical literature show that membership in the euro area reduces the costs of government borrowing. It has been argued that the elimination of currency risk and the accession to the European Stability Mechanism (ESM), providing support to countries experiencing financial difficulties, are the main reasons behind the existence of the so-called euro premium. Although in some periods the euro premium tended to be negative, as for example during the European debt crisis, when the ESM was established, over a longer period a favourable effect of the euro area membership still prevails.

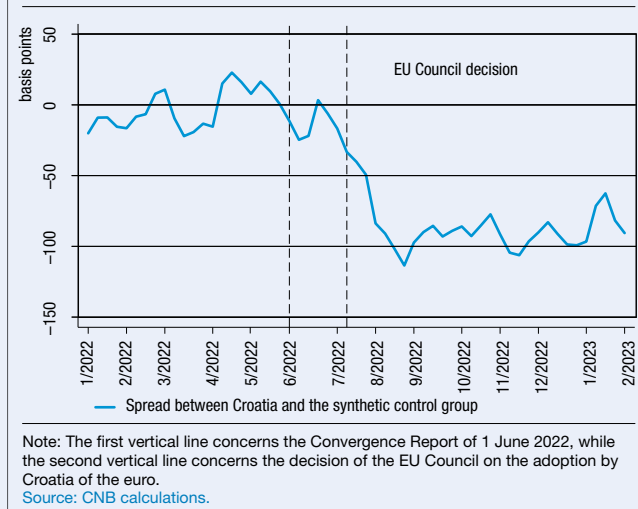
Given that Croatian economy was heavily euroised, the elimination of currency risk was expected to bring relatively large benefits. The government, corporates and households were exposed to currency risk, and so a strong depreciation of the kuna would have increased the debt servicing burden and weighed on debt repayment capacity. Now, however, rational investors should be able to factor the effects of currency risk elimination in the prices of government bonds. In other words, due to the reduced probability of default in the future, creditors should be prepared to offer more affordable funding to the government.

The impact of euro adoption on the yield on bonds of the Republic of Croatia as a result of the announced accession to the euro area cannot be directly measured, but it can be estimated. The estimation of the effect of euro adoption on yields is not simple since it is very hard to separate the impact of the announced accession to the euro area (EU Council decision) from other shocks affecting the movement of bond yields. A potential solution to this problem would be to compare the trends in Croatia's government bond yields with yields on government bonds of peer countries, where the effects of many other factors impacting yield movements should be taken into consideration. In order to determine whether the announced adoption of the euro really

caused the fall in yields on Croatian government bonds, the analytical method<sup>1</sup> is used in the Box; this method is applied in empirical literature in searches for answers to similar analytical questions (for more details see Box 4 in the publication *Macroeconomic Developments and Outlook No. 13, December 2022*).

The results of this method show that following the adoption of the EU Council decision, Croatia's bond yields moved at a different pace than those of the synthetic control group. The yield on Croatia's bonds was about 90 basis points lower at end-January than that in the calculated counterfactual scenario in which Croatia did not join the euro area (Figure 1). The analysis only shows the additional effect of the reduced uncertainty concerning Croatia's accession to the euro area (mainly due to the criterion of inflation), so that this result can be observed as the lower limit to the probable effect of the adoption of the euro.

Figure 1 Yield spread on Croatia's ten-year euro government bond relative to the synthetic control group



1 The so-called synthetic control method (Abadie, 2021). The idea is to construct a synthetic Croatia by averaging the trends in indicators for other countries. Each country is assigned a weight in a synthetic control group, so that it tracks well the trends in indicators for Croatia.

## Abbreviations and symbols

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### Abbreviations

bn	– billion
b.p.	– basis points
BEA	– U. S. Bureau of Economic Analysis
BOP	– balance of payments
c.i.f.	– cost, insurance and freight
CBRD	– Croatian Bank for Reconstruction and Development
CBS	– Central Bureau of Statistics
CDS	– credit default swaps
CEE	– Central and Eastern European
CEFTA	– Central European Free Trade Agreement
CES	– Croatian Employment Service
CHF	– Swiss franc
CHIF	– Croatian Health Insurance Fund
CHY	– Yuan Renminbi
CICR	– currency-induced credit risk
CPF	– Croatian Privatisation Fund
CPI	– consumer price index
CPII	– Croatian Pension Insurance Institute
CM	– Croatian Motorways
CNB	– Croatian National Bank
CR	– Croatian Roads
EBA	– European Banking Authority
EC	– European Commission
ECB	– European Central Bank
EEA	– European Economic Area
EFTA	– European Free Trade Association
EMU	– Economic and Monetary Union
EU	– European Union
EUR	– euro
excl.	– excluding
f/c	– foreign currency
FDI	– foreign direct investment
Fed	– Federal Reserve System
FINA	– Financial Agency
f.o.b.	– free on board
GDP	– gross domestic product
GVA	– gross value added
HANFA	– Croatian Financial Services Supervisory Agency



HICP	– harmonised index of consumer prices
HRK	– kuna
HUB	– Croatian Banking Association
incl.	– including
IMF	– International Monetary Fund
JPY	– Japanese yen
LCR	– liquidity coverage ratio
m	– million
MIGs	– main industrial groupings
MM	– monthly maturity
MoF	– Ministry of Finance
NBS	– National Bureau of Statistics of China
NCA	– National Classification of Activities
n.e.c.	– not elsewhere classified
NSFR	– net stable funding ratio
NUIR	– net usable international reserves
OECD	– Organisation for Economic Co-Operation and Development
OG	– Official Gazette
R	– Republic
ROA	– return on assets
ROE	– return on equity
o/w	– of which
PPI	– producer price index
Q	– quarter
RR	– reserve requirement
SDR	– special drawing rights
SE	– South-East
SGP	– Stability and Growth Pact
SITC	– Standard International Trade Classification
USD	– US dollar
VAT	– value added tax
ZSE	– Zagreb Stock Exchange
ZMM	– Zagreb Money Market

## 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



HNB

ISSN 1848-7505