



2019 ANNUAL REPORT

CROATIAN NATIONAL BANK

2019



ANNUAL REPORT 2019

Zagreb, July 2020

CROATIAN NATIONAL BANK



HRVATSKA
NARODNA BANKA



Foreword by the Governor¹

The year behind us was good macroeconomically. Growth accelerated slightly, employment and wages grew and external and internal macroeconomic imbalances narrowed. Monetary policy was accommodative and exchange rate stability was maintained. Household and corporate loans grew sharply amid stimulating private and government sector financing conditions; interest rates were historically low and liquidity was high. Fiscal developments were also favourable. The budget deficit turned into a small surplus in 2018 and 2019 while public debt continued to decrease, its cumulative fall amounting to over ten percentage points of GDP over the past five years. External debt also fell during that period. All of this contributed to Croatia regaining an investment grade rating and exiting the group of countries with excessive macroeconomic imbalances within the European semester.

The preparations for Croatia's entry into the euro area have been underway for several years now and they basically consist of two elements: macroeconomic measures aimed at reducing internal and external imbalances and structural measures aimed at improving the competitiveness of the Croatian economy.



Boris Vujčić, governor

¹ The Annual Report was written before the pandemic. For details on the measures taken, see “CNB’s response to COVID-19 crisis”.

The letter of intent on the entry of Croatia into the European Exchange Rate Mechanism, an essential step towards joining the euro area, was co-signed by the Minister of Finance and myself and submitted on 4 July 2019 to EU institutions, euro area member states and Denmark. In this letter, we commit to undertaking a number of reform measures until entry in the ERM II, some of which are of very technical nature, such as asset quality review. There are two reform areas that fall within the area of responsibility of the CNB. They include a further strengthening of banking system supervision through the establishment of close cooperation between the CNB and the ECB that we applied for in May 2019 and improving the framework for macroprudential policy implementation.

In 2019, we stepped up our efforts to establish close cooperation between the CNB and the ECB, primarily in the area of human resources and organisation adjustment and organisation of on-site examination and individual procedural issues. Worth noting is our high involvement in the comprehensive assessment of the quality of assets of five banks, conducted jointly by the CNB and the ECB. The entry into the ERM II will have a positive effect on the economy, while Croatian citizens will be able to enjoy very tangible direct and indirect benefits of this entry, such as interest rate reduction and exchange rate risk reduction. For this process to be lasting and sustainable, it is crucial not only to pursue a wise economic policy but also more determinedly to remove structural vulnerabilities and increase potential growth after entry into the ERM II.

We monitored the acceleration in the growth of general-purpose cash loans that account for approximately 12% of the banking system assets. Although they did not pose a threat to system stability since bank capital is greater than the amount of these loans, we issued a recommendation to banks in regard to granting of these loans. That is, we estimated that further growth in consumer lending, coupled with very lax credit standards, might hinder debt repayment or even bring it to a halt in the case of any deterioration in economic activities. A small slowdown in the growth of cash loans is exclusively the result of compliance with the CNB recommendation, which was equally effective for system stability and consumer welfare.

In 2019, the CNB worked hard on regulatory and organisational changes in the field of technological innovation in financial and banking services, which will change the banking and payment systems as we know them today.

Mobile banking long ago changed traditional banking and is now replacing internet banking. The number of transactions initiated through a mobile phone exceeded the number of internet transactions. The new Payment Services Directive enables non-bank companies access to deposit accounts of customers, subject to customer authorisation, to make transactions or manage finances on their behalf. This enhances competition and provides benefits for consumers. Technology provides the convenience of simple and quick use but it also carries the risks of recklessness. New technology poses challenges for the regulator in terms of striking a balance between encouraging innovation, benefits for consumers and a timely recognition and possible regulation of risks.

Last year we made major progress on the path towards joining the European Exchange Rate Mechanism and the banking union. It was a successful year for us, economically and from the standpoint of achieving CNB objectives. As always, prudent CNB policy, guided exclusively by the principles of the profession and concern for the economic welfare of citizens and entrepreneurs, increased the resilience of the economy and created the reserves needed for successful crisis management. Reserves management, monetary policy, banks' capital requirements, payment system, cash supply and everything else that we did in the central bank for the general good in 2019 may only be evaluated in the most challenging of times. And, at the time of publication of this report, we know that the year 2020 is exactly that.



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The year at a glance



Real GDP growth accelerated to 2.9% in 2019, from 2.7% in 2018

2.9%

The modest pick-up of economic activity reflects an acceleration in the growth of external and all components of domestic demand.



Surplus in the balance of payments current and capital accounts increased

5.0%

Croatia's balance of payments current and capital accounts registered a surplus of 5.0% in 2019, up considerably from 3.3% of GDP in 2018.



Average annual inflation slowed down

0.8%

The average annual inflation of consumer prices slowed down to 0.8% in 2019, from 1.5% in 2018.



Employment and wages continued to grow

2.3% and 2.5%

According to CPII, the number of employed persons increased by 2.3% and the real net wage by 2.5%.



The purchase of foreign exchange and growth of international reserves continued

EUR 1.32bn and EUR 18.6bn

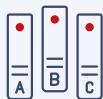
EUR 1.32bn was purchased from banks and the MoF, and the CNB's international reserves ended 2019 at EUR 18,562.4m.



Interest rates on household and consumer loans continued to trend downwards

2.9% and 2.1%

Interest rates on new housing loans in kuna decreased from 3.6% at the end of 2018 to 2.9% at the end of 2019, while interest rates on long-term corporate loans went down from 2.9% to 2.1%.



Relative indicators of foreign indebtedness continued to improve

75.7% and -6.9%

Total gross external debt stood at EUR 40.9bn at the end of 2019, or at 75.7% of GDP, 6.9 percentage points down from the end of 2018.



Public interested in videos on counterfeit recognition

150,000

Videos of verifying the authenticity of banknotes attracted more than 150,000 views.



Good bank capitalisation and high short-term liquidity coverage

23.2% and **172.7%**

Total capital ratio of 23.2% was among the highest of EU Member States. The increase in highly-liquid assets was reflected in the high Liquidity Coverage Ratio (LCR) of 172.7%.



Financial stability was protected by different capital buffers

4% and **5.5%**

Effectively, the combined capital buffer of credit institutions totalled between 4% and 5.5% in 2019.



Bank profitability indicators went up

1.6% and **9.9%**

As profit increased, ROAA and ROAE increased to 1.6% and 9.9%, respectively.



Number of transaction accounts

7,025,684

At the end of 2019, households (consumers) and business entities had altogether 7,025,684 transaction accounts with banks.



Cash in circulation increased despite new payment technologies

HRK 31bn | HRK 200 → 33.8%

The growth of cash in circulation increased. As at 31 December 2019, there was HRK 31bn in circulation, with banknotes in the denomination of HRK 200 accounting for 33.8%.



Dense network of outlets, ATMs and EFTPOS terminals

964 | 5,446 | 111,172

Reporting entities, such as banks and electronic money institutions operated via 964 business outlets, 111,172 EFTPOS terminals and 5,446 ATMs in 2019.



Growing interest in FinTech

11

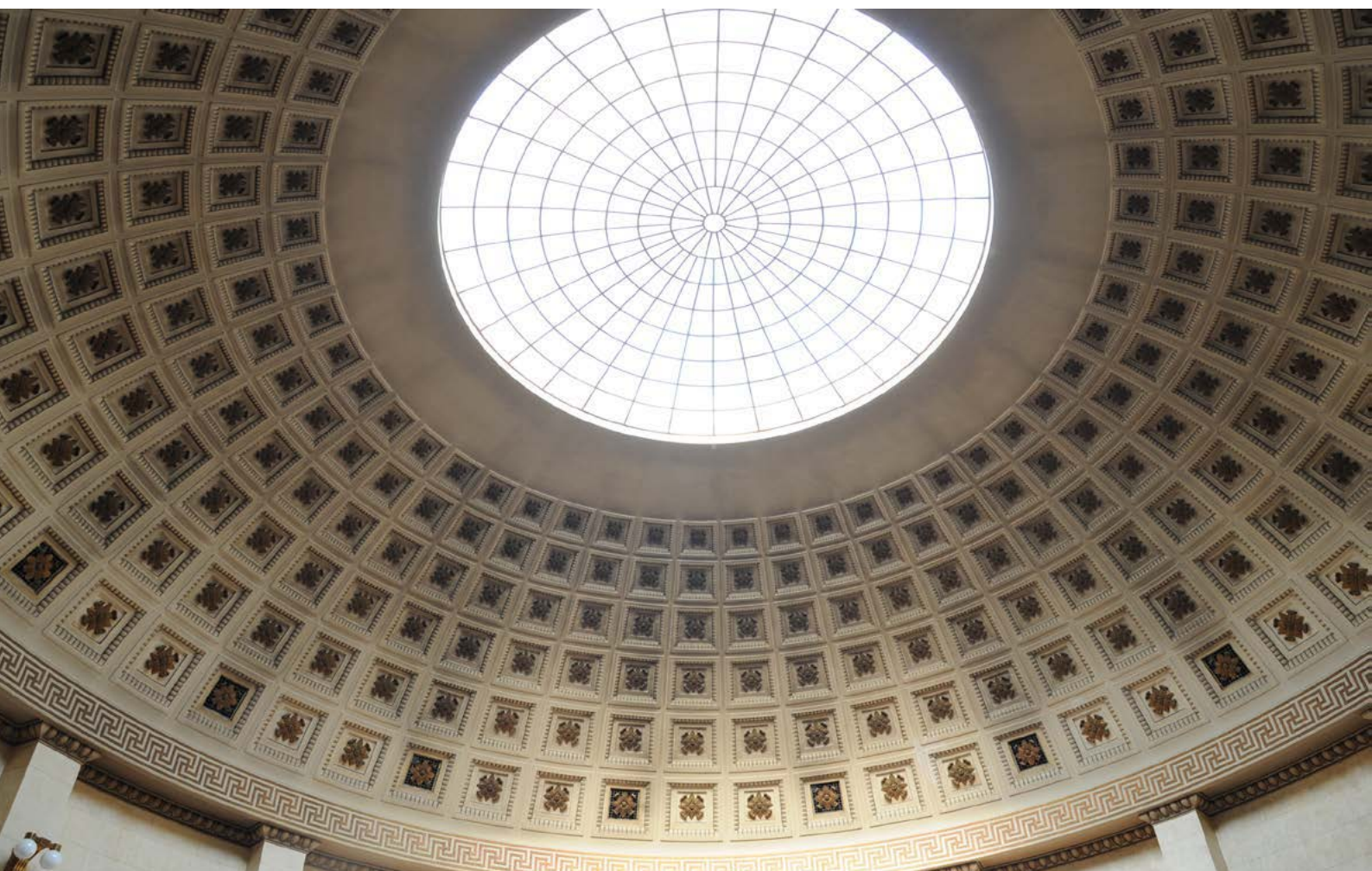
In 2019, the Croatian National Bank received 11 inquiries regarding FinTech.



Great interest in visiting the CNB

4,289 and **26**

Interest for lectures and workshops provided by the CNB on topics within the central bank's competence continued in 2019. Altogether 4,289 participants from 26 countries participated in CNB's lectures and workshops.



Cupola of the Round Hall in the CNB building, the former main hall of the Zagreb Stock and Commodity Exchange

Monetary policy, economic developments, financial stability and reserves management

Monetary policy, economic developments, financial stability and reserves management

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1 Monetary policy and economic developments

The growth in gross domestic product accelerated to 2.9% in 2019, from 2.7% in the year before. Such developments are the result of accelerated growth in foreign and domestic demand. Economic growth was mostly fuelled by the growth in total goods and services exports. Consumer price inflation slowed down in 2019, primarily due to a reduction in the rate of VAT on certain food and pharmaceutical products and a fall in crude oil prices on the global market. The current and capital account surplus rose from 3.3% of GDP in 2018 to 5.0% of GDP in 2019. This was spurred by a further fast growth in tourism and a more intensive use of EU funds. By contrast, the foreign trade deficit widened additionally. At the same time, external indebtedness of domestic sectors continued to shrink. The expansionary monetary policy of the CNB supported economic recovery in the conditions of a stable nominal exchange rate of the kuna against the euro. As a result, bank liquidity in 2019 was at the highest levels ever recorded, which contributed to a further fall in interest rates on loans and lending growth. The budget balance was maintained and the public debt-to-GDP ratio continued to trend downwards in 2019.

Real economic activity picked up slightly in 2019

Real gross domestic product grew by 2.9% in 2019, after growing by 2.7% in 2018. The slight acceleration in economic activity reflected faster growth in foreign demand and all components of domestic demand (Figure 1.1).

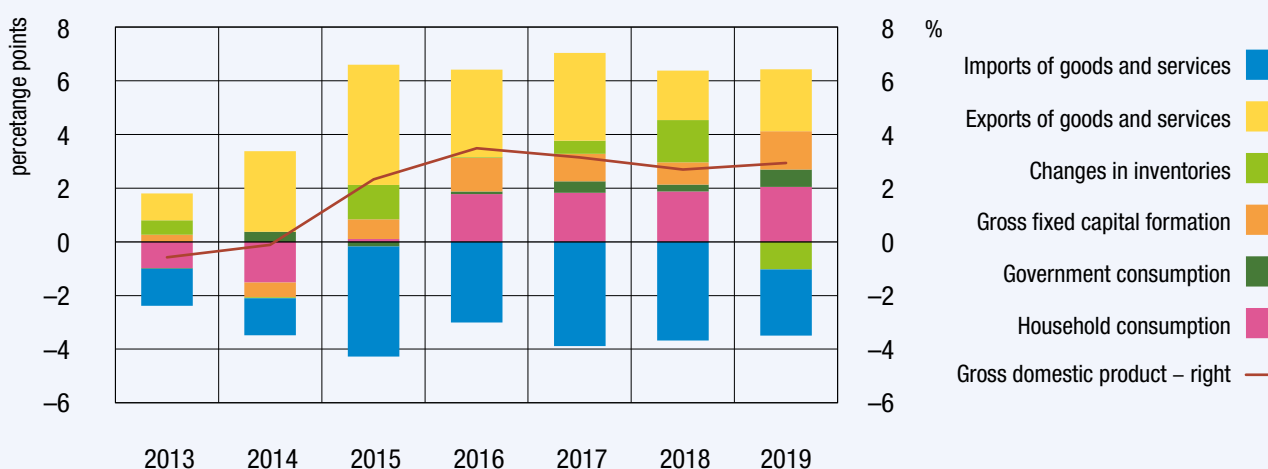
Real GDP growth in 2019 was mainly the result of the rise in total exports, with exports of goods and services growing faster than in the year before.

Goods exports were 4.3% larger in 2019 than in the preceding year, while the exports of services rose by 4.9%. As a result, the increase in total exports picked up to 4.6% in 2019, after being 3.7% in 2018.

Real GDP growth of 2.9% in 2019 was fuelled by the rise in domestic and foreign demand.

Within domestic demand, personal consumption, which expanded by 3.6% from the year before, gave the strongest boost to economic activity growth in 2019. The expansion of household consumption was due to favourable labour market developments and rising borrowing of households, coupled with record-high consumer optimism. Employment continued to grow as in 2018, with the number of employed persons up by 2.3% according to the data of the Croatian Pension Insurance Institute (CPII). Employment grew in most activities, with the sharpest growth seen in construction, the IT sector and tourism-related service activities. By contrast, employment in industry held steady (Figure 1.2). The ILO unemployment rate dropped to 6.6% of the labour force, down from 8.4% in 2018. Wages continued to rise, albeit at a slower pace than in the year before, so that real gross and real net wages grew by 2.8% and 2.5% respectively (vs 3.4% and 2.9% in 2018).

Figure 1.1 Slight acceleration of real GDP growth
contributions by GDP components



SOURCE: CBS.

Other components of domestic demand also recorded growth in 2019. The increase in gross fixed capital formation picked up to 7.1%, from 4.1% in 2018, reflecting intensified investment activity in the private and public sectors and a more vigorous use of EU funds. Government consumption growth also accelerated (to 3.6%, up from 3.2% in 2018).

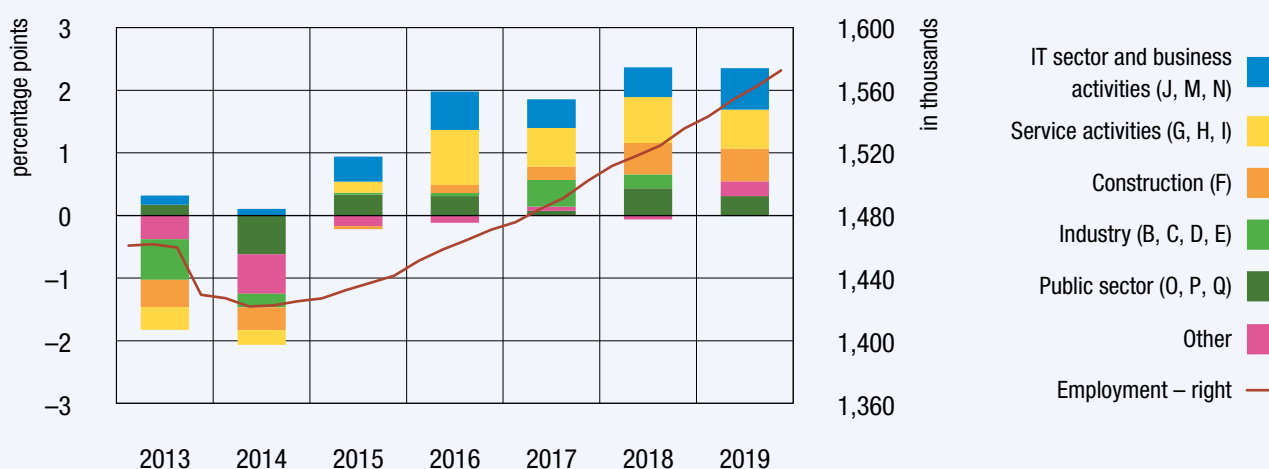
Unemployment rate dropped to 6.6% of the labour force, down from 8.4% in 2018.

The increase in total imports slowed down from 7.5% in 2018 to 4.8% in 2019, so that the contribution of net foreign demand to total economic growth was almost neutral at –0.1 percentage point.

The rise in gross value added picked up from 2.2% in 2018 to 2.7% in 2019, with an increase recorded in all activities. The largest contribution to the total increase in GVA came from wholesale and retail trade, transportation and storage and accommodation and food service activities (Figure 1.3). The sharpest GVA growth in 2019 was seen in construction, where the growth rate was almost double that recorded in 2018, 8.0% vs 4.5%. Monthly data on the volume of construction work show that this was largely due to the increase in the volume of works on infrastructure facilities following five consecutive years of declines, which may be associated with stronger investment

Figure 1.2 Favourable labour market developments

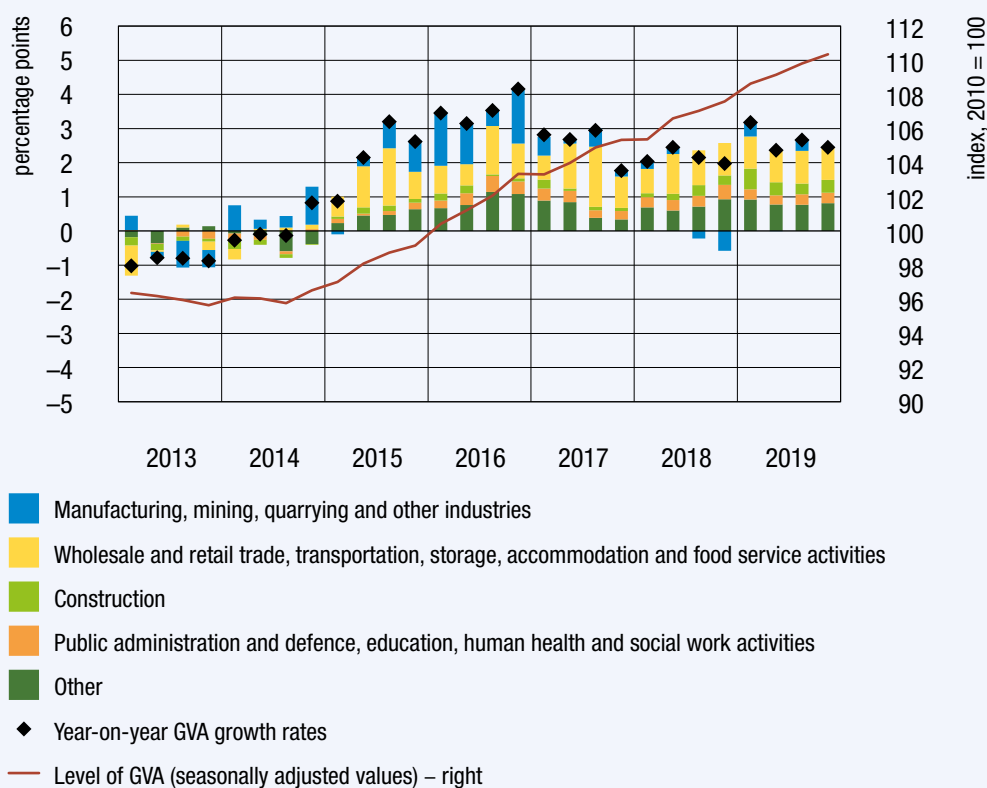
seasonally adjusted data, contributions to the annual rate of change



SOURCE: CPII (SEASONALLY ADJUSTED BY THE CNB).

Figure 1.3 GVA rose in all activities

contributions by components



SOURCE: CBS.

activity of the public sector. The upward trend in construction works on buildings that began in 2015 continued.

Deceleration of the consumer price inflation due to a cut in the VAT rate and a fall in global crude oil prices

Average annual consumer price inflation decreased to 0.8% in 2019, from 1.5% in 2018, primarily due to a cut in the VAT rate on pharmaceutical and some food products – meat, fish, vegetables, fruit and eggs – made early in the year (Figure 1.4). Imported inflationary pressures eased as a result of a drop in average global crude oil prices in 2019 and a slowdown in euro area inflation. The exception was the global market prices of meat, in particular pork, which increased in 2019, largely due to the growth of demand from China, reflecting a marked drop in the country's pork production caused by swine fever. This fuelled the rise in pork prices in the European agricultural product market. Domestic inflationary pressures were relatively mild in 2019, although slightly stronger than in the previous year, related mainly to the

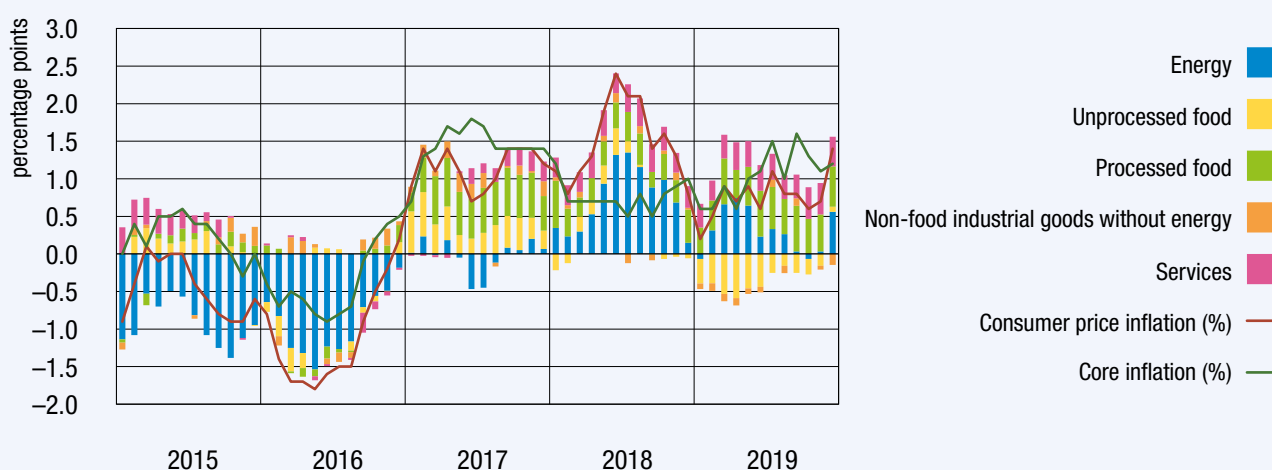
Average annual consumer price inflation was 0.8% in 2019.

acceleration of the growth of personal consumption and unit labour costs as well as of industrial producer prices (excluding energy). Cost pressures did not spill over significantly to consumer prices, having partly been alleviated by a drop in profit margins. International analyses suggest that wage spillover effects on prices were also limited in other EU member states¹. Wage spillover effects on prices have proved to be less pronounced in conditions of low inflation and low inflationary expectations, strong market competition and solid profitability of corporates, which then prefer cutting profit margins to risking losing market shares due to increases in their products' prices.

In line with the developments in the main inflation factors, overall consumer price inflation decelerated in 2019 mainly as a result of the fall in the average annual growth rate of energy prices, to 1.8% (from 4.4% in 2018), and the prices of unprocessed food products, to –3.3% (from 0.6% in 2018). The contribution of non-food industrial products without energy to overall inflation

Figure 1.4 Consumer price inflation slowed down

contributions to annual inflation



Notes: Core inflation does not include agricultural product prices, energy prices and administered prices. Processed food products include alcohol and tobacco.

SOURCES: CBS AND CNB CALCULATIONS.

¹ See in IMF (2019): *Wage Growth and Inflation in Europe: A Puzzle?*, *Regional Economic Outlook Europe* (Chapter 2): Europe, November.

edged down in 2019. By contrast, the contribution of services and processed food products to overall inflation edged up in 2019 (largely due to the pick-up in the average annual growth rate of the prices of bread and cereals and tobacco products). The average annual rate of growth of core inflation, which excludes the prices of agricultural products, energy and administered prices, also grew marginally (from 0.8% in 2018 to 1.0% in 2019), mostly due to the said acceleration in the average annual growth rate of processed food products prices.

Growing surplus in the current and capital account, coupled with a further decrease in external indebtedness

Croatia's balance of payments current and capital account registered a surplus of 5.0% of GDP in 2019, up considerably from the 3.3% of GDP in 2018. The improvement of the balance was primarily a consequence of the surge in revenues from travel services and, to a lesser extent, more intensive use of EU funds. An opposite effect was made by the larger foreign trade deficit.

The surplus in the current and capital account grew in 2019 largely due to the steady upward trend in the net exports of services, in particular travel services. The growth in revenues from the tourism consumption of foreign tourists picked up noticeably, from 6.0% in 2018 to 10.9% in 2019. This was the outcome of the increase in the average spending and the number of arrivals of foreign tourists. As regards volume indicators, the number of foreign tourist arrivals and overnight stays went up 4.3% and 1.2% respectively, mostly thanks to guests from Slovenia, Ukraine, the United States of America, the United



Deputy Governor Sandra Švaljek spoke about monetary policy at the "The Day of Great Plans" conference held in September 2019.

Kingdom and France. Larger exports of other services, primarily research and development services, also contributed to the increase in the net exports of services, although to a significantly smaller extent.

Croatia's balance of payments current and capital account registered a surplus of 5.0% of GDP in 2019, due to a large increase in tourism revenues and, to a smaller extent, more intensive use of EU funds. By contrast, the foreign trade deficit widened.

The foreign trade deficit continued to widen at the same time, though at a notably slower pace than in 2018. In particular, according to CBS data, the growth of goods exports accelerated from 3.8% in 2018 to 5.9% in 2019, while the growth of goods imports decelerated noticeably, from 8.5% to 4.7%. Nevertheless, the overall goods trade deficit deteriorated due to the significantly higher value of imports.

The deterioration was widespread among many product groups, but it was most pronounced in the trade in food products, followed by particular categories of capital goods, such as specialised machinery and general industrial machinery and equipment, and metal and wood industry products. By contrast, unfavourable developments were mitigated by the narrowing of the deficit in the trade in medical and pharmaceutical products and oil and refined petroleum products.

The overall surplus in the secondary income account and in the account of capital transactions improved strongly due to larger payments from EU funds to end beneficiaries, with a slightly bigger share of EU funds being related to capital than to current revenues; Croatia is entering the final years for using the funds earmarked for the 2014 – 2020 budget period, when disbursements are expected to peak. The surplus of the funds distributed to end beneficiaries over Croatia's total payments to the European budget grew to 2.6% of GDP in 2019, which was 0.8 percentage points more than in 2018. On the other hand, the primary income deficit widened only slightly, mostly due to higher expenditures on direct equity investments (because of larger profits of corporations and banks in foreign ownership), with unfavourable developments being alleviated by the surge in revenues from compensation of persons temporarily employed abroad.

In 2019, Croatia received 2.6% of GDP more funds from the European budget than it paid in. Disbursements are expected to peak in the final years of the 2014–2020 budget period.

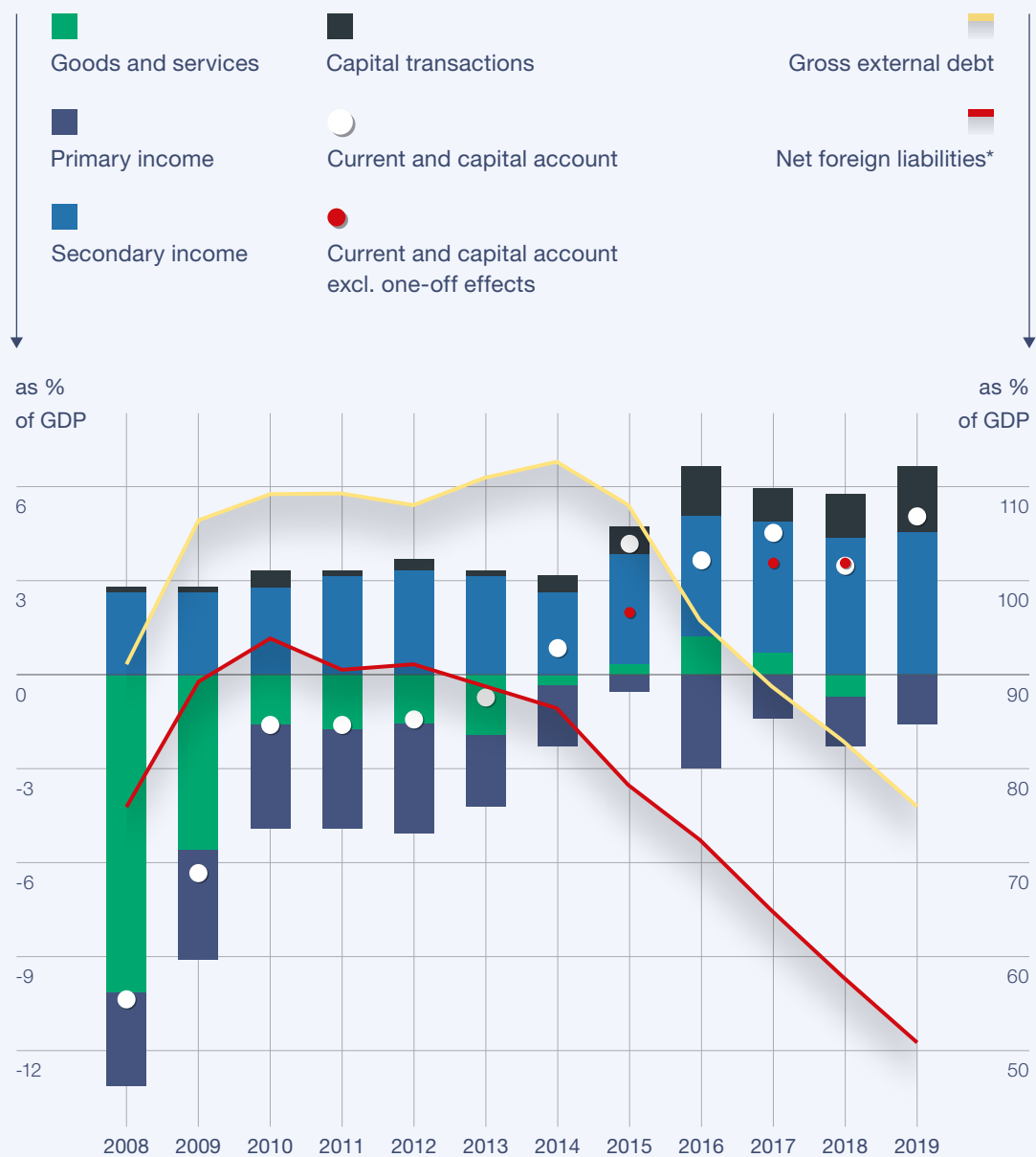
The net capital outflow in the financial account was the outcome of the decrease in net debt liabilities of domestic sectors, while foreign equity liabilities increased. The net inflow from equity investments was lower than in 2018 due to the sharper growth in assets from portfolio investments of other domestic sectors in foreign shares and equity holdings and smaller inflows of direct equity investments in Croatia. As regards the sectoral structure of debt investments, the strongest improvement was seen in the net debt position of the central bank, due to the sharp increase in international reserves fuelled by foreign exchange market interventions, and the government. In addition, other domestic sectors also reduced their net external debt, while the net position of banks deteriorated.

External debt shrank by almost seven percentage points in 2019 and stood at EUR 40.9bn or 75.7% of GDP.

The continued reduction of net debt liabilities of domestic sectors, coupled with the rise in nominal GDP, led to a further improvement in the relative indicators of external indebtedness. Total gross external debt stood at EUR 40.9bn at the end of 2019, or at 75.7% of GDP, 6.9 percentage points down from the end of 2018. The decrease in net external debt was slightly stronger; it dropped from 26.0% of GDP at end-2018 to 18.3% of GDP at end-2019. As a result of previously accumulated liabilities, the negative value of the net international investment position remained relatively high, although it did improve: from –57.9% of GDP at end-2018 to –50.8% of GDP at end-2019, continuing the several-year downward trend in external imbalances.

The several-year trend of improvement of external imbalances continued

current and capital account and the balance of foreign liabilities



Notes: 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.

* Net foreign liabilities are defined as the difference between total foreign liabilities and total foreign assets equal to the negative value of the net international investment position (-50.8% of GDP at the end of 2019).

SOURCES: CBS and CNB.

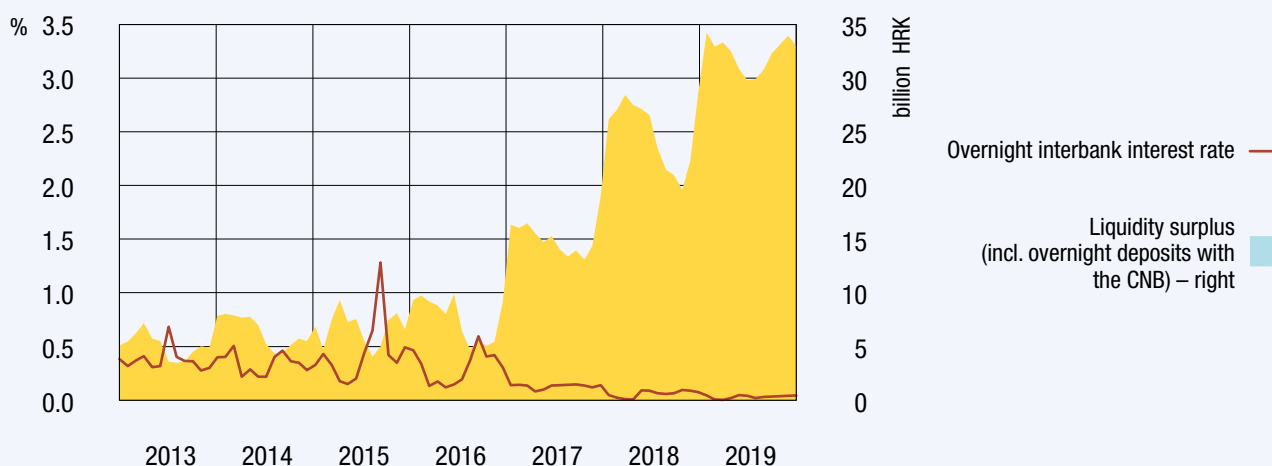
Expansionary monetary policy and maintenance of exchange rate stability

In 2019, the CNB continued to pursue an expansionary monetary policy, thus supporting continued economic growth. The central bank purchased foreign exchange to preserve the stability of the exchange rate of the kuna against the euro, thereby boosting the financial system's liquidity and strengthening the expansive orientation of the monetary policy. The expansionary character of the CNB's monetary policy is reflected in the very low overnight interest rate on trading in demand deposits², which ranged between 0.00% and 0.05% over the year. At the same time, banks' free reserves in settlement accounts with the CNB were very high. The average surplus kuna liquidity was HRK 32.2bn in 2019 (Figure 1.5), up by almost 30% from the average surplus in 2018.

The pressures on the strengthening of the exchange rate of the kuna against the euro continued in 2019 and were, as in the year before, associated with the current and capital account surplus and a further reduction in the level

Figure 1.5 High levels of kuna liquidity surplus reflect the expansionary character of monetary policy

surplus kuna liquidity and overnight interest rate

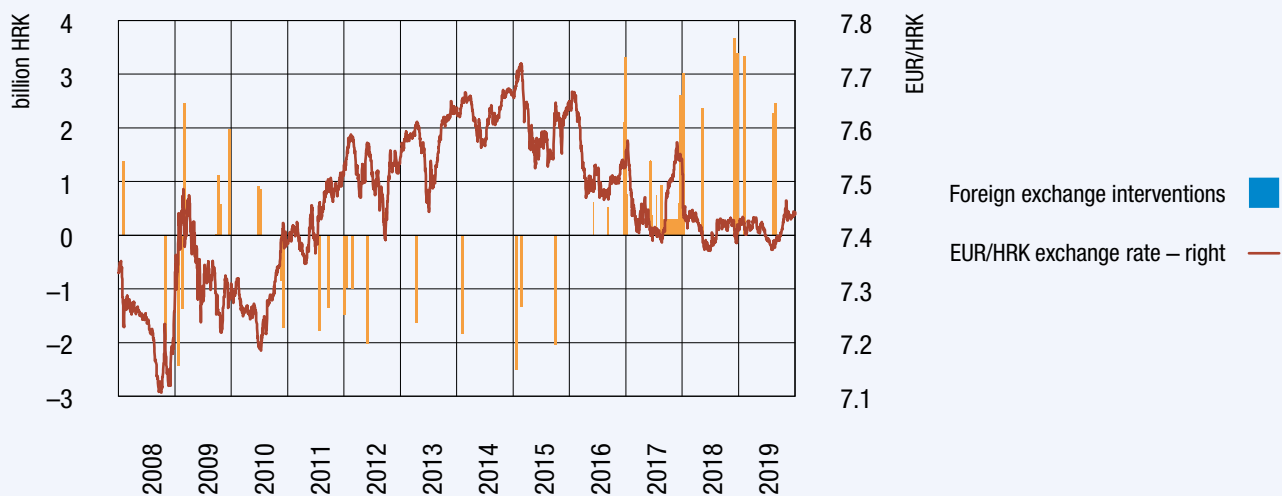


Notes: The overnight interest rate until the end of 2015 refers to the overnight interbank interest rate and as of the beginning of 2016 to the overnight interest rate on demand deposit trading between banks and between banks and other participants in the money market.

SOURCE: CNB.

² The interest rate in demand deposit trading between banks and between banks and other participants in the money market.

Figure 1.6 The purchase of euro from banks prevented excessive strengthening of the kuna
amounts of foreign exchange interventions and EUR/HRK exchange rate



SOURCE: CNB.

of euroisation of deposits and loans. To prevent excessive strengthening of the kuna, the CNB intervened in the foreign exchange market, creating HRK 9.7bn of reserve money. The CNB purchased a net total of EUR 1.1bn from banks and EUR 228.1m from the Ministry of Finance (Figure 1.6). As a result, the exchange rate of the kuna against the euro went up 0.3% from the end of 2018 to the end of 2019, standing at EUR/HRK 7.44, while the average exchange rate for 2019 as a whole (EUR/HRK 7.41) was almost equal to that in 2018.

Due to the exceptionally high liquidity, banks did not have the need to borrow from the CNB. Through regular weekly operations the CNB offered kuna funds to banks for seven-day periods at a fixed interest rate of 0.3%, whereas structural operations, through which the CNB places kuna funds to banks for a longer period, were not conducted.

Owing to the very high liquidity levels, interest rates continued to decrease in 2019. The costs of government borrowing, one of the determinants of the borrowing costs of other domestic sectors, reached historical lows. The interest rate on one-year kuna T-bills dropped to 0.06%, while the interest rate on euro T-bills of the same maturity became negative for the first time in August 2019, falling to -0.05%. Government borrowing costs on the foreign market were also much more favourable in 2019 thanks to improved risk perception regarding Croatia, which was due to the reduction in fiscal risks and other

macroeconomic imbalances. Credit default swap (CDS) spreads for Croatia went down from 96 basis points to 64 basis points, whereas the EMBI³ for Croatia dropped by 1.2 percentage points.

Financing conditions for the government, enterprises and households improved steadily, as evidenced by the drop in interest rates and the easing of credit standards (with the exception of household cash loans).

Bank interest rates for the corporate and the household sector also continued their several-year downward trend. Interest rates on new housing loans in kuna decreased from 3.6% at the end of 2018 to 2.9% at the end of 2019, while interest rates on new kuna consumer loans went down from 6.7% to 6.1%. Interest rates on corporate loans also decreased, from 3.2% to 2.5% on short-term loans, and from 2.9% to 2.1% on long-term loans.

In addition to reducing interest rates, banks continued to relax loan-granting standards for corporations in 2019. This reflected positive economic expectations, as well as competition among banks and abundant bank liquidity that is attributable to expansionary monetary policy. Favourable financing conditions also fuelled corporate demand for loans, which grew throughout the year except in the third quarter. By contrast, credit standards for households have been tightened continuously since the second quarter of 2019, particularly those applicable to consumer and other loans. This was the outcome of the banks' adjustment to the CNB's [Recommendation on actions in granting non-housing consumer loans](#)⁴, inviting banks to apply stricter conditions for general-purpose cash loans. The tightening of lending terms triggered a fall in demand for such loans, while demand for housing loans continued to grow sharply throughout most of 2019.

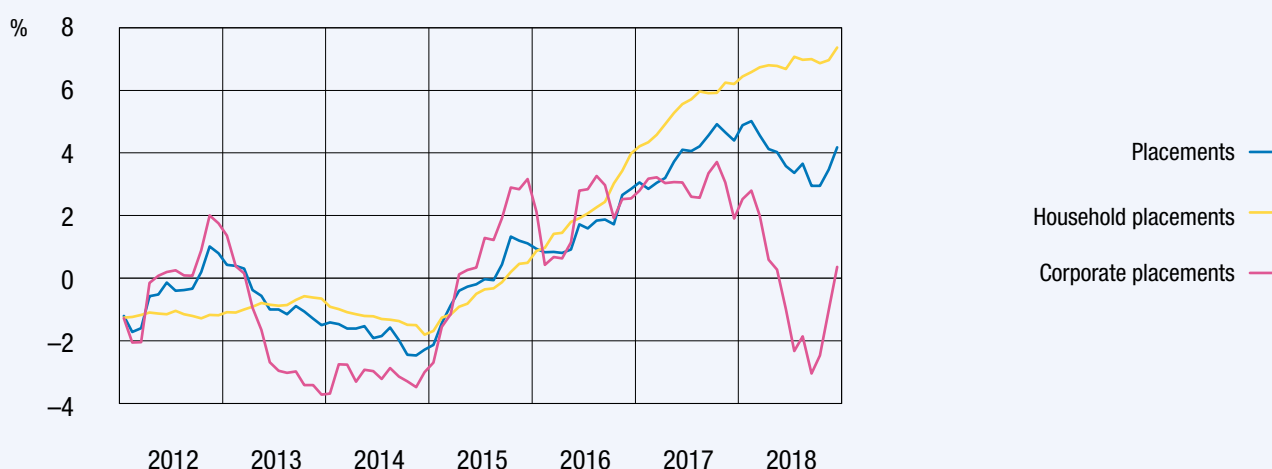
Favourable financial and economic conditions contributed to a further increase in bank lending activity (Figure 1.7). Total bank placements to domestic

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

4 For details, see chapter 4 Supervision: Supervision of credit institutions and chapter 2 Financial stability: Overall assessment of the main risks and challenges to financial stability.

Figure 1.7 Continuation of strong lending activity

year-on-year rate of change, transaction-based*



* The transactions show changes net of the changes in the exchange rate, reclassifications, price adjustments of securities and loan write-offs, including the sale of placements to the amount of their value adjustments.

SOURCE: CNB.

sectors (excluding the government) grew by 4.2%⁵ in 2019, which was only slightly less than in the year before (4.4%). This was mostly due to strong household lending, the annual growth of which reached 7.4% at end-2019. General-purpose cash loans were again the main generator of this growth, with household loans also growing strongly on the back of increases in real estate prices, the fall in interest rates and the government's continued implementation of the housing loans subsidy programme. By contrast, corporate placements rose marginally in 2019, by 0.4%, largely due to the reduction of bank claims on the Fortenova Group (former Agrokor) as a result of the operational implementation of the settlement, and activation of government guarantees for shipyards. If these one-off effects are excluded, the growth in corporate placements in 2019 was almost equal to the growth in the preceding year. Investment loans grew sharply while loans for working capital and other loans decreased.

5 The rates of change in placements specified in this section are calculated on the basis of transactions, which means that they do not include the effects of exchange rate changes, reclassifications, price adjustments of securities and loan write-offs on the rate of change in placements. Total placements to domestic sectors (excluding the government) include placements of credit institutions and money market funds and, in addition to loans, include money market instruments, bonds, shares and holdings in investment funds.

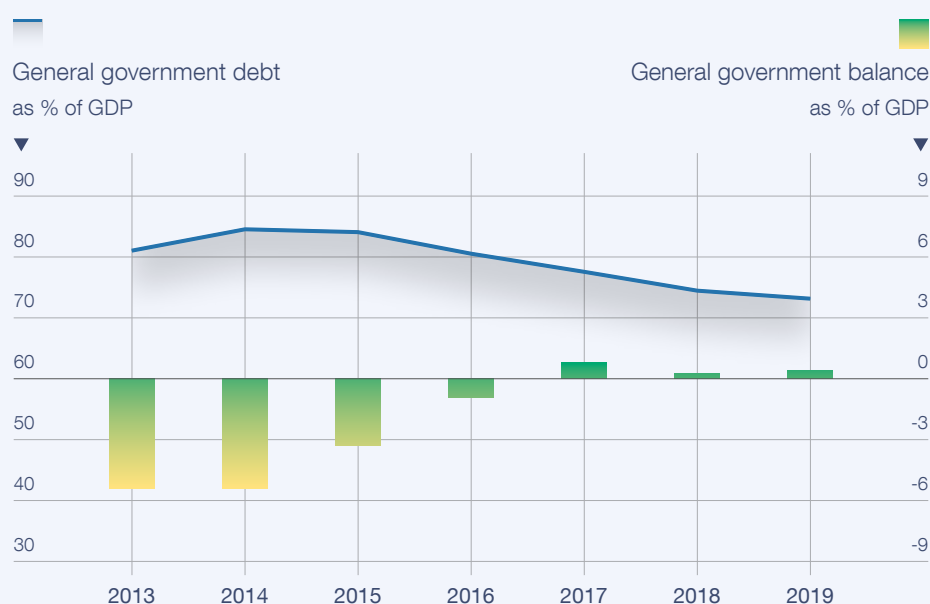
The years-long upward trend in kuna loans continued in 2019. While the household sector led the way in this trend in previous years, corporations also turned to kuna loans in 2019. As a result, kuna placements accounted for almost a half (49%) of total bank placements to domestic sectors (excluding the government), while they accounted for only slightly more than one quarter seven years before. The upward trend in kuna loans is supported by the growing awareness of citizens about exchange rate risk, and the strong increase in kuna deposits, in particular the balances in household and corporate current and giro accounts.

Fiscal adjustment and the decrease in the public debt-to-GDP ratio continued into 2019

As regards fiscal policy, favourable fiscal trends that resulted in a general government budget surplus according to the internationally comparable methodology of the European System of National and Regional Accounts (ESA 2010) continued in 2019, while the public debt-to-GDP ratio decreased steadily.

Continued fiscal adjustment

fiscal indicators as % of GDP



Sources: CBS and CNB.

The general government recorded a budget surplus of 0.4% of GDP in 2019, while in 2018 the surplus was 0.2% of GDP. The improvement is the outcome of slower annual growth in total expenditures (6.3%) than in total revenues (6.7%), which rose sharply due to stronger economic activity. The rise in revenues and expenditures was also driven by increased use of EU funds. Excluding these funds, expenditures and revenues grew annually by 5% and 5.4% respectively.

The favourable budget outturn, coupled with nominal GDP growth, led to a continued reduction in the general government debt-to-GDP ratio. The relative indicator of public debt ended 2019 at 73.2% of GDP, which is a decrease of 1.5 percentage points from the end of 2018.

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2019

2 Financial stability

One of the statutory tasks of the Croatian National Bank is to contribute to financial stability as a whole. To this end, the CNB regularly analyses systemic risks that may jeopardise financial stability and adopts measures aimed at preventing the occurrence and expansion of such risks and strengthening the resilience of the entire financial system to sudden shocks. The developments in the domestic and the international environment in 2019 mostly had a favourable impact on financial stability in Croatia. As a result, the assessment of the exposure of the financial system to systemic risk did not change significantly from last year and there was thus no need to adjust the existing measures and macroprudential policy instruments applied by the CNB. However, prompted by the possible risks associated with a strong growth in cash loans, towards the end of February 2019, the CNB issued a Recommendation on actions in granting non-housing consumer loans. Also, to enable better systemic risk monitoring, a process was initiated that was to establish a system for collecting all relevant information on loans granted to consumers.

Overall assessment of the main risks and challenges to financial stability

In 2019, Croatia saw continued moderate economic growth and the decline of structural imbalances, such as public and private sector debt, external imbalances and unemployment. Taking into account these positive trends, the European Commission published its assessment that the macroeconomic imbalances in Croatia were no longer excessive¹ while the leading rating agencies raised the credit rating for Croatia.

¹ See chapter 8 International relations.

Still, the relatively high levels of general government and external debt compared with those of peer countries continue to make the Croatian economy vulnerable to possible changes in the financing conditions on international markets. Therefore, it is assessed that the total exposure of the financial system to systemic risks remained moderate.

Moderate exposure to systemic risks and high banking system capitalisation and liquidity characterised the Croatian financial system in 2019.

High capitalisation and liquidity continued to be characteristic features of the domestic banking system. The quality of the banks' loan portfolio steadily improved during 2019, due to the better quality of existing loans and the continued sale of non-performing placements as well as inflows of newly-granted performing loans. In addition, bank resilience was also reinforced by the high coverage of non-performing placements. However, Croatia again ranked among the top EU countries in terms of the ratio of non-performing loans to total loans. While value adjustments for credit risk decreased, a noticeable increase was seen in provisions for litigation costs arising from loans indexed to Swiss francs or with variable interest rates. In an environment characterised by historically low interest rates, interest income of banks dropped in 2019, with growth seen only in interest income from general-purpose cash loans. Structural vulnerabilities of the banking sector still stem from high market concentration and concentrated exposure to the government sector and groups of connected persons. The exposure of banks to currency-induced and interest rate-induced credit risk remained high, though it continued to trend down thanks to the rise in the share of kuna loans and loans with a fixed interest rate.

As no significant activity was seen on the domestic foreign exchange and capital markets in 2019, there was little volatility in the financial stress index. On the other hand, international financial markets were marked by considerable uncertainties, associated with trade tensions between the US and China and the EU, the turmoil concerning the timing and terms of the UK's exit from the EU and political and economic turbulence in Italy, which resulted in a surge in the risk premiums on Italian government bonds and Italian banks. Croatia's risk premium was at historical lows in 2019, but it remained higher than that of peer countries of Central and Eastern Europe.

Notwithstanding vigorous new borrowing, the rise in employment and disposable income mitigated vulnerabilities of the household sector. The growth in household sector debt was mostly driven by the increase in general-purpose cash loans, predominantly uncollateralised loans with an initial maturity of five years and more. This is why in February 2019 the CNB issued a [Recommendation on actions in granting non-housing consumer loans](#)², which aims to level out the conditions for assessing creditworthiness for housing loans, which are granted under tight criteria, and non-housing loans to consumers with longer maturities and to obviate the possibility of arbitrage between different types of loans. Credit institutions gradually adjusted to the recommendation over the second half of 2019, so that the growth rate of general-purpose cash loans slackened slightly, while the initial maturity of newly-granted loans was moderately shortened. Though 2019 was characterised by a gradual decline in the interest rate and currency risks of households, these risks remained present as 45% of loans are indexed to the euro and 50% of them are granted with a variable interest rate.

Bank placements to the non-financial corporate sector continued to edge up in 2019 at a pace similar to that in the preceding year. Relative corporate debt steadily declined, along with expenditures for interest payments. Good business performance contributed to capital growth so that, in addition to liquidity growth, the sector recorded an increase in solvency. Labour shortages and high labour costs were among the problems encountered by corporations in 2019. In addition, the year was characterised by uncertainty associated with the operational restructuring of the Fortenova Group (the former Agrokor) and the implementation of the settlement itself.

The average annual increase in residential real estate prices on the Croatian market was a high 9% in 2019 and was one of the highest in the EU. Prices in the City of Zagreb grew much faster than on the Adriatic coast and in the rest of the country. Nevertheless, average prices still did not reach the highs recorded before the global financial crisis and the long-lasting correction that followed. Transactions also increased in number, though they remained low in historical terms, while market activity was focused on Zagreb and the Adriatic coast. Demand for residential real estate was driven by historically low interest rates, favourable trends in the labour market, the implementation of the government's housing loans subsidy programme and Amendments to the Real

2 For more details, see chapter 3.3 and Box 1 of [Macroprudential Diagnostics, No. 8](#).

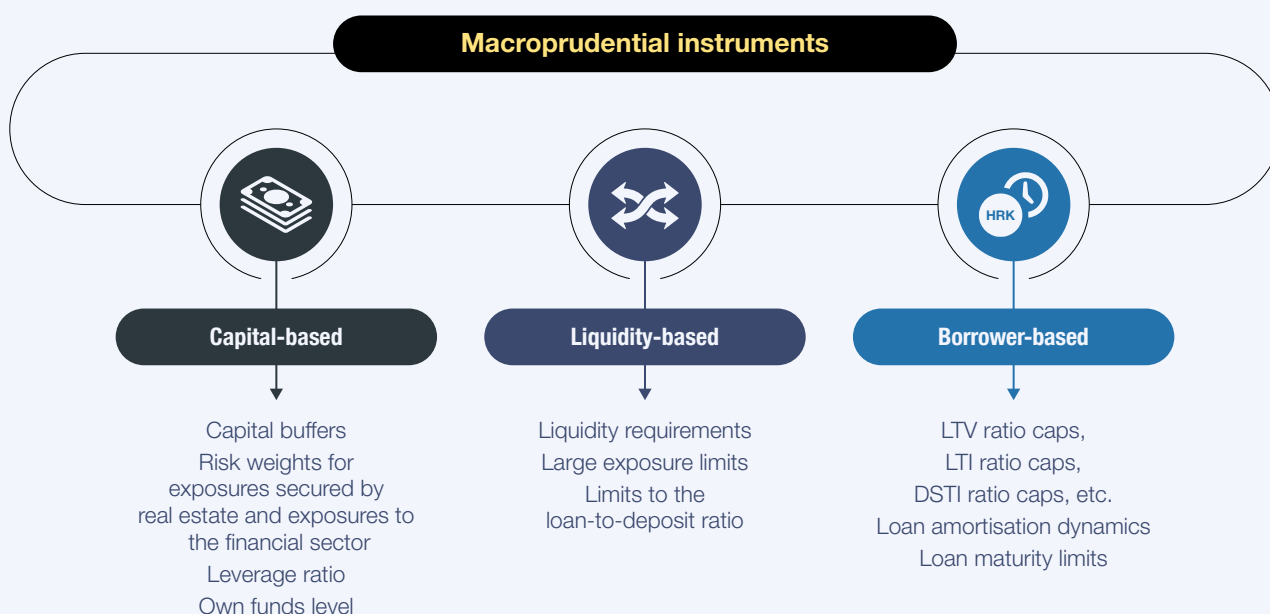
Estate Transfer Tax Act³. Furthermore, the prices on the Adriatic coast and in Zagreb were also affected by the conversion of real estate into accommodation for daily and weekly rental.

Macroprudential activities of the CNB in 2019

In response to identified systemic risks, in 2019 the Croatian National Bank actively applied macroprudential instruments within its competence. The end objective of the implementation of macroprudential policy is the safeguarding of financial stability, which also implies preventing the excessive accumulation of systemic risks and strengthening financial system resilience in case of risk materialisation. The instruments available to the competent authorities can be grouped into three basic categories: capital-based, liquidity-based and borrower-based instruments. The first two groups of instruments are defined in the EU's harmonised legal framework, with some of them being directly applicable in Croatia and some of them being transposed into the domestic legal

Breakdown of macroprudential policy instruments

By impact



Source: adapted in accordance with V. Constancio et al. (2019): Macroprudential policy at the ECB: Institutional framework, strategy, analytical tools and policies, ECB Occasional Paper Series, No. 227.

³ Amendments to the Real Estate Transfer Tax Act reduced the real property transfer tax rate from 4% to 3% for all agreements concluded in 2019.

framework. By contrast, borrower-based instruments are completely within the domain of national legislations and, in line with the ECB's recommendation, part of the usual set of instruments used by macroprudential authorities of most member states in the euro area and beyond.

Accordingly, in the letter of intent to enter the European Exchange Rate Mechanism II (ERM II) and the banking union⁴, the Republic of Croatia has undertaken to adopt certain amendments to the Credit Institutions Act and the Act on the Croatian National Bank, including those in the area of macroprudential policy. They elaborate the CNB's powers in the adoption and implementation of macroprudential measures and instruments, explicitly mentioning legally binding borrower-based measures. In addition, the ECB may issue instructions to the CNB if it assesses that a Croatian macroprudential measure based on harmonised European regulations is not strict enough, one of the conditions for the establishment of close cooperation with the ECB thus being met.

a) Capital buffers

The primary objective of capital buffers is to increase the resilience of the banking system to possible sudden shocks. As in the previous years, the combined capital buffer applied in 2019 consisted of: (a) the capital conservation buffer; (b) the countercyclical capital buffer; and (c) the systemic risk buffer or the systemically important institutions buffer, depending on whichever is the higher for a particular credit institution.

The **capital conservation buffer** amounts to 2.5% of the total risk exposure amount for all credit institutions and is set out in the Credit Institutions Act.

Throughout 2019, the **countercyclical capital buffer** stood at 0% of the total amount of risk exposure. Regular quarterly reviews of the development of cyclical systemic risks have shown that, despite the more dynamic credit activity of banks and a perceptible growth in real estate prices, there is still no pressure requiring corrective action by the CNB. Hence, the **required countercyclical capital buffer rate** to be applied in 2020 was again estimated at zero.

4 For details, see chapter 9 The process of euro adoption.

In June 2019, the CNB performed the regular yearly identification of material exposures of credit institutions to third countries (non-EU countries) in line with [Recommendation ESRB/2015/1](#). As in the previous few years, only Bosnia and Herzegovina was identified as a third country material for the banking system of the Republic of Croatia. Despite its increase, lending activity in Bosnia and Herzegovina still cannot be considered excessive and there is currently no need to set a countercyclical capital buffer for the exposures of Croatian credit institutions to Bosnia and Herzegovina. The **systemic risk buffer** level remained at 1.5% or 3% of the risk exposure amount in 2019, depending on the size of the institution's assets⁵. In mid-2019, the Croatian National Bank conducted a regular biannual [analysis of the structural elements of financial stability](#) and systemic risk in the economy, which showed that structural vulnerabilities of the system and exposures to systemic risk held steady at a moderately high level. Results of the analysis upheld the conclusion that the rates of the systemic risk buffer should remain at previously determined levels.

All three capital buffers – the capital conservation buffer, the countercyclical buffer and the systemic risk buffer – remained unchanged in 2019.

In December 2019, the CNB performed the regular annual review of systemic importance of credit institutions and determined the **buffer for institutions identified as other systemically important institutions (O-SIIs)**. The review identified [a total of seven O-SIIs](#), for which buffer rates of 0.5%, 1% or 2% of the total risk exposure amount were set, depending on their systemic importance. However, when the systemic risk buffer is applied to all exposures, as it is in Croatia, under the provisions of the Credit Institutions Act, each O-SII is only required to maintain the higher of the two capital buffers. In 2019, this was the systemic risk buffer for all credit institutions.

Effectively, the combined capital buffer of credit institutions totalled between 4% and 5.5% in 2019, depending on the bank size and on whether a particular O-SII was obliged to maintain a systemic risk buffer or an O-SII buffer.

⁵ Credit institutions whose three-year average share in the total assets of the financial system is equal to or higher than 5% are obliged to maintain a systemic risk buffer of 3%, and others at 1.5%.

b) Borrower-based instruments

The main aim of borrower-based measures is to limit excessive credit activity and reduce the accumulation of risks in the financial system and increase borrowers' resilience in the event of unfavourable economic and/or financial developments. In response to the systemic risk increase triggered by the acceleration in the growth of general-purpose cash loans to consumers, the CNB issued in February a [Recommendation on actions in granting non-housing consumer loans](#), by which credit institutions are recommended to be more cautious in the assessment of creditworthiness for the purpose of granting new general-purpose cash loans, particularly those with longer maturities. In addition to slowing down the increase in banks' credit growth, the recommendation aimed at encouraging consumers to be prudent when borrowing.

At the same time, the CNB started to establish a new reporting system on lending conditions of banks in order to widen the analytical foundation necessary to monitor the impact of the recommendation and implementation of possible borrower-based measures. Consultations with the public on the [Draft Decision on collecting data on standards on lending to consumers](#) were conducted in late 2019, and the Decision was released in early 2020. The first data should be collected starting from the second half of 2020. Individual data on all newly-granted consumer loans, which the CNB has not collected so far, are necessary for the analysis and the regular monitoring of systemic and credit risks, the calibration of macroprudential measures and the monitoring of actions by credit institutions on which measures have been imposed.

c) Macroprudential activities in accordance with the recommendations of the European Systemic Risk Board

In addition to national macroprudential policy, in 2019 the CNB acted in accordance with the recommendations of the European Systemic Risk Board.

Following the Recommendation on funding of credit institutions ([ESRB/2012/2](#)), the CNB conducted a regular assessment of the funding plans of credit institutions for end-2018, submitted by significant RC credit institutions pursuant to the Decision on reporting of funding plans. It was assessed that at that time there were no risks of unsustainable funding or liquidity structure and no adverse impacts on lending to the real economy.

In August 2019, the ESRB published a [Recommendation amending the Recommendation on closing real estate data gaps](#) adopted in late 2016 to reconcile data necessary for the assessment and monitoring of risks to financial stability associated with the real estate market. The data compiled through a new system for the collection of data on consumer lending conditions will enable compliance with the requirements regarding the risks associated with the residential real estate market, whereas the collection of financial data on the commercial real estate market is planned to be linked with future data collection pursuant to the requirements of the European Reporting System.

Finally, in accordance with the amendments to the Recommendation on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures ([ESRB/2018/1](#) and [ESRB/2018/5](#)), the CNB in 2019 reciprocated measures adopted by the competent authorities of [Belgium](#) and [Estonia](#), applying exemptions for credit institutions whose respective exposures do not exceed the recommended materiality threshold, that is, all credit institutions in Croatia. Inspired by this and the growing number of measures of other EU member states recommended for reciprocation by the ESRB, the CNB decided to change its approach and to reciprocate only measures of countries to which Croatian credit institutions have exposures exceeding materiality thresholds. Therefore, the CNB adopted decisions not to reciprocate the macroprudential measures adopted by [France](#) and [Sweden](#).

Cooperation in the field of macroprudential policy

Representatives of the CNB participated in the work of the Financial Stability Council, which held two meetings in 2019, chaired by the Governor of the CNB. Presented at the meetings were assessments of the main risks and challenges to financial stability and activities related to the implementation of macroprudential policy in the Republic of Croatia with particular emphasis on the rise in general-purpose cash loans, the reestablishment of operations of HROK (Croatian Registry of Credit Obligations) for the household sector and developments in the real estate market.

The Financial Stability Council, which sets the macroprudential policy of the Republic of Croatia, is an interinstitutional body composed of representatives of the CNB, the Croatian Financial Services Supervisory Agency (HANFA), the Ministry of Finance of the Republic of Croatia and the State Agency for Deposit Insurance and Bank Resolution (DAB).

Representatives of the CNB took part in the work of the European Systemic Risk Board; they participated not only in the General Board and the Advisory Technical Committee⁶, but also in standing working groups for macroprudential analysis and macroprudential policy instruments and in expert groups for stress testing and assessment of macroprudential policy instruments. Among the most significant topics in 2019 were risks to financial stability in the EU (particularly those associated with the real estate market, but also Brexit), exchange of experiences related to the application of macroprudential measures in member states, with a particular emphasis on measures aimed at loan users and the requests for reciprocation of macroprudential policy measures of other member states. In order to comply with the requirements of the ESRB Recommendation on closing real estate data gaps, the CNB initiated and organised meetings of the inter-institutional group comprising representatives of the CBS, Tax Administration and HANFA to discuss available data and the development of real estate market indicators.

6 For details, see chapter 8 International relations.

CROATIAN NATIONAL BANK • ANNUAL REPORT

2019

3 International reserves management

The international reserves of the Croatian National Bank continued to grow in 2019. The rise in international reserves was mostly driven by a large purchase of foreign currency from the banks, which ensured the stability of the exchange rate of the domestic currency and prevented excessive strengthening of the kuna against the euro. Although a long period of historically low interest rates on the global financial markets, which were even negative in the euro area, continued into 2019, a positive result and an adequate level of earnings from reserves management were achieved. At the same time, the key mandate in international reserves management – to ensure safety and liquidity – was successfully fulfilled.

CNB's international reserves grew in 2019

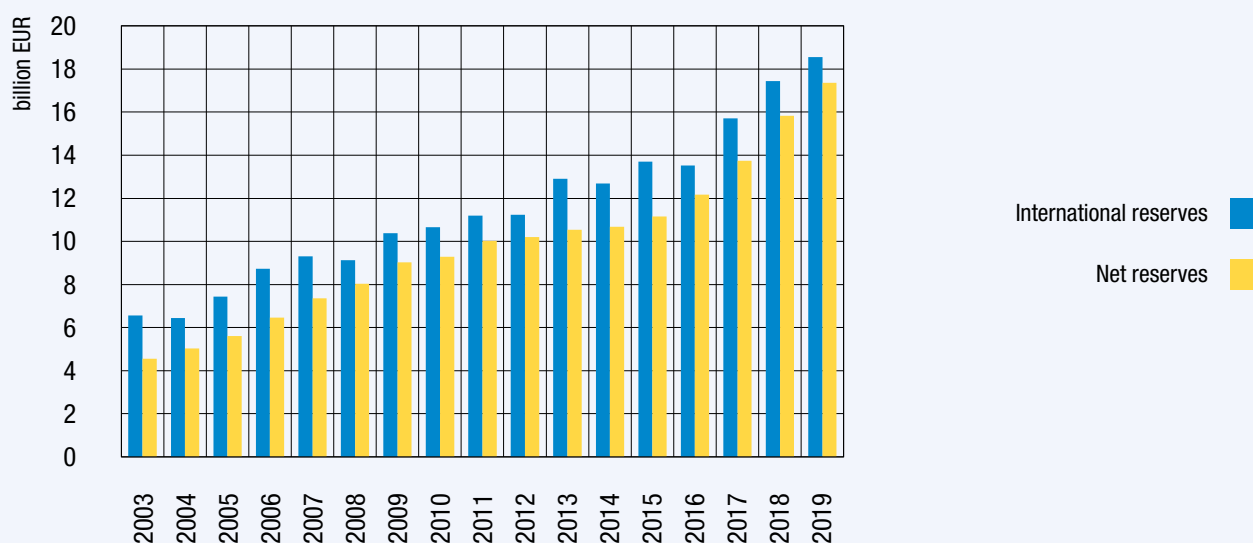
CNB's international reserves stood at EUR 18,562.4m at the end of 2019, up by EUR 1,123.6m (6.4%) from the end of 2018 (Figure 3.1). Net reserves, which exclude the funds of the Ministry of Finance and the European Commission, SDR holdings with the IMF and investments in repo operations, increased by EUR 1,549.7m (9.8%), reaching EUR 17,369.7m.

CNB's international reserves continued to trend up in 2019, reaching a record high of EUR 18.6bn on 31 December.

The 2019 increase in reserves was above all the result of foreign currency purchases from banks, whereas the lower level of agreed repo transactions at the end of the year reduced total reserves growth. Having been unaffected by the balance of repo operations, net international reserves grew more than gross reserves in 2019.

Figure 3.1 Growth in CNB international and net reserves continued in 2019

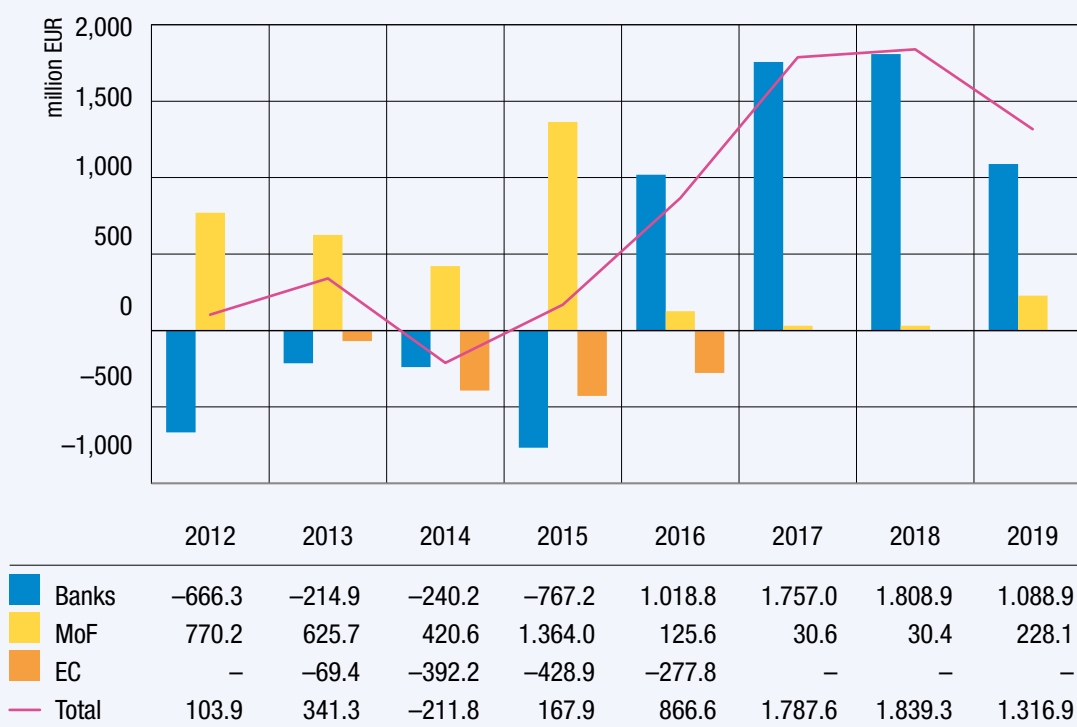
end of period, in billion EUR



SOURCE: CNB.

Figure 3.2 The CNB purchased less foreign currency from banks in 2019 than in the previous two years

in net amounts, from 2012 to 2019, in million EUR



Notes: Positive values refer to the CNB's foreign currency purchases and negative to foreign currency sales.

SOURCE: CNB.

In 2019, the CNB's net foreign currency purchases amounted to EUR 1,316.9m, with HRK 9.7bn of kuna liquidity created. The bulk of the foreign exchange transactions was accounted for by foreign currency purchases from banks (EUR 1,088.9m), while the remaining share was accounted for by net purchases from the Ministry of Finance (EUR 228.1m).

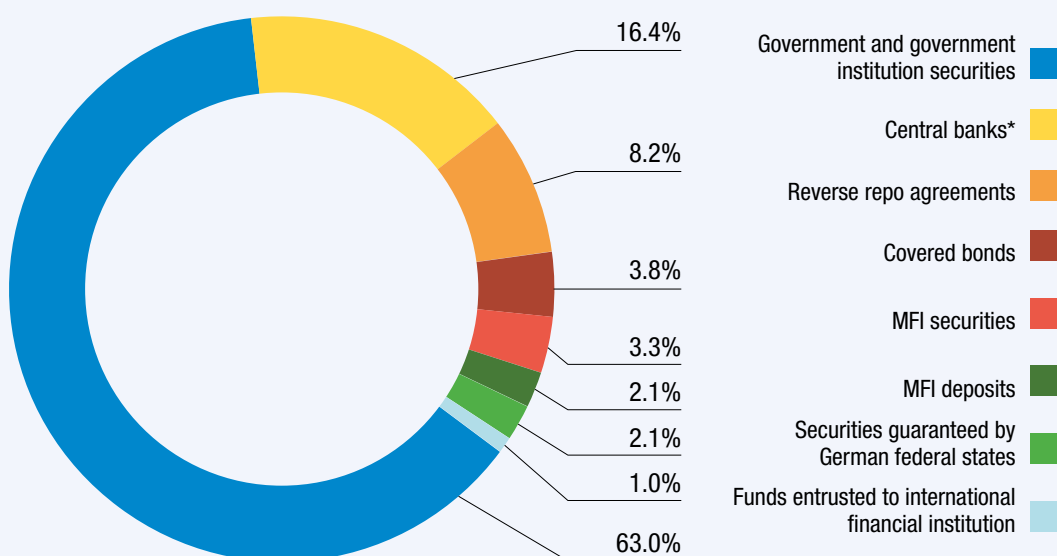
Structure of international reserves investment

International reserves, managed by the CNB independently and in line with its own guidelines, comprise held-for-trading portfolios, investment portfolios, funds entrusted for management to an international financial institution and foreign cash in the vault. Securities of governments and government institutions, deposits with central banks and reverse repo agreements accounted for the largest share in the structure of international reserves investment at the end of 2019.

International reserves are invested in financial institutions and in countries with an investment grade rating. The CNB applies restrictions to investments in individual financial institutions and countries and individual instruments, thus

Figure 3.3 Investments in the safest instruments accounted for the largest share in the international reserves structure

shares in percentages, at the end of 2019



* Includes foreign cash.

SOURCE: CNB.

In its international reserves management, the CNB is governed primarily by the principles of liquidity and safety.

diversifying credit risk. At the end of 2019, almost half of the CNB's international reserves were invested in countries, banks and institutions within the two highest credit rating categories, or in the BIS and the IMF, or in foreign cash in the CNB's vault.

Currency structure of international reserves

In 2019, the currency structure of international reserves changed in favour of the US dollar. Thus, the share of the US dollar, which amounted to 12.7% at the end of 2018, increased to 15.9% in 2019, while the share of the euro decreased from 85.1% to 82.0%. The share of SDRs in international reserves edged down from 2.1% to 2.0% due to the increase in international reserves.

Due to such a currency structure and the fact that international reserves account for almost all the CNB's assets, while the major share of liabilities is kuna-denominated, the CNB, like many central banks in other countries, is significantly exposed

Euro dominates the currency structure of international reserves

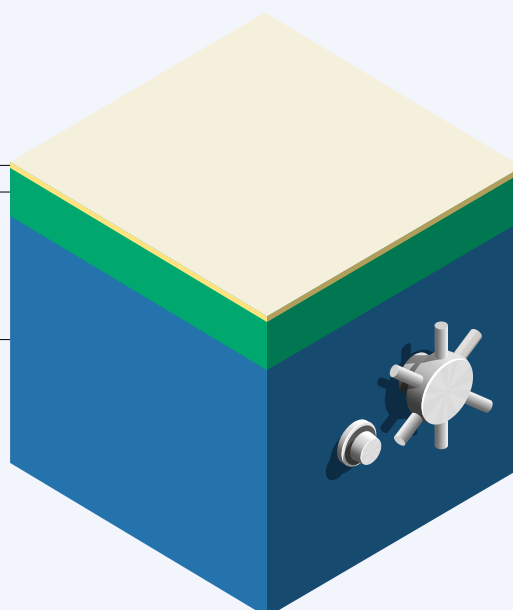
End 2019

Share

SDR **2.0%**

USD **15.9%**

EUR **82.0%**



Change from 2018

SDR **-0.1**
percentage point

USD **+3.2**
percentage points

EUR **-3.1**
percentage point

SOURCE: CNB.

to currency risk. This currency mismatch of assets and liabilities results in exchange rate differences that have a direct impact on the final financial result in the CNB's Income Statement¹. The exchange rate of the euro and the US dollar against the kuna was stronger in 2019 than in 2018, which led to an increase in international reserves in kuna terms and unrealised foreign exchange gains of HRK 810m.

Financial markets and international reserves management results in 2019

Financial markets in 2019 were marked by a reversal of the expected trend of ongoing normalisation of monetary policies. In these circumstances, the ECB adopted a new set of incentive measures, including the relaunching of the programme of securities purchase and lengthening of the horizon for maintaining negative and low interest rates. The Fed, on the other hand, firstly interrupted the cycle of raising its benchmark interest rates and went on to lower them on three occasions. The exceptionally expansive monetary policy ensured high liquidity and contributed to the fall in the yields on government bonds and to the growth of global stock exchange indices to record levels, while the US dollar strengthened against the euro.

Yields on almost all issued European government securities decreased in 2019, so that half of government securities of the euro area member states had negative yields in late 2019. The yield curve for German bonds for all maturities up to fifteen years was in negative territory at the end of December.

US yields dropped sharply across the entire curve in 2019, the average fall for all maturities up to ten years totalling some 83 basis points.

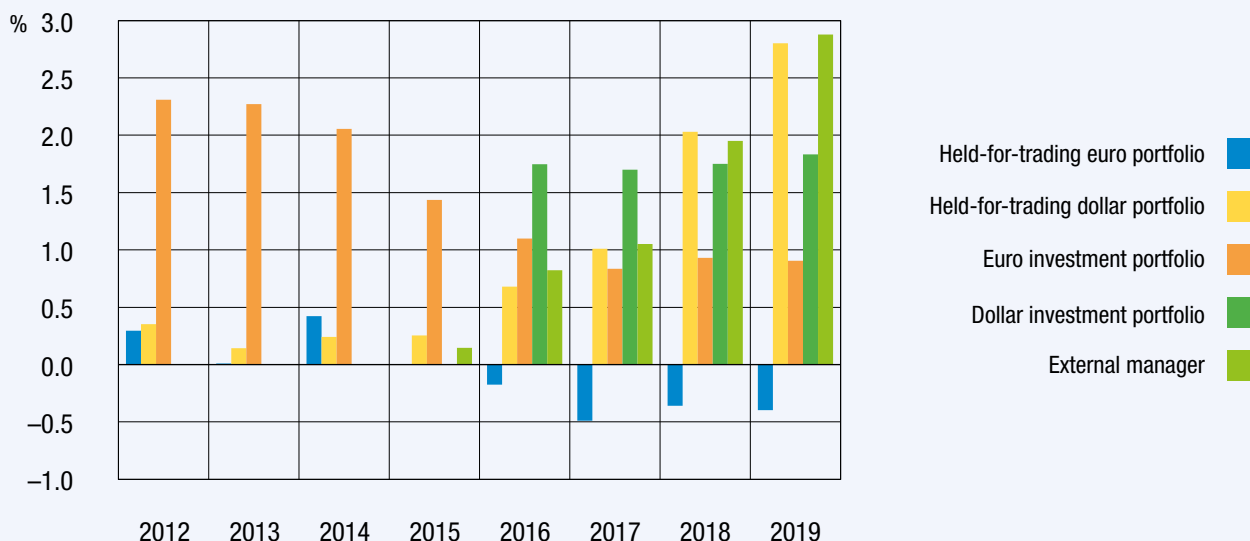
In these conditions and despite the fact that the unfavourable environment of a prolonged period of negative euro yields was continuing, the CNB ensured an adequate income from the investment of international reserves in 2019 as well. This was largely due to decisions on international reserves management in the 2011–2019 period and ongoing adjustments of investment guidelines. Investments of net international reserves generated a total income of EUR 59.9m or HRK 443.7m in 2019.

The entire euro portfolio of net reserves generated a rate of return of 0.07% in 2019, while the rate of return on the entire dollar portfolio stood at 2.10%. If held-for-trading and investment portfolios are observed separately, the euro held-for-trading

¹ According to the International Financial Reporting Standards (IFRS), in accordance with which the CNB compiles its financial statements, exchange rate differences are first recognised in the Income Statement and then the income is allocated or the loss covered from the CNB's general reserves.

Figure 3.4 International reserve investment portfolios secure adequate rates of return in a period of historically low yields

year-on-year rates of return



SOURCE: CNB.

portfolio generated a rate of return of -0.40%, while the dollar held-for-trading portfolio generated a rate of return of 2.80% in 2019. The euro-denominated investment portfolio yielded a return of 0.91%, while the dollar-denominated investment portfolio yielded a return of 1.83% in 2019.

The rate of return on the euro and the dollar portfolios stood at 0.07% and 2.10% respectively in 2019, whereas income from reserves investment was EUR 59.9m or HRK 443.7m.

Held-for-trading portfolios, which account for approximately 49% of net reserves, have short average maturities and are used as a source of liquidity. Investment portfolios, which account for approximately 48% of net reserves, have longer average maturities and serve as a source of more stable long-term income.

In 2019, the rate of return on the US dollar funds entrusted for management to an international financial institution was 2.88%. The entrusting of funds to this international financial institution enabled additional diversification and knowledge-exchange in the field of investment management.

Preparations for entry into the banking union

Preparations for entry into the banking union

4 Supervision
47

5 Resolution planning
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4 Supervision

In 2019, Croatian National Bank supervision fulfilled its main objectives of preserving the safety and stability of the Croatian banking system. The banking system in 2019 was profitable, highly-liquid and well-capitalised. The Republic of Croatia applied to the European Central Bank (ECB) for the establishment of close cooperation in the framework of the Single Supervisory Mechanism in line with the requirements for joining the European Exchange Rate Mechanism (ERM II). In response, the ECB adopted a decision on a comprehensive assessment of five Croatian banks, the results of which are expected in June 2020. The CNB monitors, on an on-going basis, the business of credit institutions by analysing regular reports and by conducting on-site examination, aligns the domestic legislation with relevant European regulations and participates in national and international efforts to prevent money laundering and terrorist financing.

The CNB presented to the public its supervisory priorities for 2019/2020 by means of the acronym EDINA, while it used a risk map to present various factors that may influence the risk level and overall operations of banks.

Business operations of credit institutions in 2019

Ample system liquidity and capitalisation continue to ensure the safe and stable operation of credit institutions. Total assets of credit institutions and nominal profits reached record highs in 2019, while the quality of exposure to credit risk steadily improved. In 2019, bank lending activity was predominantly directed towards the household sector, particularly in the form of general-purpose cash loans, with noticeable growth also seen in housing loans.

Banking supervision

Our mission is to preserve the safety and the stability of bank operations with an aim to maintain confidence in the banking system.

Our priorities in 2019 and 2020:



EUROZONE PREPARATIONS

Croatia's convergence with the euro area

Adjusting the regulatory framework to close cooperation between the CNB and the ECB, adjusting the CNB's supervisory function for entering into close cooperation and supporting the ECB's detailed assessment of credit institutions.



DIGITALISATION

Digitalisation of credit institutions' operations

Reviewing initiatives for digitalisation of operations, assessing their impact on business models and risk profile, and evaluating the preparedness of governance bodies and risk management for changes associated with digitalisation.



INTEREST RATE RISK IN THE BANKING BOOK

Interest risk in the banking book

Assessing credit institutions' models for managing specific risks and monitoring of their levels for the purpose of maturity transformation on their balance sheets.



NPE, NON-PERFORMING EXPOSURES

Non-performing exposures

Credit institutions' compliance with new regulatory requirements associated with the management of NPEs and monitoring of the level of these exposures, particularly in the context of the increase in unsecured general-purpose cash loans to households.



ANTI MONEY LAUNDERING AND COUNTERING THE FINANCING OF TERRORISM

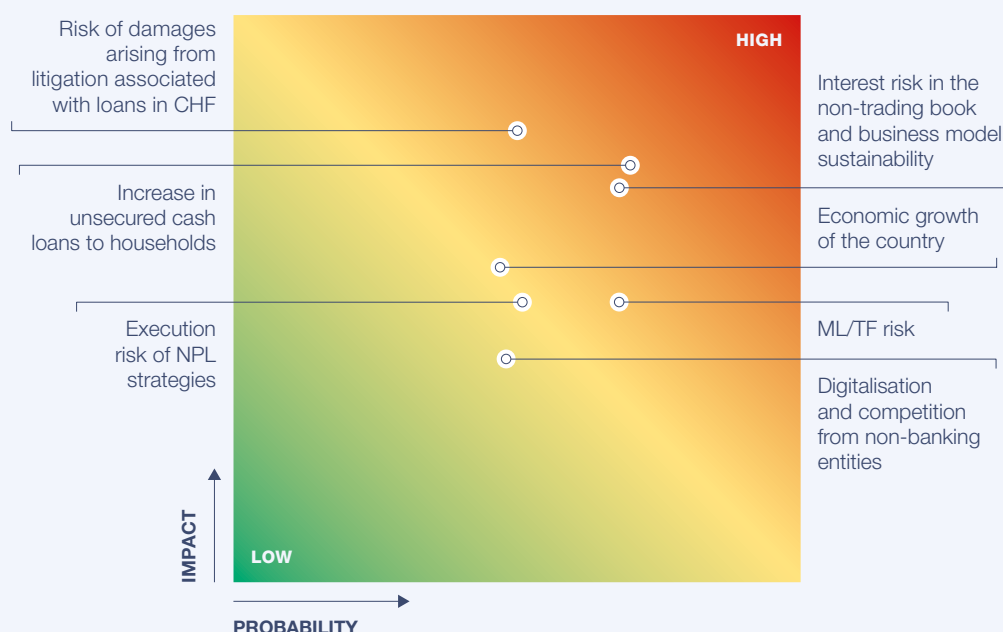
Prevention of money laundering and terrorist financing

Improving supervisory mechanisms with an aim to prevent the misuse of the financial system for the purpose of money laundering and terrorist financing and ongoing awareness raising regarding the risks of money laundering and terrorist financing.

Our communications objectives

Timely delivery of relevant information appropriately tailored to the other party, fostering friendly atmosphere and active listening.

CNB risk map for 2019 and 2020

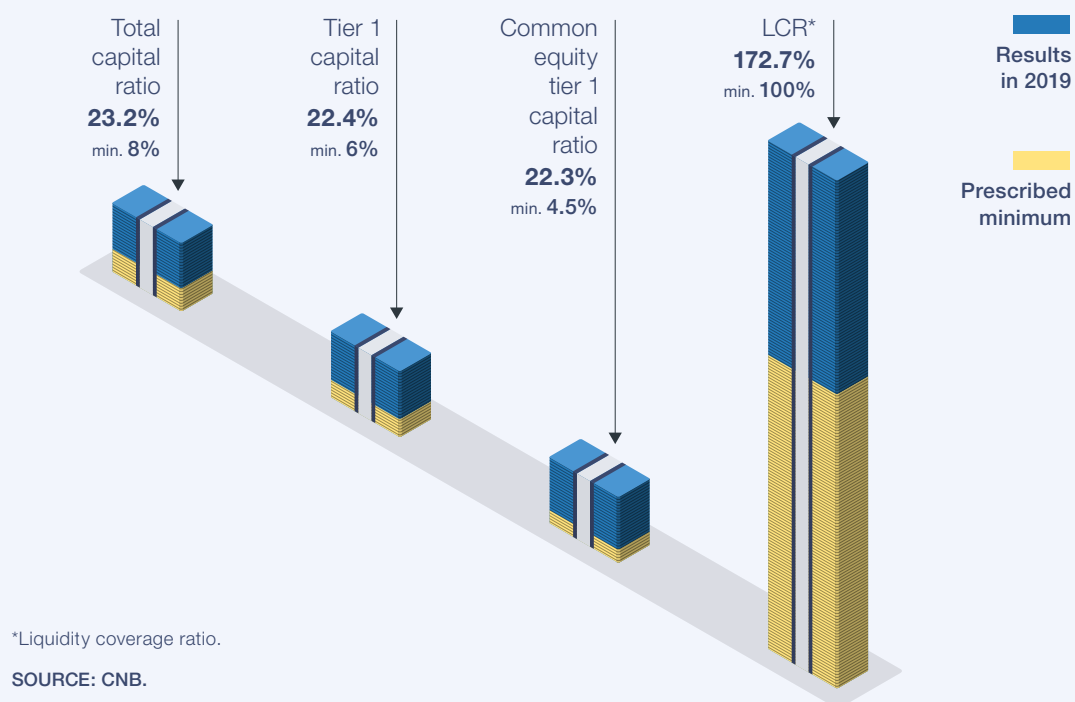


SOURCE: CNB.

The years-long downward trend in the number of credit institutions continued in 2019. At the end of 2019 there were 20 banks and three housing savings banks operating in the Republic of Croatia. In addition, there was one branch of an EU credit institution operating in the country, while some 200 institutions from the EU and the European Economic Area (the EEA) had notified the CNB of the direct provision of mutually recognised services in the territory of the Republic of Croatia. The system of credit institutions continued to be dominated by institutions in foreign ownership and systemically important institutions.

The year under review was the second year in succession registering a recovery in bank assets. The increase to a record high of HRK 425.8bn was mostly driven by the rise in domestic sources of financing, with the usual impact of the tourist season. Bank lending was predominantly financed by the increase in household deposits, which, amid extremely low interest rates, continued to undergo the maturity transformation process: a decrease in time deposits in favour of the rising share of transaction account deposits. Almost one fourth of total bank assets continued to be accounted for by highly liquid assets – cash and received deposits, with the greatest contribution to this share coming from assets in settlement accounts with the CNB. The increase in

Banking system capitalisation is several times higher than the required minimum

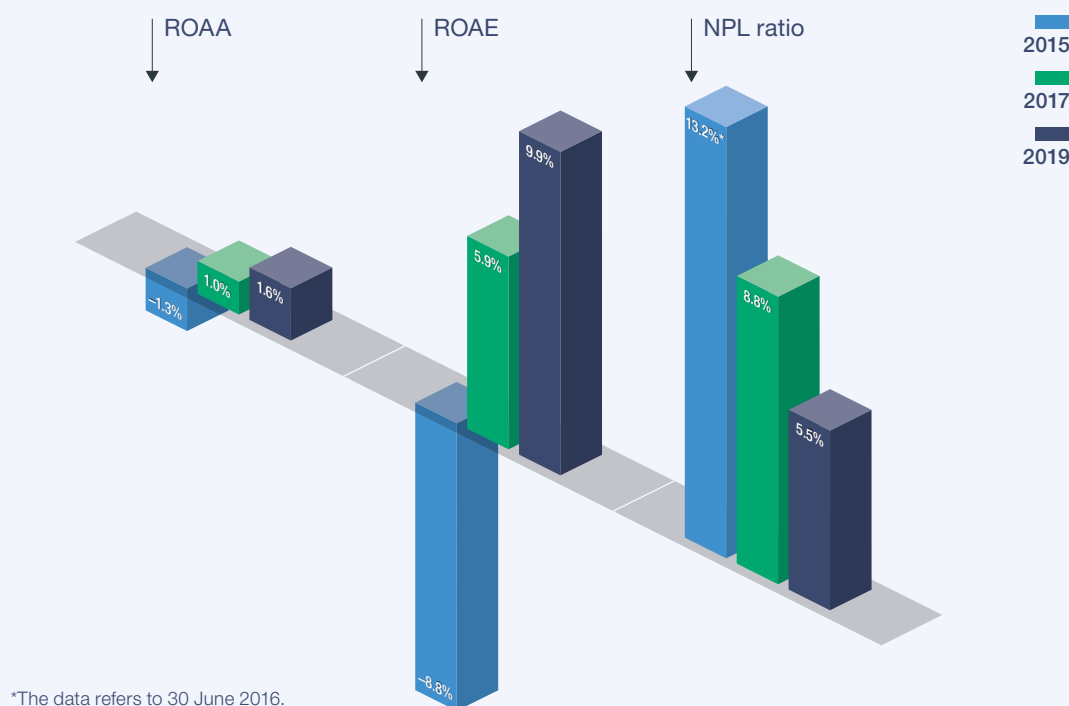


deposits with the CNB and other highly liquid assets, especially investments in RC bonds, was reflected in the high liquidity coverage ratio (LCR), which was 172.7%, much above the prescribed minimum of 100%.

Bank lending was predominantly directed towards households, with a particularly notable increase seen in general-purpose cash loans. These loans have been growing for years and have over time squeezed out other types of household loans due to their simplicity and high yields. To mitigate potential risks associated with excessive growth in non-housing loans to consumers¹, the CNB recommended additional mechanisms to credit institutions to assess the disposable income of borrowers and expressed its supervisory expectations regarding the appropriate inclusion of the risks arising from such loans in the internal capital adequacy assessment process. Solid growth in housing loans in 2019 may primarily be attributed to banks' participation in the government's housing loans subsidy programme.

¹ For details on the impact of the recommendation on developments in household loans, see chapter 1 Monetary policy and economic developments, and on the impact on financial stability, see chapter 2 Financial stability.

Increase in banking system profitability and improvement in loan quality



The years-long trend of improvement in the quality of bank assets continued in 2019. This was mostly a result of the decrease in non-performing exposures to non-financial corporations resulting from the sale of claims and the settlement deal being completed by Agrokor. Although the volume of claims sold has gone down from the previous years, this continues to represent an important tool for reducing non-performing exposures. The non-performing loans ratio (NPLR) went down from 7.6% to 5.5%. Despite the positive trend, this is still among the highest in EU member states. In only four banks was this indicator below 5%, while at a half of them the NPLR continued to exceed 10%. Its value continued to be influenced by the quality of loans to non-financial corporations, the NPLR of which stood at 13.6%, whereas the NPLR for household loans was 5.9%. While loan quality in Croatia was below the EU average, the indicator of the coverage of non-performing loans by impairment was above-average and grew even further. This indicator shows the level of expected losses, which means that banks in Croatia recognised a higher degree of expected losses and such losses have already reduced their profits.

In 2019 banks generated the highest nominal profits on record, of HRK 5.8bn. With the rise in profits, return on average assets (ROAA) and return on

average equity (ROAE) also increased, to 1.6% and 9.9%, respectively. Profits grew mostly on account of the increase in non-interest income, primarily income from dividends. A positive contribution also came from lower expenses on impairment for credit risk. A noticeable increase in provisions for litigation costs, resulting primarily from the multiplied number of new court proceedings against banks initiated by consumers – borrowers of loans with a currency clause in CHF, had an opposite effect. After seven years of decline, there was a marginal increase in interest income, mostly from household loans, which was paired with a further decrease in interest expenses. The cost efficiency of bank operations improved, with the cost-to-income ratio (CIR) down to 46.2%. Both this and the profitability indicator were under the key influence of leading banks. However, this indicator remained unfavourable for some small institutions, pointing to the inefficiency of their operations.

In 2019, the banking system was characterised by high capitalisation, profitability growth and reduction of the still high level of non-performing loans.

The high capitalisation that characterises the banking system continued to the end of 2019. The total capital ratio of 23.2% was among the highest of EU member states. Its increase in 2019 was driven by the rise in own funds, among other things, due to the upgrade of Croatia's credit rating in the first half of the year and the associated increase in the prices of RC bonds, which account for a large share in bank portfolios. Total capital ratio of all banks exceeded the 8%-minimum, while in nine banks, accounting for a 91.7% share of total assets of all banks, this ratio exceeded 20%. Much higher total capital ratios suggest that banks voluntarily decided to maintain certain capital buffers to ensure the additional safety and stability of their operations.

Housing savings banks

The assets of housing savings banks continued to decrease, standing at HRK 5.3bn at end-2019, or only 1.2% of the total assets of credit institutions. The fall in their total assets was driven by the decrease in the deposits of housing savings bank depositors and further cuts in state incentives for housing savings. As housing loans increased only slightly, the share of housing savings banks in total housing loans of the system dropped to 5.5%, whereas the non-performing loan ratio fell to 0.8%.

Housing savings banks generated HRK 16.2m in profits in 2019. This was much more in nominal terms than in the previous year. There was a recovery in profitability indicators – ROAA and ROAE stood at 0.3% and 3.3%, respectively. However, they remained noticeably lower than the bank average.

The greatest contribution to these developments came from the decrease in general operating expenses. This improved cost efficiency, although a sizeable portion of total net income remained burdened by general expenses (CIR was 80.2%).

Total capital ratio decreased marginally, to 23.8%. Its fall was due to the decrease in own funds, which was a result not only of the decline in the number of housing savings banks but also of a decrease in accumulated other comprehensive income associated with lower investments in RC bonds.

Establishment of close cooperation with the ECB

By signing the Treaty of Accession of the Republic of Croatia to the European Union, Croatia undertook to introduce the euro as the official currency, when the conditions for this were met. In this respect, the Government of the Republic of Croatia and the CNB compiled the Strategy for the Adoption of the Euro in the Republic of Croatia and on 27 May 2019 the Government sent to the ECB a request for the establishment of close cooperation between the CNB and the ECB in the exercise of supervision of credit institutions within the Single Supervisory Mechanism, which is an integral part of the procedure for the entry into the ERM II and then the euro area.

The banking union is a single system of bank supervision and resolution at EU level that operates on the basis of uniform rules applied by all member states whose currency is the euro as well as the member states outside the euro area that decide to join.

The establishment of close cooperation marks the beginning of participation in the banking union, which provides Croatia with financial system security and stability and contributes to integration into the EU's single financial market.

Comprehensive assessment by the European Central Bank

Comprehensive assessment is an integral part of the process of establishing close cooperation between the ECB and the national competent authority of a

EU banking union

The banking union is a single system of bank supervision, recovery and resolution at EU level

- it consists all euro area member states and non-euro area member states that decide to join
- it emerged after the financial crisis of 2008 – 2009 with an aim of additionally strengthening the economic and monetary union
- the integrated financial framework enables supervision, resolution and deposit insurance for all credit institutions operating in the EU

SSM

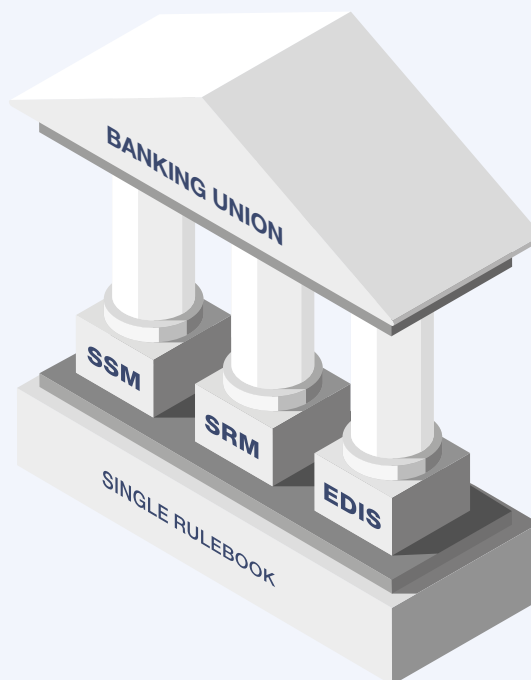
Single
Supervisory
Mechanism

SRM

Single
Resolution
Mechanism

EDIS

European
Deposit
Insurance
Scheme



member state whose currency is not the euro, and is part of the process of entering the ERM II. Comprehensive assessment is headed by the ECB, with the CNB's supervisory function supporting the process. The ECB's comprehensive assessment of five banks in the RC began in September 2019 and results will be published in June 2020.

The assessment covered the following five banks: Zagrebačka banka, Privredna banka Zagreb, Erste&Steiermärkische Bank, OTP banka and Hrvatska poštanska banka and focused on the following three areas: (1) improvement in the quality of available information of bank positions; (2) detection of problems and implementation of necessary corrective measures; and (3) essential stability and safety of bank operations.

The asset quality review (AQR) established the adequacy of assessment of the banks' credit portfolios and was complemented by a test of resilience to macroeconomic stress scenarios. Both components focused mostly on risks associated with capital.

Other risk areas, such as liquidity risk, operational risk and the prevention of money laundering are not part of the comprehensive assessment.

Supervision of credit institutions

In the course of supervision, the CNB verifies the legality of a credit institution's operations and evaluates risks arising from the credit institution's operations. Should it identify illegalities, weaknesses or deficiencies in credit institutions' operation, the CNB imposes measures aimed at eliminating established illegalities and irregularities. Almost all credit institutions were covered by at least one supervisory activity in 2019.

Table 4.1 Supervisory activities in 2019

Activities	Number of activities	Number of credit institutions covered
Reports based on ongoing supervision (regular risk assessment)	14	14
Reports based on ongoing supervision due to irregularities established	18	13
On-site examinations	10	9
Decisions issued for the purpose of rectifying irregularities or improving the situation at a credit institution	38	19
Decisions on the implementation of advanced approaches to measuring risks	1	1
Technical decisions issued (authorisations and approvals), implementing Regulation (EU) No 575/2013	12	7
Issued warnings	–	–
Trusteeship and special administration	–	–
Joint decisions adopted	20	9
Early intervention measures imposed	1	1

SOURCE: CNB.

Ongoing monitoring of operations

The CNB monitors, on an on-going basis, the operations of credit institutions by collecting and analysing regular reports and information and by analysing additional information submitted by credit institutions at the request of the CNB in order to establish the risk profile of a credit institution.

In the third quarter of 2019, a thematic analysis was made of the appropriateness of the strategies credit institutions use to manage non-performing exposures and their alignment with EBA guidelines. Though the majority of credit institutions took steps to ensure adequate management of non-performing exposures, there was still room for improvement. The CNB presented its expectations regarding improvement of the strategies and the process of managing non-performing exposures to credit institutions, and an agreement was reached on the dynamics of the implementation of necessary activities, which has been monitored on an ongoing basis.

In accordance with the principle of proportionality and risk-orientation, the CNB directs more resources to monitor credit institutions with a higher risk profile and to systemically important credit institutions.

Finally, in the course of 2019 the CNB continued to carry out the regular supervisory cycle of assessing credit institutions. This includes the sufficiency of available capital, liquidity reserves and the adequacy of the established risk management process, which is used to compile reports containing risk assessments of credit institutions.

The CNB assesses the IT risk in credit institutions within the supervisory review and evaluation process (IT SREP). In 2019, the assessment covered systemically important credit institutions (O-SIIs). The initial stage of assessment included an analysis of reports by external auditors on IT audits carried out and a questionnaire for credit institutions. The questionnaire compiled data on credit institutions' IT and self-assessments of exposure to IT risk and the adequacy of the established control environment. Also analysed were IT incidents reported by credit institutions to the CNB as well as the intended outsourcing of materially important IT activities. Systemically important credit institutions were interviewed about IT risks, the quality of the control environment and IT development plans. Assessed on that basis were IT management and strategy and IT risks and controls in systemically important credit institutions.

In April 2019, all credit institutions in the RC received a questionnaire on digitalisation and digital transformation of operations. The purpose was to

examine the current situation and learn about the plans and opinions of credit institutions. The questionnaire asked about approaches to digitalisation, use of technological innovations, impact of digitalisation on a credit institution's business model, current initiatives and challenges and obstacles. Responses were received from all authorised credit institutions: 20 banks, of which seven were O-SIs, and four housing savings banks. Based on compiled data, an analysis was made of the situation, trends and impact of IT technology on the operations of credit institutions and risks to which they are exposed. The analysis² shows that while all institutions focused on digitalisation, O-SIs were digitalising their operations more actively and comprehensively than small institutions. Slightly more emphasis was put on digitalisation of services provided to clients than on digitalisation of internal processes.

Digitalisation of banking services is led by client requests, with larger banks in the forefront in the offer of digitally supported services.

In 2019, several meetings were held at which credit institutions presented the innovative services they intended to offer to their clients and the regulatory framework for the provision of such services and associated risks was examined.

On-site examination of banks

The CNB carries out on-site examinations taking into account the ECB's assessment of the asset quality of selected credit institutions in the process of establishing close cooperation. Ten on-site examinations were carried out in 2019 in nine credit institutions the assets of which accounted for 88% of banking system assets. The following areas were examined:

- market and credit risk management;
- advanced approaches to measuring risks and risk management;
- prevention of money laundering and terrorist financing;
- management of IT and similar technologies.

2 Smojver, S., and I. Jolić (forthcoming): Digitalizacija poslovanja – rezultati Ankete hrvatskih banaka u 2019., *Croatian National Bank Surveys*.

In the course of and following the on-site examinations, the CNB imposes measures for the elimination of established illegalities and irregularities and for the improvement of the situation.

Cooperation with foreign supervisors

The CNB cooperates with supervisors of the member states and third countries in the field of supervising the operation of credit institutions belonging to cross-border banking groups. The CNB exchanges information with foreign supervisors, monitors credit institutions on an ongoing basis, primarily in the assessment of risk profile and recovery plans, and carries out joint on-site examinations.

Table 4.2 Credit institutions with cross-border colleges of supervisors

1 Addiko Bank d.d.	6 Sberbank d.d.
2 Erste&Steiermärkische Bank d.d.	7 J&T banka d.d.
3 OTP banka Hrvatska d.d.	8 Wüstenrot stambena štedionica d.d.
4 Privredna banka Zagreb d.d.	9 Zagrebačka banka d.d.
5 Raiffeisenbank Austria d.d.	

SOURCE: CNB.

As part of that cooperation, the CNB is responsible for the annual assessment of the risk profile of a domestic credit institution (the Supervisory Risk Report). It is based on the SREP process and adoption of the final Joint Risk Assessment Decision and the joint decision on the required amount of capital of a banking group and each of its members. Nine supervisory reports for 2018 were compiled in 2019 and a joint decision on the capital adequacy of a banking group was adopted for all of them.

The SREP process implies an analysis of all the risks to which a credit institution is or might be exposed, carried out in four main areas: business model analysis, analysis of internal governance and controls, analysis of risks to capital (at a minimum, credit, market, operational and interest rate risk in the banking book) and analysis of liquidity risk.

Furthermore, since 2015 the CNB has participated in the process of reaching a joint decision on the review and assessment of the recovery plan for groups of credit institutions. The review focuses on the adequacy of methods used by credit institutions and groups to define stress that might seriously threaten their operations, the methods of monitoring indicators defined in the recovery plan and the feasibility of recovery options planned. All nine joint decisions regarding recovery plans were adopted within the set deadline of May 2019.

Supervision of credit unions

At the end of 2019, there were 21 credit unions in operation, one more than in 2018. At the same time, nine credit unions were in the process of winding-up and two were undergoing bankruptcy proceedings.

The solvency rate of credit unions was 19.14% at the end of 2019. The total number of credit union members was 58,714, and the total number of employed persons was 122. The assets of credit unions, according to the reports submitted to the CNB, totalled HRK 677m, growing by only HRK 1m (0.14%) from the end of 2018. Notwithstanding the stagnation in the total assets of credit unions, loans to members grew by HRK 10m (1.77%) and were financed from existing liquidity, that is, deposits with financial institutions. The capital of credit unions was HRK 141m at the end of 2019, up slightly (1%) from 2018. Profits of credit unions stood at HRK 1.2m, down by as much as HRK 5.3m (82%) from 2018, driving the profitability indicators downwards. The return on average assets (ROAA) and the return on average equity (ROAE) stood at 0.32% and 0.85% respectively at the end of 2019. This was due to the fact that the drop in interest income outstripped the fall in interest expenses by HRK 1.9bn, value adjustments grew by HRK 1.7m, net interest income decreased by HRK 0.9m while administrative expenses increased by HRK 0.6m.

Issuance of authorisations and approvals

The CNB is competent for the issuance of authorisations and approvals to credit institutions and credit unions by means of:

- implementation of joint procedures, which includes the issuance of authorisations, approvals for the acquisition of a qualifying holding and withdrawal of authorisations;

Table 4.3 Authorisations and approvals issued in 2019

Activities	Number of activities	Number of credit institutions covered – systemically important	Number of credit institutions covered – other	Number of credit unions covered
Suitability of members of the management and supervisory board	62	5	12	5
Issuance of authorisations	1	–	–	1
Merger and acquisition of a qualifying holding	5	2	1	–
Other authorisations and approvals	4	1	3	–
Total	72	–	–	–

Assessment of suitability is a supervisory procedure which includes an interview with the candidate and an evaluation of the proposed business plan for the period of the term of office.

SOURCE: CNB.

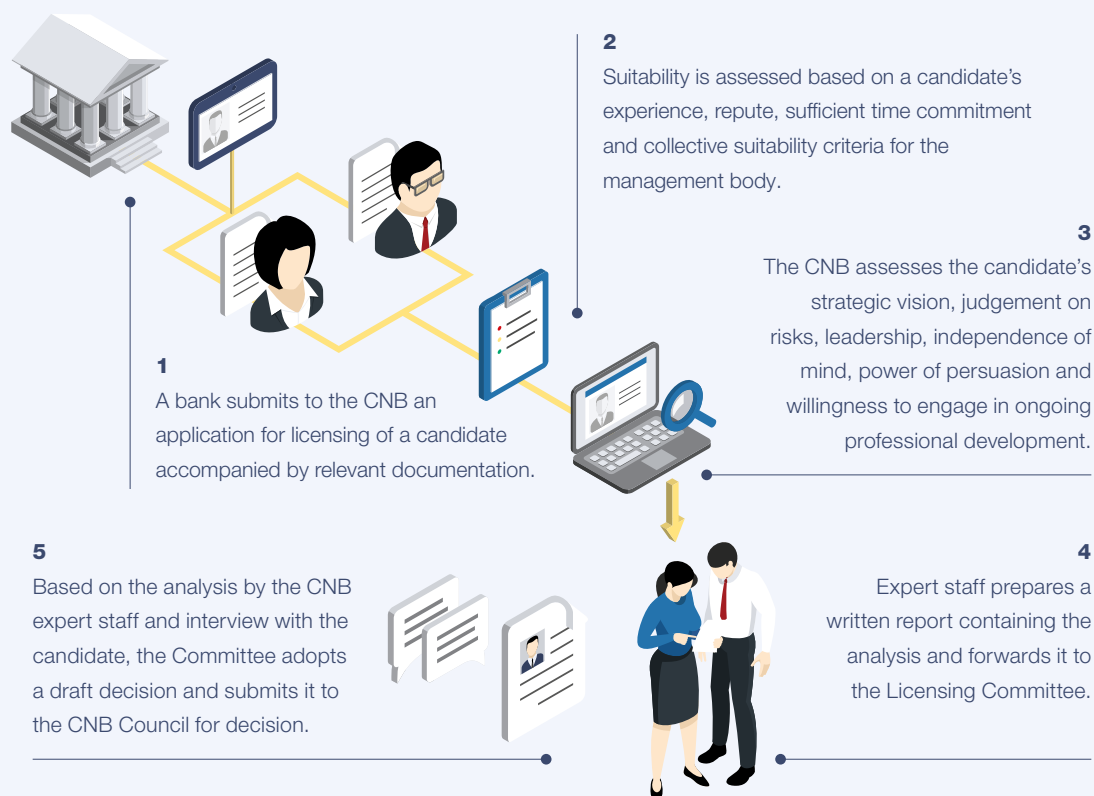
- implementation of the process of suitability assessment as basis for the issuance of approvals to perform the function of member of a management or supervisory board;
- implementation of the procedure for approvals of other changes in the status of credit institutions, such as mergers, acquisitions or division of operations, and of general operating conditions of housing savings banks.

In 2019, the CNB received 55 applications for authorisations and approvals and issued 72 decisions.

Management of a credit institution or a credit union must be prudent and adopt decisions that ensure its safe operations. Assessment of the suitability of candidates to perform key management functions in a credit institution and a credit union is the process where the CNB assesses whether the candidate nominated by the credit institution or the credit union meets the legally prescribed criteria for the performance of such functions. In the course of the assessment, the CNB assesses whether candidates possess adequate knowledge, skills and experience to perform the function; whether they are of good repute or have a criminal record; whether there is a conflict of interest that might influence the adoption of decisions; whether candidates are able to commit sufficient time to perform their functions; and how they contribute to the functioning of the management body as a whole (collective suitability).

Supervisory process to determine the suitability of candidates for management and supervisory board members of credit institutions

In suitability assessment the CNB verifies whether a candidate meets legally prescribed criteria.



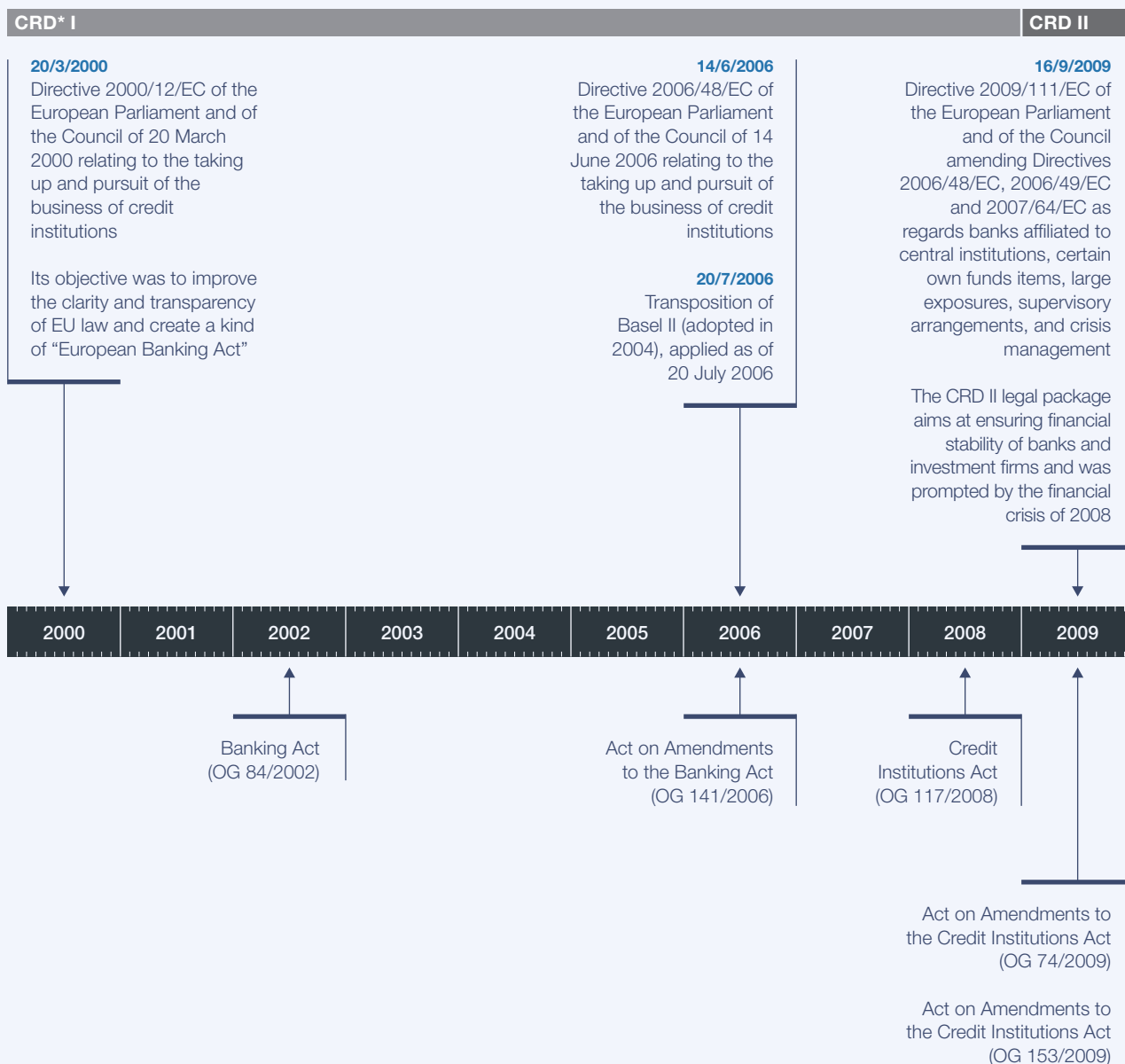
Prudential regulation and harmonisation of regulations

Representatives of the CNB, a member of the EBA, were actively involved in the work of the European System of Financial Supervision. The following were among the most significant topics:

- prudential regulation;
- reporting, accounting, auditing and disclosure;
- cooperation in the area of the prevention of money laundering and terrorist financing and consumer protection;
- improvement of the supervisory process;
- security of electronic payments and supervision of IT systems.

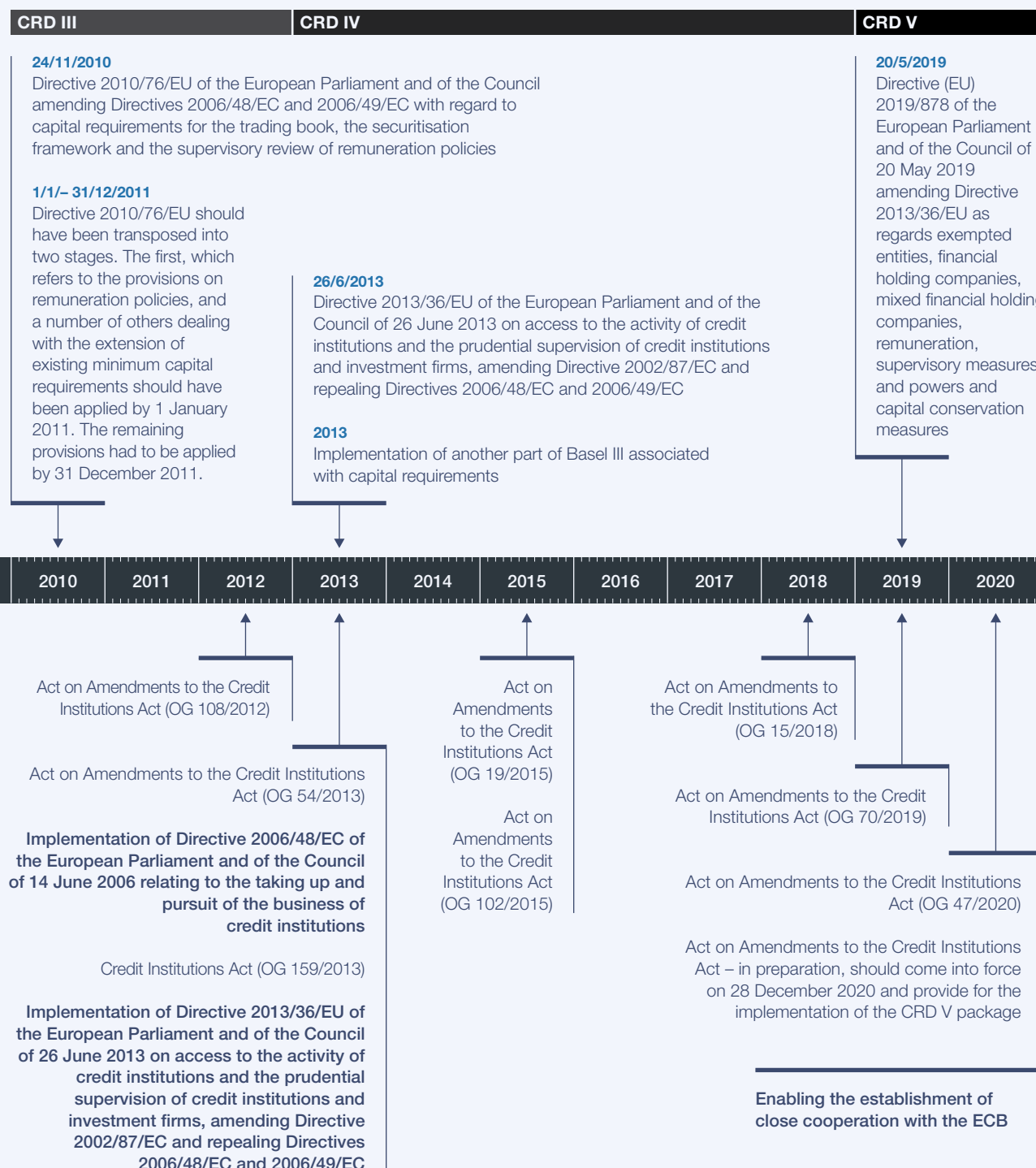
Selected EU banking regulations and their transposition into the Croatian legal system

EU DIRECTIVES



CROATIAN LEGAL SYSTEM

* Capital Requirements Directive



CNB supervisors participated in working groups and activities of the EU Council and Commission in the adoption of regulations at the EU level³, subsequently to be transposed into the Croatian legal system. In 2019, three directives were adopted in the field of **the prudential supervision of investment firms, exempted entities and covered bonds**. The CNB also adopted three subordinate regulations in the area of prudential regulation⁴ and transposed two EBA guidelines⁵ by means of circular letters.

In the course of 2019, the CNB continued the harmonisation with EU regulations, with the most significant changes in terms of regulatory improvement relating to the Credit Institutions Act. The amendments were necessary for the establishment of close cooperation with the ECB.

To ensure that comprehensive and significant legal changes are implemented as correctly as possible, the CNB explained the new regulations in numerous analyses. The analyses covered outsourcing, recovery plans, exposures to the central government, large exposures and the digitalisation of credit institutions. In order to promote the consistent application of regulations, in 2019 the CNB held numerous seminars and workshops, gave opinions and responded to queries by credit institutions and other entities subject to banking regulations.

Supervision and regulation of prevention of money laundering and terrorist financing

One of the tasks of the CNB consists of activities related to the prevention of money laundering and terrorist financing, where supervision is based on risk assessment of the occurrence of such activities.

The Act on Amendments to the Anti-Money Laundering and Terrorist Financing Act, which transposes the **relevant European directive** into the legal

3 For details on the CNB participation in the work of the Council and the Commission, see chapter 8 International relations.

4 **Decision on governance arrangements, Decision implementing the part of Regulation (EU) No 575/2013 pertaining to credit institutions' qualifying holdings outside the financial sector and limits on credit institutions' holdings of tangible assets, Decision on the refusal of annual financial statements of credit institutions and the content of an audit for the purposes of the Croatian National Bank.**

5 **Guidelines on the specification of types of exposures to be associated with high risk, Guidelines for the estimation of LGD appropriate for an economic downturn ('Downturn LGD estimation').**

system of the Republic of Croatia, entered into force at the beginning of 2019. In addition, an obligation was laid down that audit reports must contain a separate assessment of the compliance with the **rules on managing the risk of money laundering and terrorist financing**. The CNB closely cooperates with the Anti-Money Laundering Office and other competent bodies and issues guidelines based on queries of credit and other institutions.

Supervision of the risks of money laundering and terrorist financing ensures that supervisory resources and strategy are directed at institutions that are assessed as high-risk. In 2019, supervision focused on the review of procedures for identifying beneficial owners, private banking and the typology of money laundering associated with non-residents. Four on-site examinations were carried out, questionnaires were sent to 53 institutions with the aim of identifying and monitoring the risk of money laundering and terrorist financing, and supervisory dialogue was strengthened at annual meetings held with six credit institutions.

The CNB continued to participate actively in the national system of the prevention of money laundering and terrorist financing in 2019. To coordinate and engage in joint activities aimed at attaining common and operational objectives in this field, the CNB continued to cooperate with other competent authorities, particularly within the Inter-Institutional Working Group for Preventing Money Laundering and Terrorist Financing. In the course of the year, the CNB participated in preparing a second National Assessment of Money Laundering and Terrorist Financing Risks and for that purpose conducted a survey of 32 institutions with the use of special questionnaires.

Cooperation with international institutions continued in 2019 through participation in the work of committees of European supervisory bodies dealing with the problem of money laundering and terrorist financing, and other competent European bodies as well as in the work of the special committee of the Council of Europe – MONEYVAL. The CNB started to prepare the necessary documentation for a MONEYVAL assessment planned for 2020.

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5 Resolution planning

In parallel with the establishment of close cooperation with the ECB and joining the Single Supervisory Mechanism, the Republic of Croatia will become a full member of the Single Resolution Mechanism. This will ensure that all credit institutions with a head office in the Republic of Croatia are on a level playing field with other credit institutions operating in the banking union. In addition to regular activities associated with resolution planning, the whole of 2019 was marked by preparations for joining the Single Resolution Mechanism.

Joining the Single Resolution Mechanism

Joining the Single Resolution Mechanism is one of the first steps on the path towards adoption of the euro as the legal tender that would guarantee the RC all the rights and duties of a full member of the banking union.

The Single Resolution Mechanism is a set of uniform regulatory rules for resolving financial difficulties of credit institutions in the banking union comprising, in addition to the member states whose currency is the euro, those member states that have established close cooperation with the ECB.

Joining the Single Resolution Mechanism will ensure that all credit institutions with a head office in the Republic of Croatia are on a level playing field with other credit institutions operating in the banking union.



Roman Šubić, Vicegovernor of the Croatian National Bank at the workshop “Novelties Related to the Republic of Croatia Joining the Single Resolution Mechanism”

This mechanism enables all decisions on resolution issues at the level of the banking union as a whole to be reached in a centralised manner, independently, efficiently and quickly. Joining the Single Resolution Mechanism will ensure that all credit institutions with a head office in the RC receive the same treatment as other credit institutions operating within the banking union.

The Single Resolution Board (SRB), a European agency located in Brussels, is responsible for efficient and consistent functioning of the Single Resolution Mechanism.

As the RC plans to join the Single Resolution Mechanism at the same time it enters the banking union, preparations for this important step characterised the whole of 2019 for the CNB as a resolution authority. First of all, amendments to the Act on the Resolution of Credit Institutions were initiated in 2019 to enable the functioning of the Single Resolution Mechanism in the RC.

As part of the preparations, several technical workshops with SRB experts were organised to adequately prepare CNB employees engaged in resolution

issues for the uninterrupted continuation of regular activities after Croatia joins the Single Resolution Mechanism. A special workshop entitled “*Novelties Related to the Republic of Croatia Joining the Single Resolution Mechanism*” was organised in December 2019 for all credit institutions.

Resolution planning

To prepare itself for possible future crisis situations, the CNB, in its capacity as the resolution authority, carried out the regular annual resolution plan update for all credit institutions. The purpose of resolution planning is the preparation of resolution strategies, that is, options for the recovery of credit institutions or their removal from the market. The resolution authority takes into account the structure and operation of a credit institution to enable the resolution of a crisis situation that cannot adequately or at all be resolved by market and/or supervisory tools.

The operations of credit institutions are restructured and recovered by application of resolution tools to enable the continuity of key functions and avoid a significant impact on financial stability.

To update resolution plans for eight credit institutions with head offices in the RC that are members of EU banking groups, the CNB participated in resolution colleges and signed joint decisions on their resolution plans and the minimum requirement for own funds and eligible liabilities (MREL requirement). Furthermore, the CNB carried out the regular annual resolution plan update for credit institutions that are not members of a group.

In addition to conducting its regular activities associated with resolution planning, the CNB cooperated with national, European and international institutions, primarily the EBA, where the CNB participates in the work of the Resolution Committee and its two sub-groups, the Sub-Group on Resolution Planning Preparedness (SGRPP) and the Sub-Group on Resolution Execution (SGRE).

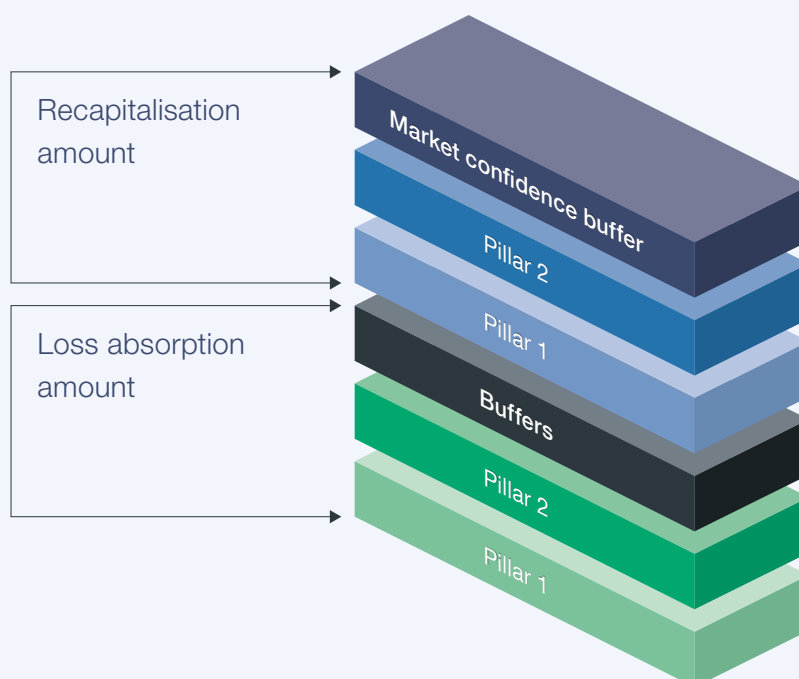
Resolution planning is an ongoing process



Setting minimum requirements for own funds and eligible liabilities

The concept of the minimum requirement for own funds and eligible liabilities (MREL) emerged as a consequence of the shift from dealing with financial distress in credit institutions by use of state funds (bail-out) to resolving financial distress by own funds of those credit institutions (bail-in). As a result, credit institutions that perform key functions for the banking system in the RC or whose failure would have a significant impact on the financial stability of the RC have to build minimum reserves of own funds and eligible liabilities that may be used to absorb losses and cover recapitalisation needs in case they face financial difficulties. Among other conditions, the funds and liabilities must have sufficient maturity, be adequately rated in the hierarchy of creditors, ensure legal certainty and not produce contagion effects in the financial system and economy as a whole. Should a need arise to resolve any such credit institution, the CNB would write down or convert into capital MREL instruments so that the credit institution again meets the basic preconditions for operation and continues to perform the key functions.

Setting minimum requirements for own funds and eligible liabilities



In early 2019, the CNB, in its capacity as the resolution authority, published a summary of its policy for MREL determination. In this way, the CNB informed credit institutions and interested investors of the main principles applied in the calculation of MREL for credit institutions with head offices in the RC. Meetings with representatives of the largest credit institutions in the system were organised in order to familiarise credit institutions in detail with the CNB's policy regarding MREL, the calculation for information purposes of their MREL level as well as changes that will happen after Croatia joins the Single Resolution Mechanism.

The purpose of all these activities was to prepare credit institutions as well as possible for this new regulatory requirement once the maintenance of MREL-related capacity becomes obligatory.

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Statistics and research

Statistics and research

6 Statistics

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7 Research

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6 Statistics

The statistical function of the Croatian National Bank implies the collection and processing of information obtained from the reporting units and calculating statistical indicators based on those data. It also includes public disclosure and submission of information to international financial and statistical bodies and organisations for the purpose of calculating and publishing transnational statistics and their use in economic analyses and research. The Croatian National Bank is one of the key competent authorities responsible for the official statistics of the Republic of Croatia. For the purpose of further strengthening the statistical function, the CNB reorganised the Statistics Area, published revised external statistics and stepped up efforts to adjust its statistical function to the requirements of the ESCB in the context of the Republic of Croatia's joining the European Exchange Rate Mechanism and the banking union.

Further strengthening of the Croatian National Bank's statistical function

The Croatian Bureau of Statistics and the Croatian National Bank are equally key providers of official statistics in the Republic of Croatia. The Statistics Area collects data from statistical reporting entities and administrative data holders and processes them to produce and publish indicators of official statistics of the Republic of Croatia within its area of competence. This includes indicators in the field of monetary statistics, financial statistics, external statistics, financial accounts statistics, government finance and general economic statistics. In order to improve the content, the level of detail, the comprehensiveness and the accessibility of statistical indicators, methods of collection, processing, analysis and publication must be continuously upgraded. At the same

Table 6.1 Effects of the methodological revision of external statistics 2013 – 2018
as % of GDP, as at the date of publication

Indicator / year	2013	2014	2015	2016	2017	2018
BOP current transactions						
– before revision, (1)	0.9	2.0	4.6	2.5	3.5	2.5
– after revision, (2)	–1.1	0.3	3.3	2.1	3.4	1.9
Revision effect, (3) = (2) – (1)	–2.0	–1.7	–1.4	–0.4	0.0	–0.5
BOP net errors and omissions						
– before revision, (4)	–2.1	–1.4	–1.0	–1.1	–1.3	–1.0
– after revision, (5)	–0.3	1.3	0.0	–0.2	0.4	0.4
Revision effect, (6) = (5) – (4)	1.8	2.7	1.0	0.9	1.7	1.4
Net international investment position						
– before revision, (7)	–87.4	–85.0	–76.1	–70.0	–63.8	–55.7
– after revision, (8)	–88.8	–86.5	–78.2	–72.2	–65.2	–57.9
Revision effect (9) = (8) – (7)	–1.4	–1.5	–2.0	–2.2	–1.4	–2.2
Gross external debt stock						
– before revision, (10)	104.8	106.9	101.7	89.4	82.0	75.3
– after revision, (11)	110.9	113.1	108.1	95.9	89.0	82.8
Revision effect (12) = (11) – (10)	6.1	6.2	6.4	6.5	7.0	7.5

SOURCE: CNB.

time, reporting entities must be informed of the objective and purpose of data collection and data users of the options of using published data for various purposes. To raise the efficiency of CNB statistics in conditions of increasingly complex reporting demands, particularly in the context of Croatia's forthcoming entry into the European Exchange Rate Mechanism II (ERM II) and the banking union, the General Economic Statistics and Statistical Information Systems Department was established within the Statistics Area in April 2019. This organisational change contributed to the centralisation of some data collection, processing and publication tasks, intensification of activities regarding the development of experimental statistics and surveys for the purpose of the European System of Central Banks and the strengthening of IT support to statistics, particularly the demanding development projects of integration into the Eurosystem's statistical function.

Comprehensive methodological revision of external statistics indicators

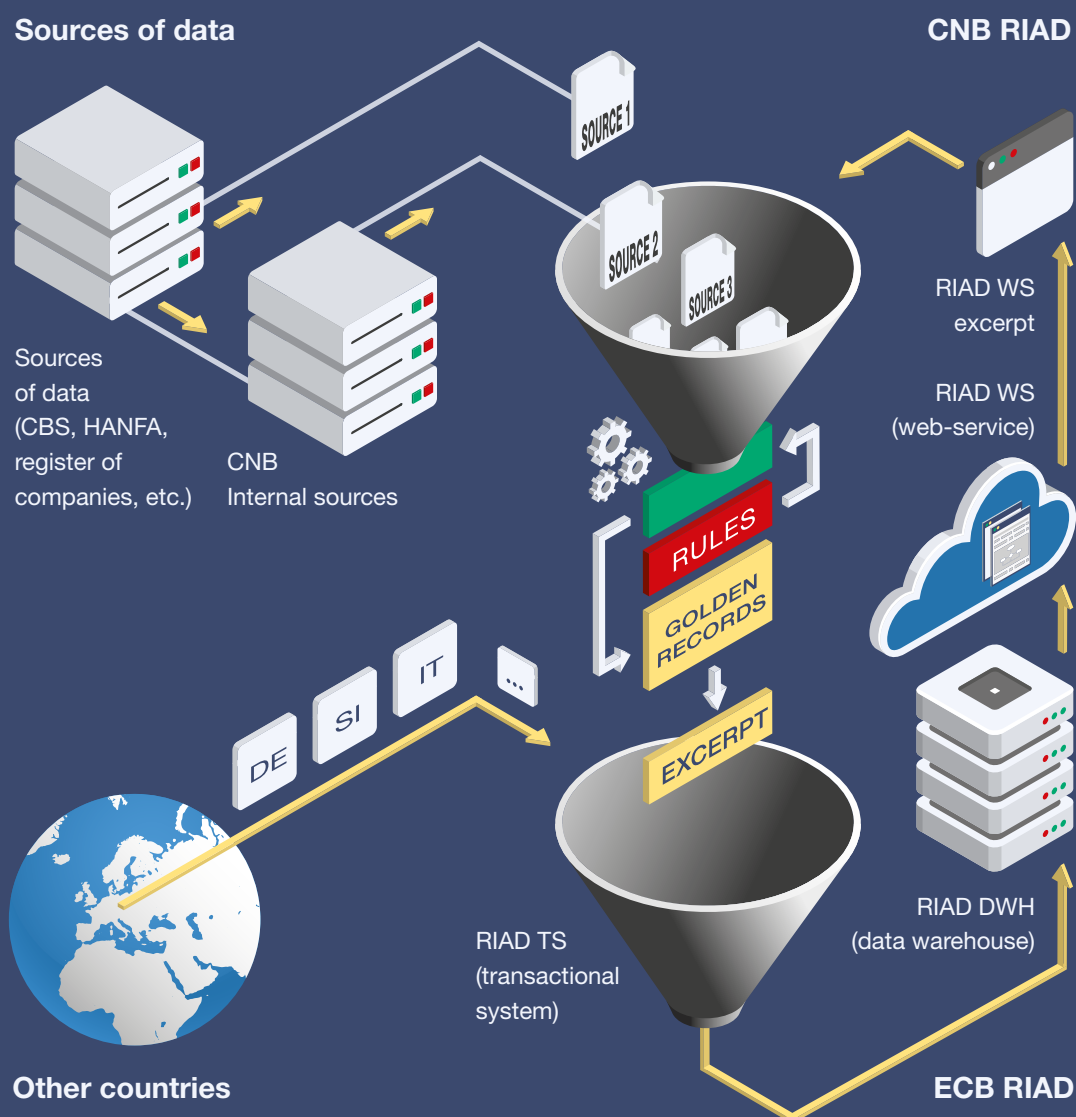
On 30 September 2019, the Croatian National Bank published a **new calculation of the balance of payments, international investment position and external debt statistical indicators** of the Republic of Croatia. The CNB carries out the revision of external statistics every five years, and the published statistical indicators are harmonised with the new methodologies and standards in order to achieve higher accuracy, a more comprehensive scope and a better alignment with international statistical standards. The most important qualitative improvements relate to the new method of calculating indicators of tourism revenues in the BOP, the inclusion of trade credits with an original maturity up to six months in the external debt statistics, and the improved coverage of data related to workers' remittances and imports of used vehicles from the EU. Balance of payments and external debt data and data on the international investment position have been revised at the time of publication of the data for the second quarter of 2019.

Further development of infrastructural projects aimed at establishing granular databases

The CNB intensively works on turning the Register of Institutions and Affiliates Data in Croatia (CNB-RIAD register) into a single register of all legal persons in the Republic of Croatia. This is a key infrastructural statistical project whose development began in 2018 and whose completion will create a basis for the introduction of the Integrated Reporting Framework for the ESCB's statistical purposes into the Republic of Croatia. More precisely, the ESCB has been working on consolidation of most of its existing reporting requirements by developing the Integrated Reporting Framework (IReF). This framework has been designed to:

- **reduce** the reporting burden for banks and enterprises
- **standardise** reporting based on data collected from various countries and statistical domains
- **provide** uniform information simultaneously to all domestic and foreign supervisory regulatory authorities (ECB, Eurostat, ESRB, SSM, SRB) and other users.

Register of Institutions and Affiliates Data (RIAD) in the Republic of Croatia



Notes: There are some twenty sources from which input data for CNB-RIAD are retrieved. Some are outside the CNB's infrastructure, e.g. the register of companies, while for others the CNB is the producer and provider of official statistics, e.g. monetary statistics. Data are entered into CNB-RIAD at a certain pace and "golden records" are created based on defined rules. Golden records are "the truth" about each concept in case different sources contradict each other. Other countries also send data to the transactional system of ECB-RIAD (RIAD TS). Collected data are controlled and processed at the ECB and are available with a one-day lag at the statistical data warehouse RIAD DWH.

The data from the CNB-RIAD register are used for the reporting and the control of reference data on legal persons in Croatia in the ECB's Register of Institutions and Affiliates in the whole of the EU (ECB-RIAD). CNB-RIAD also enables a systematic overview of changes to the population of enterprises in Croatia and is used for other purposes as well, such as the recording of business demography. The development of the CNB-RIAD register is also a precondition for future CNB participation in reporting for the ECB's database on credit exposures and risks in the whole of the EU (AnaCredit database). Following future integration of the AnaCredit database with data on issued securities (ECB-CSDB) and data on securities holdings (ECB-SHSDB), integrated AnaCredit-CSDB-SHSDB data will be a multi-purpose set of data on credit exposure and risk in the entire EU, suitable for complex analysis for the purposes of monetary policy, financial stability analysis, supervision and research within the ESCB.

Stronger reliance on survey sources coupled with integration into international research networks

The **Household Finance and Consumption Survey** is conducted by most national central banks within the ESCB in order to estimate the effect of financial shocks on households, achieve better understanding of the behaviour and financial decision-making of households and to estimate the effects of social, tax, educational, demographic and other policies on particular groups of households and research into poverty and inequality. The Croatian National Bank entered this project in 2017 and in 2019 it participated in the preparations for the new wave of the Survey planned for 2020. Publication of the results and data comparability with the results for other twenty one countries that participated in this wave of the Survey at the EU level will certainly contribute to the better understanding of the macroeconomic environment and the position of Croatian households. In addition, the results and data sources of the Survey provide a valuable contribution to the interested public for further scientific and professional research.

The **ECB's Competitiveness Research Network** (CompNet) analyses the effect of the productivity and competitiveness of firms on exports, employment and economic growth. The data are regularly updated in the database containing microdata for 19 European countries, which makes this register unique in terms of its coverage and methodological comparability. In the seventh round of data collection, Compnet extended its data coverage. In addition to

the previous indicators of a firm's productivity, inclusion in international trade and financial operations, also included was information on a firm's sector and type of ownership, geographical location and the date of its establishment and dissolution. The CNB's participation in this research network enables a comparison of Croatian enterprises with European "rivals and allies" in the competitive global market.

In 2019, the CNB made a number of methodological adjustments of its statistics, in order to keep it aligned with relevant international and EU standards.

Improvements were made to the quality and methodological alignment of monetary statistics and government finance and financial accounts statistics.

A major change in the field of monetary statistics was caused by the implementation of an EU Regulation which provided for reclassification of most former money market funds from the sector of other monetary financial institutions to the sector of non-money market investment funds, which considerably reduced the size of the sector of monetary financial institutions.

Qualitative improvements in 2019 were also made in the field of government finance statistics, with continued work on aligning existing statistical indicators with methodological standards. Recommendations from Eurostat during visits to Croatia marked by dialogue and discussion of methodology are the mainstay of this demanding process, which in 2019 included a revision of the Cooperation Agreement between the CBS, the CNB and the MoF in the field of producing parts of official statistics of the Republic of Croatia.

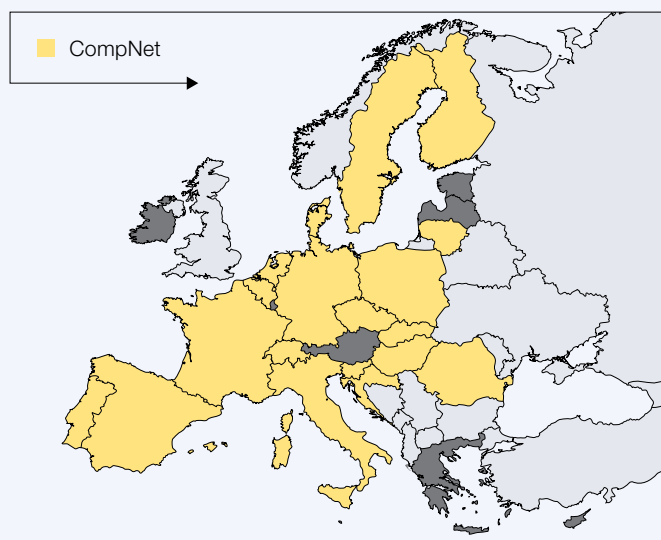
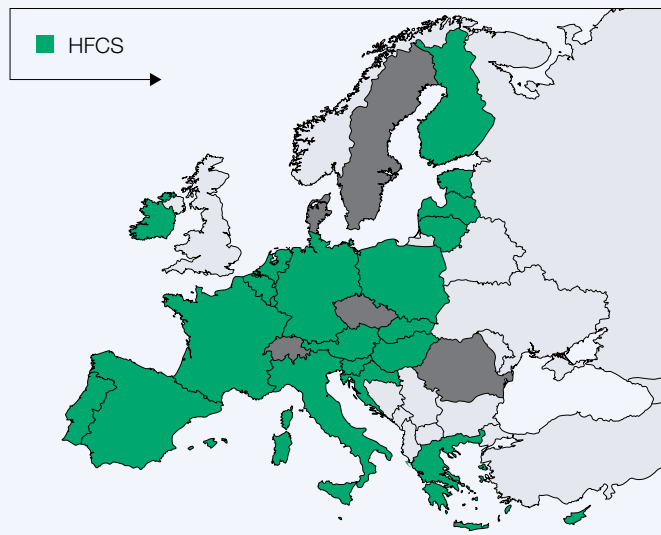
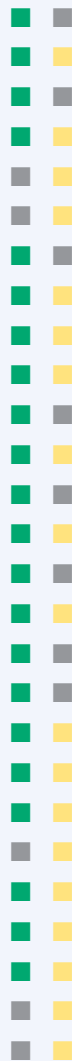
Also continued was the methodological work on improving the statistics of the quarterly financial accounts for all sectors. **Published and revised in July 2019 was a series of indicators covered by the statistics** referring to the shares and equity of non-financial corporations from 2001 on, resulting from methodological corrections to the assessed value of shares and other forms of equity of non-financial corporations.

Croatia participates in two ECB's research networks

■ Household Finance and Consumption Network (HFCS)

■ Competitiveness Research Network (CompNet)

- 1 Austria
- 2 Belgium
- 3 Cyprus
- 4 Croatia
- 5 Czech Republic
- 6 Denmark
- 7 Estonia
- 8 Finland
- 9 France
- 10 Germany
- 11 Greece
- 12 Hungary
- 13 Ireland
- 14 Italy
- 15 Latvia
- 16 Lithuania
- 17 Luxembourg
- 18 Malta
- 19 Netherlands
- 20 Poland
- 21 Portugal
- 22 Romania
- 23 Slovakia
- 24 Slovenia
- 25 Spain
- 26 Sweden
- 27 Switzerland



SOURCES: HFCS and CompNet.

The CNB has been actively participating in the Household Finance and Consumption Network (HFCN) since 2017 and the Competitiveness Research Network (CompNet) since 2015.

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7 Research

The priorities of CNB's research activities in 2019 related to the introduction of the euro and research based on the Household Finance and Consumption Survey. The CNB organised two scientific conferences and a central banking part of a conference hosted by the Faculty of Economics in Split.

Research objectives and areas of the Croatian National Bank

The Croatian National Bank conducts research in order to fulfil its objectives and tasks. The bulk of the CNB's research supports the implementation of monetary policy and the maintenance of financial stability. The CNB publishes most of its research findings so that they are accessible to the public. The quality of published papers increases the channels of activity and the visibility of the central bank and contributes to the continuous development of its analytical capacities.

Priority research areas of the CNB may be classified into four groups. The first area focuses on attaining the main objective – price stability. The area comprises topics related to the instruments and effects of monetary policy, inflation and exchange rate movements and international financial relations. The second research area is dedicated to financial stability. Financial systems and markets are analysed for that purpose, as are the financial behaviour of corporations and households, their access to financing and the long-term sustainability of their financial position. The third area concentrates on the developments in productivity and the sources of growth of the Croatian economy, with an emphasis on cyclical movements. In particular, the area focuses on fiscal sustainability as an important determinant of macroeconomic stability. The fourth priority area comprises payment operations and challenges of technological innovations, particularly in the financial system.

Research at the CNB is carried out independently within the central bank, in cooperation with representatives of the academic community and within working groups and research networks of the European System of Central Banks (ESCB) and the European Systemic Risk Board (ESRB).

Research activities in 2019

Research activities in 2019 focused on continued research related to the entry into the European Exchange Rate Mechanism and the euro area, with special attention directed to research based on the findings of the Household Finance and Consumption Survey, which provide new insight into Croatian households at a micro level. In addition to these key activities, research continued in a wide range of CNB interests, according to priority areas, such as exchange rate policy and international reserves, real estate prices, movements in the banking sector, determinants of competitiveness and growth, fiscal policy and digital currencies.

The Croatian National Bank organised two scientific conferences in 2019. In June 2019, the traditional Dubrovnik Economic Conference was held, the 25th in the series, bringing together economists from central banks, international financial organisations and the scientific community. The conference also included the Young Economists Seminar. The second joint conference, organised by the Croatian National Bank and the International Monetary Fund and entitled “**Demographics, Jobs and Growth: Navigating the Future in Central, Eastern and Southeastern Europe**”, was held in July. The conference focused on labour market and demographic challenges, the future of labour, and policies needed to sustain growth and reach Western European levels of income. In addition to the IMF and CNB representatives, the conference participants included about fifteen central bank governors and finance ministers from Central, Eastern and Southeastern Europe, the representatives of international financial organisations, the European Commission and the scientific community.

In efforts to foster cooperation with the scientific community, the CNB organised a series of sessions in the field of central banking within the 13th International Conference “Challenges of Europe”, hosted by the Economics Faculty in Split in May 2019, which also brought together central bankers from other EU member states. CNB employees presented their papers in numerous other scientific meetings and conferences. The CNB continued to

organise economic workshops where ongoing new research by CNB employees and other interesting studies of foreign lecturers were presented. Economic workshops are open to the academic and professional public. A total of four economic workshops were held in 2019, with presentations by authors from domestic and foreign universities, international institutions and the CNB.

The Croatian National Bank issues two types of publications, in which it publishes the first research findings obtained by its employees: Working Papers and Surveys. In 2019, a total of five new papers were published, of which one was a working paper and four were surveys. CNB employees also publish papers in the publications of the European Central Bank and other central banks.

Some of the papers by CNB employees were also published in scientific journals and other scientific publications. In 2019, eight papers authored by CNB employees were published in scientific journals and two were published in scientific digests. Several papers were accepted for publication in 2020.

Table 7.1 Economic workshops of the Croatian National Bank in 2019

Workshop number	Authors	Title	Date
28th CNB Economic Workshop	Vladimir Arčabić (Faculty of Economics and Business Zagreb)	Fiscal Convergence and Sustainability in the European Union	23 January 2019
29th CNB Economic Workshop	Milan Deskar-Škrbić, Karlo Kotarac and Davor Kunovac (CNB)	Third Round of the Euro Area Enlargement: Are the Candidates Ready?	13 March 2019
30th CNB Economic Workshop	Marek Mikuš (Trinity College Dublin)	Financialisation of the State: Preliminary Analysis for Croatia	6 June 2019
31st CNB Economic Workshop	Igor Ljubaj (CNB)	International Reserves, Exchange Rate Differences and the CNB's Financial Result	29 October 2019

SOURCE: CNB.

Table 7.2 Overview of selected papers according to priority areas**Priority area 1: Monetary and exchange rate policy**

- Bokan, N., and R. Ravnik (2018): Quarterly Projection Model for Croatia, CNB Surveys, S-34
- Bošnjak, M., G. Kordić, and I. Budimir (2019): Determinants of Foreign Exchange Reserves in Croatia: A Quantile Regression Approach, *Economic Thought and Practice* 28(1)
- Bukovšak, M., G. Lukinić Čardić, and N. Pavić (2020): Structure of Capital Flows and Exchange Rate: The Case of Croatia, *Empirica*, 47(1) (also published in CNB Working Papers, W-52)
- Bule, M., and A. Čudina (2020): Foreign Direct Equity Investments and Foreign Ownership Premium: The Case of Croatia, CNB Working Papers, W-58
- Deskari-Škrbić, M., and T. Čorić (2020): Pristupanje Europskom tečajnom mehanizmu ERM II: iskustva novih zemalja članica EU i slučaj Hrvatske, published in: *Public Finance Sustainability on the Path to the Monetary Union*, eds. Družić, G., H. Šimović, M. Basarac, and M. Deskari-Škrbić, Faculty of Economics and Business Zagreb and Croatian Academy of Sciences and Arts
- Deskari-Škrbić, M., K. Kotarac, and D. Kunovac (2020): The Third Round of the Euro Area Enlargement: Are the Candidates Ready?, *Journal of International Money and Finance*, 107 (also published in CNB Working Papers, W-57)
- Deskari-Škrbić, M., and D. Kunovac (2020): Twentieth Anniversary of the Euro: Why Are Some Countries Still Not Willing to Join? Economists' View, *Comparative Economic Studies* (also published in CNB Surveys, S-39)
- Galinec, D., J. Vuglar, and D. Cvrtila (2019): Residential Property Price Index in Croatia: from Experimental to Official Statistics, *Croatian Review of Economic, Business and Social Statistics*, 5(1)
- Kunovac, D., and K. Kotarac (2019): Residential Property Prices in Croatia, CNB Surveys, S-37
- Ljubaj, I. (2020): International Reserves, Exchange Rate Differences and the CNB's Financial Result, CNB Surveys, S-38
- Ortega, E. et al. (Đozović, E., and D. Kunovac) (2020): Exchange rate pass-through in the euro area and EU countries, *ECB Occasional Paper Series*, 241

Priority area 2: Financial system and macroprudential policy

- Brkić, M. (2019): Banking Distress in Europe in the Context of the Global Financial Crisis – the Role of Capital Flows, CNB Surveys, S-36
- Dumičić, M. (2019): Linkages between fiscal policy and financial stability, *Journal of Central Banking Theory and Practice*, 8(1)
- Dumičić, M., and T. Ridzak (2019): Are Shadow Banks Hiding in Croatia as Well?, *Economic Trends and Economic Policy*, 27(2)
- Huljak, I. (2019): Shareholder value in Croatian banking sector, *Croatian Review of Economic, Business and Social Statistics*, 5(1)
- Huljak, I., R. Martin, and D. Moccero (2019): The cost-efficiency and productivity growth of euro area banks, *ECB Working Paper Series*, 2305
- Huljak, I., R. Martin, D. Moccero, and C. Pancaro (2020): Do non-performing loans matter for bank lending and the business cycle in euro area countries?, *ECB Working Paper Series*, 2411
- Kraft, E., and I. Huljak (2018): How Competitive is Croatia's Banking System? A Tale of Two Credit Booms and Two Crises, CNB Working Papers, W-54
- Kunovac, M. (2020): Distribution of Household Assets in Croatia, *Public Sector Economics* (accepted for publication) (also published as *Households' Wealth Distribution in Croatia*, CNB Working Papers, I-57)

Šubić, R. (2019): Interakcija financijskih ciklusa u gospodarstvu i medijske percepcije banaka tijekom financijske krize, published in: *Svjetski financijski vrtlog – 30 godina poslije*, eds. Družić, G., I. Lovrinović, M. Basarac Sertić, and M. Nakić, Faculty of Economics and Business Zagreb and Croatian Academy of Sciences and Arts

Priority area 3: Productivity and growth

Buljan, A., M. Deskar-Škrbić, and H. Šimović (2019): Determinants of Public Health Care, Education and Administration Efficiency in Central, Eastern and South Eastern Europe, *Croatian and Comparative Public Administration*, 19(4)

Deskar-Škrbić, M. (2020): Makroekonomski učinci fiskalne politike u malim otvorenim gospodarstvima, published in: *Public Finance Sustainability on the Path to the Monetary Union*, eds. Družić, G., H. Šimović, M. Basarac, and M. Deskar-Škrbić, Faculty of Economics and Business Zagreb and Croatian Academy of Sciences and Arts

Deskar-Škrbić, M., A. Buljan, and M. Dumičić (2020): What drives banks' appetite for sovereign debt in CEE countries?, *Public Sector Economics* (accepted for publication)

Deskar-Škrbić, M., and A. Grdović Gnip (2020): Obilježja fiskalne politike u Hrvatskoj, published in: *Public Finance Sustainability on the Path to the Monetary Union*, eds. Družić, G., H. Šimović, M. Basarac, and M. Deskar-Škrbić, Faculty of Economics and Business Zagreb and Croatian Academy of Sciences and Arts

Dumičić, M. (2020): Održivost javnog duga i financijska stabilnost, published in: *Public Finance Sustainability on the Path to the Monetary Union*, eds. Družić, G., H. Šimović, M. Basarac, and M. Deskar-Škrbić, Faculty of Economics and Business Zagreb and Croatian Academy of Sciences and Arts

Goldner Lang, I., and M. Lang (2019): The Dark Side of Free Movement: When Individual and Social Interests Clash, *Migracijske i etničke teme*, 35(1)

Nickel, C. et al. (Draženić, I., and M. Kunovac) (2019): Understanding low wage growth in the euro area and European countries, *ECB Occasional Paper Series*, 232

Švaljek, S., I. Rašić Bakarić, and M. Sumpor (2019): Citizens and the City: The Case for Participatory Budgeting in the City of Zagreb, *Public Sector Economics*, 43(1)

Valdec, M., and J. Zrnc (2019): Characteristics of Croatian Manufacturing Exporters and the Export Recovery during the Great Recession – the CompNet Trade Module Research Results, *CNB Surveys*, S-35

Priority area 4: Payment operations and technological development

Ivanov, M., and M. Lang (2019): Challenges of a Cashless Society, published in: *Svjetski financijski vrtlog – 30 godina poslije*, eds. Družić, G., I. Lovrinović, M. Basarac Sertić, and M. Nakić, Faculty of Economics and Business Zagreb and Croatian Academy of Sciences and Arts

SOURCE: CNB.

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8 International relations

The CNB is a member of the European System of Central Banks and actively participates in the execution of the tasks falling within the competence of the General Council of the European Central Bank. CNB representatives also participate in the work of the European Systemic Risk Board, the European Banking Authority and working bodies of the Council of the European Union and the European Commission.

The CNB is the fiscal agent of the RC for the IMF and a depository of the IMF and also cooperates with other international multilateral financial institutions. Concluding Article IV consultations with the Republic of Croatia for 2019, Executive Directors welcomed the solid economic growth and employment growth, noting that monetary policy was appropriately accommodative and the banking system well-capitalised and liquid. They stressed that the fiscal consolidation achieved should be preserved by further prudent policy.

Activities connected with EU membership

European System of Central Banks (ESCB)

The CNB Governor is a full member of the General Council of the ECB and the CNB is an integral part of the ESCB. In 2019, the Governor participated in the regular quarterly meetings of the General Council, which dealt with macroeconomic, monetary and financial developments in the EU as well as with monetary policy measures in non-euro area member states.

CNB experts took part in the work of 13 ESCB committees, numerous sub-committees and working groups that provide expert assistance to the

General Council and other ECB decision-making bodies. As a member of the ESCB, the CNB also takes part in the formulation of ECB opinions concerning draft legislative proposals of the EU and individual member states.

European System of Financial Supervision

As a participant of the European System of Financial Supervision, the CNB is actively involved in the work of the European Systemic Risk Board (ESRB). The Governor and the Vicegovernor competent for banking supervision participated in the regular quarterly meetings of the ESRB General Board dealing with systemic risks to the EU financial system and the implementation of macroprudential policy measures. As assessed at the General Board meetings, total risk remained high in 2019, and as in the previous years, the possibility of a sudden increase in interest rates remains the key systemic risk¹. Trade and geopolitical tensions among major global economies are mentioned as potential causes of a sudden increase in interest rates. It was estimated that the materialisation of this risk might jeopardise the debt sustainability of heavily indebted countries and enterprises. The Governor's three-year term in the ESRB's Steering Committee ended in September 2019. The Steering Committee is tasked with preparing the agenda for the General Board meeting comprising 14 members, of whom only four are the governors of national central banks.

As assessed by the ESRB, total risk remained high in 2019, and as in the previous years, the possibility of a sudden increase in interest rates remains the key systemic risk.

CNB experts are involved in the work of the European Banking Authority (EBA) and take part in the meetings of EBA committees and working bodies. Competent vicegovernors also actively participate in the meetings of the Board of Supervisors and the Resolution Committee.

EU Council and the European Commission (EC)

In 2019, preparations were completed for the Croatian six-month presidency of the Council of the European Union in the first half of 2020, during which

¹ For more details on Macroprudential activities according to the recommendations of the European Systemic Risk Board, see Chapter 2 "Financial stability".

CNB experts would actively participate in the preparation and the activities of some EU Council working groups.

In 2019, CNB experts continued with their regular activities in the working bodies of the EU Council and the EC. The activities included the discussion of draft legislation and other EU acts, most often together with the representatives of the Ministry of Finance of the RC. The Governor and the Deputy Governor took part in informal meetings of finance ministers of member states, while designated CNB representatives participated in the work of the Economic and Financial Committee (EFC), which promotes the coordination of national economic policies. Through participation in the work of the working bodies of the Economic and Financial Affairs Council, CNB representatives were actively involved in the preparation of the positions of the RC related to the fields of competence of central banks, such as improving the quality of financial services and the functioning of financial markets as well as strengthening the resilience of the EU financial system.

The EU Council continues with activities aimed at the further strengthening and deepening of the Economic and Monetary Union (EMU) by the completion of establishing a banking union, building a capital markets union and strengthening the international role of the euro.

The EU Council continued with activities aimed at the further strengthening and deepening of the Economic and Monetary Union (EMU) by the completion of establishing a banking union, building a capital markets union and strengthening the international role of the euro. Negotiations continued on a package of measures to reduce risks within the banking system and on the European Deposit Insurance Scheme (EDIS). In late 2019, an agreement was reached on the start of the implementation of the reform of the European Stability Mechanism (ESM) to enable a further development of the ESM's instruments, including the establishment of a common backstop for potential major disruptions in the euro area banking system. Progress has been made in building a capital markets union by the adoption of measures for higher integration of EU financial markets and for the improvement of the access to finance of enterprises. Activities continued on the design of a budgetary instrument for convergence and competitiveness dedicated to euro area member states and member states in the process of euro adoption.

Republic of Croatia and coordination of economic policies within the European Union

In February 2019, within the European Semester, the annual process of coordination of economic policies of EU member states, the EC established that Croatia had macroeconomic imbalances. Such an assessment means that progress has been made relative to the previous years when Croatia was in a group of countries with excessive macroeconomic imbalances. The improvement of the assessment of the intensity of imbalances is a reflection of the persistent reduction of public and external debt in a context of economic growth and prudent fiscal policy. The EC established that Croatia had made some progress in most of the areas covered by the EU Council's country-specific recommendations for 2018. The Report stated that the banking system was well-capitalised and profitable and that bank asset quality continued to improve. However, the NPL ratio was still regarded as relatively high.

The new set of recommendations of the EU Council made to Croatia in mid-2019 emphasises the importance of implementing reforms in the areas of public finances, the labour market, education, social policy, public administration, the justice system, investment policy, business environment, the management of government-owned enterprises and government property. In late 2019, at the beginning of the new European Semester, the EC concluded that in 2020 in-depth reviews of national economies would be conducted for Croatia and 12 other member states.

Other activities connected with the European Union

Following complex negotiations, at the meeting of the European Council held on 17 October 2019, chiefs of states and governments of the EU member states adopted conclusions endorsing the text of the Agreement on the withdrawal of the United Kingdom from the EU on 31 January 2020. The entry into force of the Agreement marks the start of a transition period during which agreement on the future relationship between the UK and the EU should be reached. National central banks were not directly involved in the negotiation process on the dissociation and, during the negotiations on the future relationship between the UK and the EU, they also primarily act as advisors. Accordingly, the CNB participates in an ESCB working group dealing with the assessment of the economic and financial implications of the potential scenarios of the future relationship for the EU. The CNB contributes at the

national level in preparing the analyses of potential impacts regarding the areas within its competence.

The CNB also continued cooperation with the representatives of EU member state central banks, the ECB and other EU institutions and bodies. Noteworthy in 2019 are several visits by EC and ECB experts and the fourteenth annual dialogue between the CNB and the Austrian central bank.

In addition to periodical bilateral cooperation with the central banks of EU candidate and potential candidate countries in the form of transfer of knowledge on the *acquis*, in 2019, the CNB was engaged as a twinning partner in three twinning projects: for the Montenegrin financial sector (the consortium members were institutions from Germany, Croatia and the Netherlands), for the strengthening of institutional capacities of the National Bank of Serbia during its EU accession process (the consortium members were central banks from Germany, Croatia and Romania) and in the project for the strengthening of the institutional capacity of the National Bank of the Republic of North Macedonia in the process of its accession to the ESCB (the consortium members were the central banks from Germany and Croatia). The completion of all three projects is foreseen in the course of 2020.

CNB experts also participated in the twinning light project for the Republic of North Macedonia led by the German central bank. The project entitled “Strengthening the capacities of the system for fight against counterfeiting of EUR” was closed in June 2019.

The CNB was engaged as a partner in several twinning projects and in the regional Central Bank Capacity Building Programme for Western Balkan countries.

The regional Central Bank Capacity Building Programme was launched in March 2019 for six Western Balkan countries in the context of their forthcoming accession to the ESCB, in which the CNB will provide assistance, together with 19 other member state central banks and the ECB. The Programme’s Component 1 foresees the holding of 20 training seminars on central banking issues, each lasting three days. In 2019, the CNB hosted two seminars, which focused on issues concerning monetary statistics and payment systems.

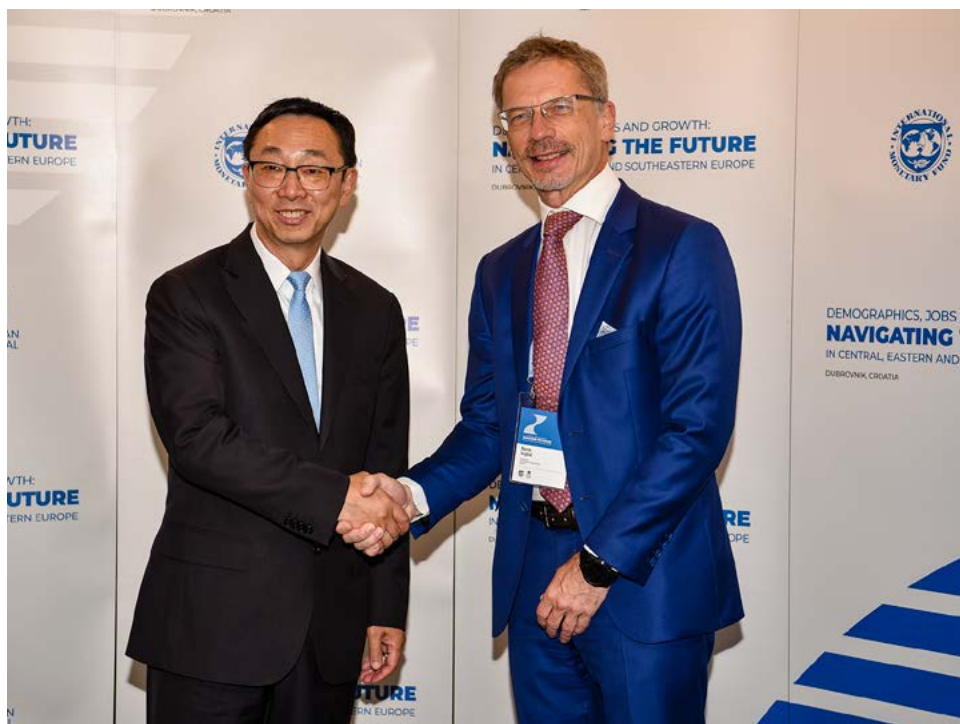
International Monetary Fund (IMF)

The Republic of Croatia is a member of the constituency that is alternately headed by the Netherlands and Belgium. This constituency comprises 15 countries (Armenia, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Georgia, Israel, Luxembourg, Moldova, Montenegro, the Netherlands, North Macedonia, Romania and Ukraine). Anthony De Lannoy, a Belgian representative, is the Executive Director in the current term, with alternates from the Netherlands and Ukraine. The Republic of Croatia appoints its representative as advisor to the Executive Director for a two-year term within each four-year period.

Concluding the Article IV consultations with the RC for 2019, the IMF Executive Directors, among other things, emphasised the need to strengthen public investment, accelerate structural reforms, improve the efficiency of state-owned enterprise management and the digitalisation of public administration.

In mid-February 2020, the Executive Board concluded the 2019 Article IV consultations with the Republic of Croatia, and considered and endorsed the staff appraisal without a meeting. The Executive Directors welcomed Croatia's fifth consecutive year of solid economic growth, driven largely by private consumption and tourism. Employment gains have been robust, wages have continued to rise, while import prices have helped to keep inflation muted. Continued strong consumption was then anticipated, and the current account surplus was expected to decline, and turn into a moderate deficit, while economic growth would moderate. Both public and external indebtedness were expected to continue their declining trajectories. The pace of fiscal consolidation in 2019 continued to slow and the budget balance was expected to turn into a small deficit in 2020. In order to avoid commitments and contingent liabilities exerting a pressure on budget balances in the coming years, the authorities' decision to withhold the planned reduction in the overall VAT rate was supported and it was recommended that any other tax reductions should be held back, as they could undermine recent gains. Despite the good performance, the Executive Directors presented their opinion that convergence with the EU needs to accelerate. They also recommended shifting

IMF Deputy Managing Director Tao Zhang and Governor Boris Vujčić at the second joint conference co-organised by the CNB and the IMF “Demographics, Jobs and Growth: Navigating the Future in Central, Eastern and Southeastern Europe”.



spending priorities towards public investment. Better absorption of EU funds could ease this shift in priorities. However, structural reforms are still needed in areas such as public service, pension and healthcare systems.

The needs to modernise state-owned enterprise management and accelerate the digitalisation of public administration were also mentioned. It was emphasised that renovating the capital stock and enhancing the business climate would help raise potential growth. Monetary policy was assessed as remaining appropriately accommodative within the limits of the exchange rate anchor. It was noticed that liquidity in the banking system continued to rise, and interest rates remained low. Bank lending to households continued to grow and the CNB issued recommendations to banks to be more cautious with long-term uncollateralised consumer lending. If growth in real estate prices accelerates, or if there is a migration to other forms of household lending, stronger supervisory responses merit close consideration. The Executive Directors also supported the credit register becoming fully operational again to prevent a build-up of systemic risk. They assessed the banking system, on the whole, as well-capitalised and liquid, and the share of non-performing loans further declining. International reserves were estimated to be considerable and growing. It was also mentioned that Croatian plans to enter the exchange rate mechanism (ERM II) in mid-2020 and ultimately to enter the euro area.

In addition to Article IV consultations, cooperation with IMF experts and exchange of opinions also took place in a number of other gatherings and conferences in 2019, primarily during the regular visits of the delegation of the Republic of Croatia to Washington for the International Monetary and Financial Committee (IMFC) Spring Meeting², and the Annual Meeting of the Boards of Governors of the IMF and the World Bank Group. CNB representatives also participated in the meeting of the IMF and World Bank constituency of which Croatia is a member, held in June in North Macedonia.

The conference aimed at heads of Central, Eastern and Southeastern Europe (CESEE) was held in July 2019 in Dubrovnik. The conference was jointly organised by the CNB and the IMF for the second time in the past two years. The topic of the conference was “**Demographics, Jobs and Growth: Navigating the Future in Central, Eastern and Southeastern Europe**”. The CNB is the fiscal agent of the RC for the IMF and a depository of the IMF. As a result, the CNB is responsible for keeping deposit accounts of the IMF in the RC and for settling the obligations of the RC, in its name and for its account, on the basis of its membership in the IMF.

The quota of the RC in the IMF and its voting power remained unchanged in 2019 (SDR 717.4m and 0.171% respectively).

Bank for International Settlements (BIS)

In 2019, the CNB Governor took part in the regular meetings of central bank governors from BIS member countries, at which current issues in the area of international banking and finance were discussed. In addition, in June 2019, the Governor participated in the BIS Annual General Meeting, on which occasion the BIS Annual Report was adopted.

Cooperation with other international financial institutions

The CNB, within its competence, continued its cooperation with a number of other international financial institutions and organisations in 2019. This cooperation largely included the cooperation with multilateral development banks in which the RC is a member, such as the World Bank Group, the European Bank for Reconstruction and Development and the European Investment Bank.

2 International Monetary and Financial Committee (IMFC).

Other activities

The CNB Governor is the chairman of the Vienna Initiative 2.0 Steering Committee. The Vienna Initiative 2.0 is a framework for safeguarding financial stability in the countries of Central, Eastern and Southeastern Europe through the exchange of experience and opinions of the key stakeholders in these countries' financial systems and private and public sectors. The Initiative brings together international financial institutions, home and host country supervisory authorities and the principal cross-border banking groups. The Vienna Initiative was established at the peak of the global financial crisis with the aim of preventing a sudden outflow of capital from the banking systems of the countries of Central and Eastern Europe. On the occasion of the tenth anniversary of the Vienna Initiative, in late 2019, a **collection of essays** was published, prepared by the key initiative participants, including the CNB Governor, in which they describe their motivation for the setting up of the initiative in the beginning of 2009 and evaluate its effects so far. The authors agreed that the Vienna Initiative played an important role in safeguarding financial stability in Central and Eastern Europe during the global financial crisis and that even in the post-crisis period it proved to be a useful platform for cross-border cooperation.

CNB representatives also participate in the work of an interdepartmental group for the coordination of activities within the 17+1 initiative, which promotes cooperation between 17 Central, Eastern and Southeastern European countries and China. The eighth summit of this initiative was held in April 2019 in Dubrovnik.

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9 The process of euro adoption

A letter of intent concerning the entry of Croatia into the European Exchange Rate Mechanism, jointly signed by the Minister of Finance and the Governor of the Croatian National Bank, was sent on 4 July 2019, to EU institutions, euro area member states and Denmark, the only participant in the Exchange Rate Mechanism. By May 2020, Croatia has to take a number of reform measures, two of which fall within the competence of the CNB: further strengthening of banking system supervision through the establishment of close cooperation between the CNB and the ECB and strengthening of the framework for macroprudential policy implementation through the introduction of new borrower-based instruments. The CNB continues to conduct various informative activities on the effect of the adoption of the euro and will intensify them considerably once Croatia enters the Exchange Rate Mechanism.

In 2019, the Government and the CNB continued making efforts aimed at Croatia's entry to the Exchange Rate Mechanism II (ERM II), an important step in the process of the adoption of the euro as the country's official currency. At the beginning of the year, Government and CNB officials held a large number of meetings with heads of euro area states and EU institutions to inform them about Croatia's intentions to start participating in the ERM II in the near future. This had been preceded by the creation of the preconditions for such a step, primarily the presence of a stable macroeconomic environment without excessive macroeconomic imbalances and the reduction of structural vulnerabilities recognised within the European Semester.

On 4 July 2019, the Republic of Croatia sent a letter of intent to enter the ERM II.



Governor Vujčić spoke about the process of euro adoption at the conference “The Croatia We Need: Croatian Presidency of the EU”, organised by Večernji list.

A letter of intent concerning the entry of Croatia into the European Exchange Rate Mechanism, jointly signed by the Minister of Finance and the Governor of the Croatian National Bank, was sent on 4 July 2019, to EU institutions, euro area member states and Denmark, the only participant in the Exchange Rate Mechanism. Apart from expressing interest in entering the ERM II, in the letter of intent Croatia also undertook to implement a set of reform measures within a relatively short time limit, by May 2020. These include 19 measures in six areas, two of which fall within the competence of the CNB: to further strengthen the supervision of the banking system by establishing close cooperation between the CNB and the ECB¹ and to strengthen the macroprudential policy framework by introducing new borrower-based instruments. The implementation of these measures will be the responsibility of the CNB. The remaining four areas relate to the strengthening of the anti-money laundering framework, improving the processes in the production of official statistics, enhancing public sector governance and reducing the financial and administrative burden on the economy. At the Eurogroup meeting held on 8 July, the representatives of euro area member states, Denmark and EU institutions welcomed the readiness of Croatian authorities to implement the measures and stressed that

¹ By establishing close cooperation, the ECB will exercise direct supervision of several systemically important banks in Croatia, while the remaining banks will be supervised by the CNB. At the same time, Croatia will become a participating member state within the Single Resolution Mechanism. For more details, see Chapters 4 “Supervision” and 5 “Resolution planning”.

in the case of the full implementation of the assumed commitments Croatia would be able to officially submit the request for the entry into the ERM II.

During the year, the CNB was intensively involved in legislative activities that were an integral part of the reform measures specified in the letter of intent. The implementation of the measures in the areas within the CNB's competence includes, among other things, the adoption of amendments to several acts. Since it was certain that the establishment of close cooperation between the CNB and the ECB would be one of the areas to which Croatia was going to commit in the letter of intent, the drafting of legal adjustments had started even before the letter of intent was sent to the member states and EU institutions. On 27 May 2019, Croatia sent a formal request for the establishment of close cooperation with the ECB, so that all activities preceding the establishment of close cooperation could be completed by mid-2020. In addition to legislative adjustments, it also includes the ECB's carrying out of a comprehensive assessment – asset quality review and stress testing – for the five selected credit institutions in Croatia. The CNB will assist the ECB in this process. It is expected that close cooperation between the CNB and the ECB will start on the day of Croatia's entry in the ERM II.

The request to establish close cooperation with the ECB was sent on 27 May 2020.

In 2019, the members of the Council and other CNB experts held a large number of public presentations on the topic of the adoption of the euro. The purpose of the presentations was to inform the public of the euro adoption procedure and raise awareness among Croatian citizens about the many advantages Croatia will have from the adoption of the euro. Individually, the most important benefit will arise from the elimination of currency risk to which, today, all citizens and entrepreneurs who are repaying loans with a currency clause in the euro, as well as the country, whose debt is also predominantly indexed to the euro, are exposed. There are many other important advantages that citizens and entrepreneurs will gain, such as the elimination of exchange transaction costs, facilitating doing business abroad, lower interest rates and higher resilience of the economy to financial crises.

In 2019, the CNB again organised a poll to gauge public opinion on the adoption of the euro in Croatia. Information obtained by the public opinion poll is

important to assess the level of public support for the efforts undertaken by the Government and the CNB with the aim of adopting the euro. In addition, polls reveal how well-informed the public is concerning the potential effects of euro adoption. This information is important to plan further informational activities, which will be particularly intensive after Croatia joins the ERM II.

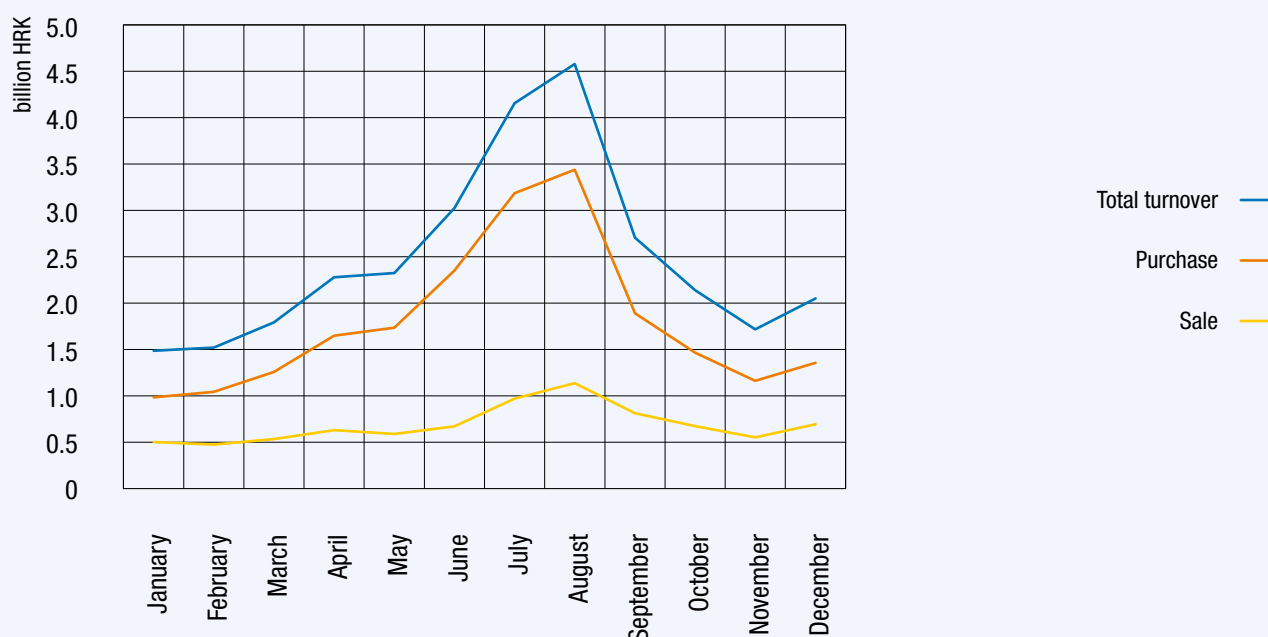
The results of the poll, conducted in February 2019, suggest that slightly over 50% of Croatian citizens support euro adoption and as many as 80% of them expect Croatia to adopt the euro over the next ten years. The level of support for euro adoption would probably be even higher than 50% if citizens were not so concerned about the impact of euro adoption on consumer prices. Almost half of the respondents believe that the changeover to the euro will lead to an increase in prices. Experiences from other countries indicate that their fear is unfounded. In all new member states that have adopted the euro, euro adoption has had a very weak or one-off impact on prices, which is largely attributed to the consistent implementation of consumer protection measures. In the Strategy for the Adoption of the Euro as the official currency in the Republic of Croatia, issued in May 2018, the Government announced that it would undertake consumer protection measures that had proven to be efficient in other countries. Therefore, there is no reason to fear that the living standard in Croatia will decline with the adoption of the euro.

10 Authorised currency exchange offices

Towards the end of 2019, there were 1,228 authorised currency exchange offices operating in Croatia that traded in 31 currencies and generated a turnover of almost HRK 30bn, 85% of it in the euro.

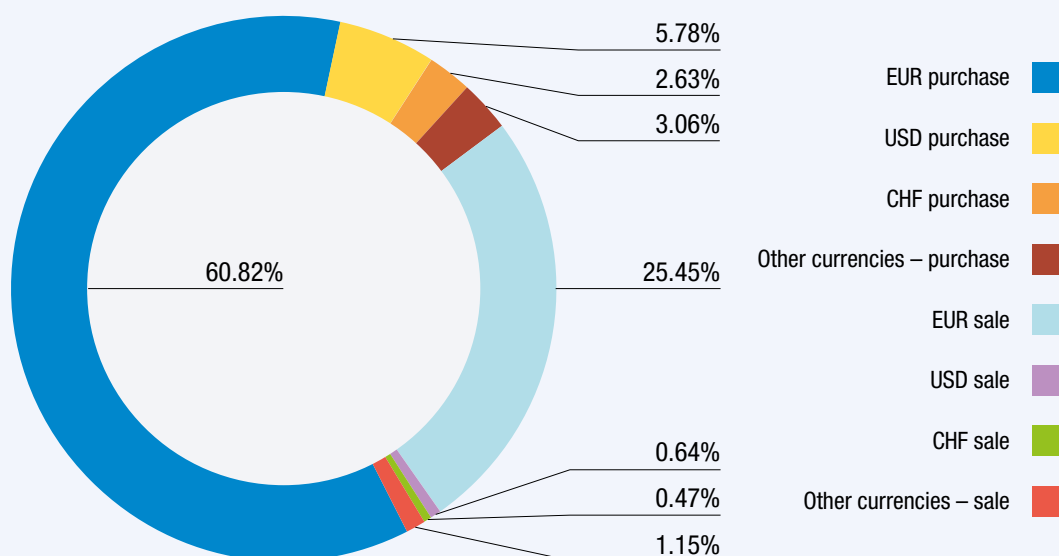
As at 31 December 2019, 1,228 authorised currency exchange offices operated in the Republic of Croatia on the basis of valid authorisations to conduct currency exchange transactions issued by the CNB. About 900 of them actively provided the service of foreign cash exchange transactions, both throughout the year or seasonally, at about 3,500 currency exchange locations.

Figure 10.1 Movement of total turnover and purchase and sale of foreign cash in 2019



SOURCE: CNB.

Figure 10.2 Share of purchase and sale of foreign cash by currency in total turnover in 2019



SOURCE: CNB.

In 2019, the CNB issued a total of 51 authorisations to conduct currency exchange transactions, 42 decisions on the withdrawal of authorisation to conduct currency exchange transactions and also recorded 73 authorisations that ceased to be valid as a matter of law, most frequently because a currency exchange office had been removed from the court register. In 2019, authorised currency exchange offices traded in 31 currencies and purchased from or sold to natural persons foreign cash in the equivalent of HRK 29.77bn. Of that amount, purchase accounted for HRK 21.52bn, or 72.29%. The bulk of total authorised currency exchange offices' transactions (86.3%) were in euro. The kuna equivalent of the authorised currency exchange offices' total turnover in foreign cash was down by HRK 373.22m (1.24%) from 2018, while the share of the euro in total turnover was down by 0.36 percentage points (a decrease from 86.66% to 86.3%).

In September 2019, the CNB adopted a new subordinate regulation **governing the conditions and the manner for the conduct of currency exchange transactions** by authorised currency exchange offices. In the course of last year, the CNB did not adopt or amend other regulations governing foreign exchange operations.

Consumer protection

Consumer protection

11 CNB consumer protection policy implementation

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11 CNB consumer protection policy implementation

The CNB continuously works on raising awareness about the importance of the protection of the rights and interests of consumers. Our initiatives have enhanced banking system transparency in respect of the supply of loans and the associated costs and payment transaction fees. The CNB acquainted credit institutions and other providers of financial and banking products and services falling within its competence with consumer rights by issuing opinions on the implementation of regulations in the area of consumer protection, holding bilateral meetings, carrying out supervision, etc. We have continued to provide financial education, in particular of the young, as well as of the general population. In addition, the CNB worked with credit institutions to increase their compliance with EU regulations and promote the quality of consumer protection and develop good practices in this area.

Application of regulations in the area of consumer protection

Improvements to the legal framework

The CNB constantly improves and develops the consumer protection legal framework in the areas within its competence.¹ The protection of consumers – users of services provided by credit institutions, credit unions, credit intermediaries that participate in the process of offering consumer housing loans and consumers – users of payment services and electronic money holders fall within the competence of the CNB. The main rules regulating consumer

¹ All current regulations governing consumer protection and supervised by the CNB are available at the following link: <https://www.hnb.hr/en/about-us/consumer-protection/regulations>.

protection in the banking and financial sectors in the RC are set by laws. In some cases, detailed provisions of individual laws are elaborated by decisions and/or ordinances. In addition, if recommendations or examples of good practices are given, guidelines are also published.

The new regulations issued by the CNB in 2019 include [Guidelines for complaints-handling for the banking sector](#) and the [Decision on amendments to the Decision on the necessary knowledge and competence of staff of credit institutions and credit intermediaries and on the requirements and the procedure for authorisation to provide credit intermediation services](#). The Guidelines additionally improve the protection of all users of services provided by banking and financial institutions because all service providers within the competence of the CNB are obliged to align their organisation and their internal processes and/or internal acts with the requirements from the Guidelines. In addition, the Guidelines define the statistical form for reporting on the type, number and structure of consumer complaints. This has enabled a clear comparison of complaints, the classification of complaints in sub-categories and a better insight into those areas on which supervisory activities should be focused. Furthermore, the Decision on amendments to the Decision on the necessary knowledge and competence of staff of credit institutions and on the requirements and the procedure for authorisation to provide credit intermediation services additionally improved the procedure of the analysis and preparation of proposals for issuing authorisations to credit intermediaries.

The consumer protection legal framework consists of laws, decisions, guidelines, circular letters, opinions and responses to inquiries on the implementation of regulations.

In order to ensure a balanced implementation of applicable laws and other forms of regulations from all institutions within the CNB's competence, the CNB continuously gives opinions and responds to queries regarding the individual provisions of all regulations the implementation of which it supervises. An increase in the introduction of innovative products and their sales channels, as well as a growth of general-purpose cash loans, was recorded in 2019. As a result, the opinions given in 2019 mostly referred to regulations concerning the introduction of new products of credit institutions, the manner of calculation and the provision of information to consumers on the effective



The CNB participated in marking the World Consumer Rights Day.

interest rate, and partially also to the conditions and the manner of training staff offering and/or selling housing consumer loans, etc.

The CNB also defined the framework for credit institutions' approach to consumers in the cases of replacement of the ZIBOR reference rate in the existing consumer contracts. At the end of 2019, a decision was adopted to stop using ZIBOR as the reference interest rate. In order to avoid putting consumers in a less favourable position, in communication with the Croatian Banking Association (CBA) and credit institutions, the CNB requested that all consumers with contracts in which ZIBOR is the reference interest rate be allowed to refinance their loans or terminate their deposits early, free of charge. It was also requested to leave consumers reasonable time to take a decision and to specify at least two offers in the notifications sent to them with all the necessary information.

Supervision of the application of regulations

By conducting its consumer protection policy, the CNB also exercises supervision and determines whether institutions within its competence comply with applicable legislative and other provisions on consumer protection. Supervision is mostly exercised by collecting and analysing reports and

information. The CNB also exercises direct supervision of institutions within its competence. Complaints that consumers lodge concerning the procedure of an institution, the content published by institutions on their websites, marketing campaigns, etc. are also taken into account when exercising supervision. The CNB issued 15 reports and two decisions in 2019 as a result of identified illegalities in the area of consumer protection and imposed measures for the elimination of illegalities. Both of the mentioned decisions are the result of supervision exercised based on received consumer complaints, during which illegalities have been identified in the procedure of a credit institution because of its employment of unfair business practice in contractual relationships with consumers. This specific supervision identified illegalities in procedures concerning 3,589 consumers, so that the CNB imposed measures by means of a decision for the elimination of the identified illegalities. With the aim of fully informing the directly interested citizens and the general public, the CNB published the decisions on its website and will continue this practice in the future.

The supervision of the application of regulations is exercised by collecting and analysing reports and by exercising direct supervision.

In addition, in 2019, the CNB also exercised direct supervision of the part of operation of a credit institution concerning compliance risk management and the risk of the establishment and management of a business relationship in the area of credit and deposit operations with consumers. In 2019, the CNB continued the activities initiated in 2018 to assess the levels of credit institutions' compliance with the requirements of the **Guidelines on product oversight and governance arrangements for retail banking products**. The CNB held bilateral meetings with all credit institutions in which it had identified a need to improve the current manner of management, governance and oversight of products offered by the institutions.

In addition, using a questionnaire, the CNB collected and analysed information obtained from credit institutions and credit intermediaries concerning their policies and practices of receipts related to the provision of banking products and/or services to consumers. Depending on the results of the analyses, the CNB assessed the level of risk of damage to consumers that may arise as the consequence of inadequate policies and practices of remuneration for staff in the individual credit institutions and credit intermediaries. The CNB shared the

findings on identified risks with credit institutions bilaterally. In 2020, the CNB will continue to undertake activities directed at the elimination of identified deficiencies in the policies and practices of these institutions.

A large number of the CNB's supervisory activities in 2019 also referred to the operation of credit intermediaries that provide intermediation services in consumer housing loans.

The results of these activities were 30 decisions, of which:

- 13 decisions were for the provision of credit intermediation services; and
- 17 decisions concerned the revocation of the decision granting authorisation for the provision of credit intermediation services.

In addition, certain deficiencies were identified in updates to the programme for staff training, conducting the training and assessment of staff knowledge, checking data on the requirements staff must satisfy, etc. The CNB warned credit institutions and related credit intermediaries of the need to comply with all the relevant requirements from the Act on Consumer Housing Loans and the Decision on the necessary knowledge and competence of staff of credit institutions and credit intermediaries and on the requirements and the procedure for authorisation to provide credit intermediation services.

Consumer complaints

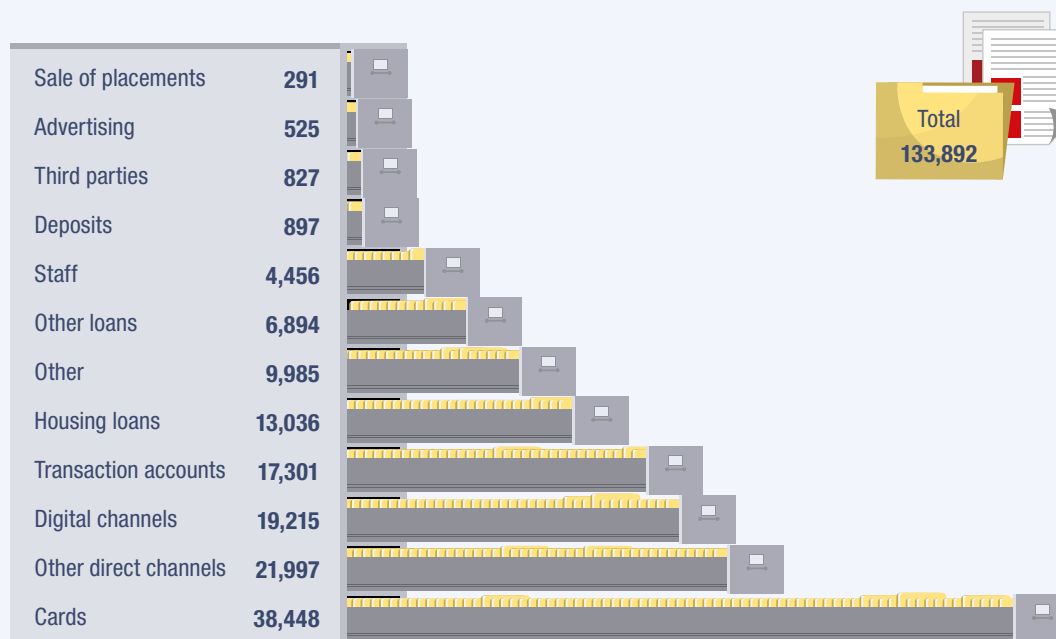
The Credit Institutions Act prescribes the possibility of filing a notification of complaint to the central bank, in cases in which a consumer is not satisfied with the response received from a credit institution or in which the credit institution failed to reply. Depending on the subject of the complaint itself, the CNB responded to the consumers directly, or requested credit institutions to respond to their clients' forwarded complaints, with the obligation of sending copies of such responses to the CNB. As a rule, a credit institution's response was required in the case of complaints that were directly related to bilateral contractual relationships between a consumer and the credit institution.

Consumers file complaints with the CNB or the credit institution.

In 2019, the CNB received a total of 796 complaints, which means that their number increased by 15.3% from 2018. The highest proportion of complaints,

Structure of complaints against credit institutions in 2019

by type of complaint



or almost 37%, referred to the provisions of contracts governing loans or deposits, followed by complaints related to banking fees, payment accounts and cards, seizure of assets and freezing of accounts. This structure of the subjects of complaints is very similar to that of 2018. However, in 2019, when compared to 2018, the number of complaints related to the sale of claims dropped considerably (a decline from 60 complaints in 2018 to 16 in 2019), which was primarily the result of the reduced activity of credit institutions in this segment. On the other hand, the largest growth was noticed in complaints related to incomplete or untimely information that credit institutions provide to consumers (an increase from five complaints in 2018 to 30 complaints in 2019).

Moreover, in 2019, the CNB continued with the semi-annual collection of data on the types and the number of complaints filed with credit institutions by consumers.

A total of 133,892 client complaints were recorded as having been received by credit institutions in 2019, which is 31.6% more than in 2018. The largest number of complaints (29%) referred to cards, as in the two previous years.

The largest number of consumer complaints filed with banks concerned problems with cards, and the smallest number concerned the sale of placements.

From 1 July 2019, credit intermediaries and credit unions are also obliged to file a complaints report. For this period, credit intermediaries only reported on one received complaint, while credit unions received 12 complaints.

Financial education

The CNB considers participation in economic and financial education to be very important. For this reason, the CNB continuously carries out activities with the aim of improving consumers' financial knowledge and their attitude towards personal finance, while special attention is paid to the education of young people and children before they become participants in the financial market.

Most lectures were given during the European and Global Money Week (from 25 to 31 March 2019). The CNB has already traditionally joined the global movement to mark the money week with the central event – a debate for high school students organised in cooperation with the Croatian Debate Society. The debate took place on 29 March 2019 on the theme “Financial Literacy Test as a Prerequisite for Borrowing: yes or no?”. About 200 students from all parts of Croatia participated in the debate and concluded that financial education is important, although most of them believe that there is no need to test it. The debate was live streamed on the CNB's Facebook and YouTube pages and followed by over 1,500 viewers.

In addition to the above, the CNB regularly publishes on its website information aimed at raising the level of information and education of consumers. For this purpose, in 2019, among other things, the CNB also published a leaflet “How to protect yourself when selecting internet or mobile banking services”. The leaflet is the result of the EBA's activities and it was accepted and published by other national competent authorities that participate in its work.

CNB representatives also took part in a panel discussion at which they presented their activities in the area of financial literacy. The panel discussion was organised by the Ministry of Finance to mark the Global and European Money



Participants in the debate presented before their peers the pros and cons of a financial literacy test as a precondition for borrowing.

Week. The CNB also participated in the marking of the World Consumer Rights Day on 15 March 2019, organised by the Ministry of Economy, Entrepreneurship and Crafts. As part of the event, CNB representatives held a workshop entitled “What do we need to know about online payment?”. Since 30 April 2019, the public has also been able to obtain information on consumer rights from the “Central Consumer Portal – All for consumers”, while the “Manual on consumer rights” of the Ministry of Economy, Entrepreneurship and Crafts was updated and amended. The CNB also participated in its preparation and updating.

In cooperation with the Croatian Catholic Radio, a cycle of brief educational radio programmes entitled “The ABCs of Finance” was launched in October 2019. The weekly radio broadcasts host CNB representatives who speak about the relevant topics in the field of financial literacy.

The CNB also participates in the technical assistance project for financial education organised by the OECD/INFE and the Netherlands Ministry of Finance. In 2019, the OECD conducted a new cycle of “Financial Literacy Measurements” within the project. The CNB also joined the work of the Regional Working Group for Youth Financial Education and Financial Inclusion, which includes the participation of eight central banks.

Other activities

For the purpose of providing better information to consumers, the “Information list with the offer of loans to consumers” is regularly updated on the CNB website, also accessible via a mobile application. The list is a user-friendly table with information on the current offer of kuna loans, loans indexed to a foreign currency or in euros.

Inter-institutional cooperation

CNB representatives participate in the work of EU institutions, including the European Banking Authority (EBA), already in the phase of preparing regulations. In 2019, such activities included, in particular, discussion on topics related to consumer protection in the area of FinTech and the convergence of supervisory practices. The strongest emphasis was placed on the supervision of the management of products intended for consumers and the remuneration policy for sales staff in credit institutions. In addition, tools such as mystery shopping were also discussed.

In the area of consumer protection, the CNB participates in the National Council for Consumer Protection and the working group for financial education. The CNB also cooperates with the Ombudswoman and the Croatian Banking Association.

CNB representatives participate in the work of the regional group for financial education and financial inclusion, and at the national level, they participate in the work of the **National Council for Consumer Protection**, established at the Ministry of Economy, Entrepreneurship and Crafts, in the work of the operational **working group responsible for monitoring the implementation of measures and activities in the area of financial education established at the Ministry of Finance**.

The cooperation of the Croatian central bank with the Croatian Banking Association and the Ombudswoman relates to issues important for the position of consumers in business relationships with credit institutions and other institutions within the CNB's competence.

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Payment operations, currency department operations and FinTech

Payment operations, currency department operations and FinTech

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12 Payment operations

One of the basic tasks of the Croatian National Bank is to ensure smooth operation of the payment system, which includes payment services providers, payment system infrastructure, payment services users and regulations governing the payment system. The Croatian National Bank plays a central role in ensuring the use of regulations, particularly as regards protection of the rights of payment system users, performs the function of a payment system operator and supervisor of systemically important payment systems and facilitates safe and efficient payment flows. The payment system and the retail payment market are influenced by innovation-led changes and the process of digitalisation. The role of the Croatian National Bank is twofold: as a catalyst, it has to encourage the integration of innovation while promoting payment safety at the same time.

Development of payment operations: from the adoption of the new legal framework to digitalisation and technological innovations in payments

The second Payment Services Directive¹ (PSD2) was transposed into Croatian legislation by the **Payment System Act** and **Electronic Money Act** in July 2018.

A part of the provisions of the PSD2 and the corresponding Regulation that defines regulatory technical standards for safe communication between

1 **Directive (EU) 2015/2366** of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC (Payment Services Directive 2, PSD2).

payment service providers and secure customer authentication standards have been applied in the member states since 14 September 2019.

One of the characteristics of the PSD2 is the “opening up of banks”, i.e. enabling new payment services to providers – the payment initiation service (PIS) and the account information service (AIS). In order to provide the new services in a safe environment, payment service providers are required to set up **common and secure standards of communication**.

In 2019, fifteen banks in the Republic of Croatia offered access to new payment service providers by means of a specific, dedicated interface – the application programming interface (API), according to a single national specification, while five banks offered access by modifying the interface used by bank clients for access to their payment accounts (internet and mobile banking).

With regard to strong customer authentication² (a procedure that allows payment service providers to verify a customer’s identity), payment service providers have the obligation to apply even stronger authentication procedures where a customer initiates an electronic payment transaction or where a customer accesses their account remotely (by using internet or mobile banking, card-based payments in e-commerce, etc.).

New regulations in payment operations and new service providers

In order to reduce charges on cross-border payments in euro in the whole of the EU, **Regulation (EU) 2019/518**³ was adopted, based on which all banks in the Republic of Croatia, from 15 December 2019, levy on their customers the same charges for national payments and cross-border payments in euro.

The equality of charges refers to the charges for payment transactions in euro and in kuna. Consumers can access information on current fees charged by banks and compare them via the CNB website, on which **charges are also compared** for the most frequently requested services via the mHNB application, free of charge.

² For more on this topic in **CNB press release**.

³ See **Communication on the beginning of implementation of the new EU regulations on the equality of charges for payments in euro and kuna**.

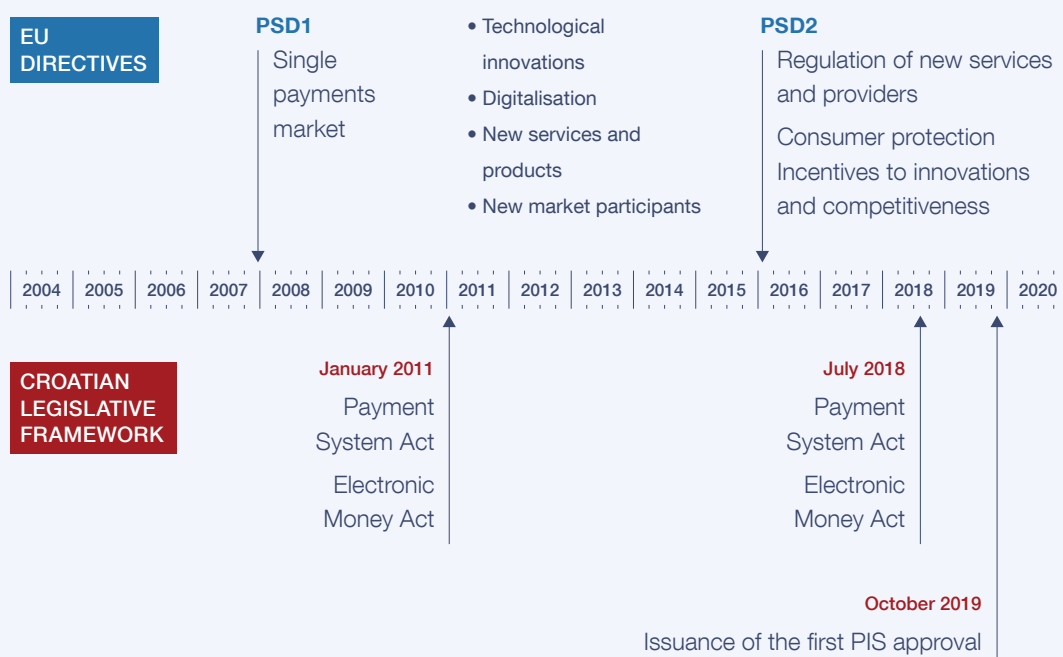
Cross-border payments in euro now cost the same as national payments in kuna.

In 2019, pursuant to the Payment System Act, the CNB adopted a **decision** governing transaction accounts, as well as a new **decision** governing the obligation of payment service providers to report any identified payment fraud. The CNB adopted new decisions prescribing the manner of calculation of the amount of own funds of **payment institutions** and **electronic money institutions**.

The list of payment service providers and electronic money issuers, the type of services they provide and the EU member states in which they operate is publicly available in the **register of payment service providers and electronic money issuers** on the CNB's website. The register was set up based on the new CNB's **decision** prescribing the manner of keeping the register and its content.

In 2019, the CNB issued authorisation to provide payment services to a new payment institution, which was at the same time the first payment institution

Selected EU payment system regulations and transposition into the Croatian legislative framework



in the Republic of Croatia to have obtained authorisation to provide a new payment service, the payment initiation service (PIS).

Payment infrastructure – payment systems

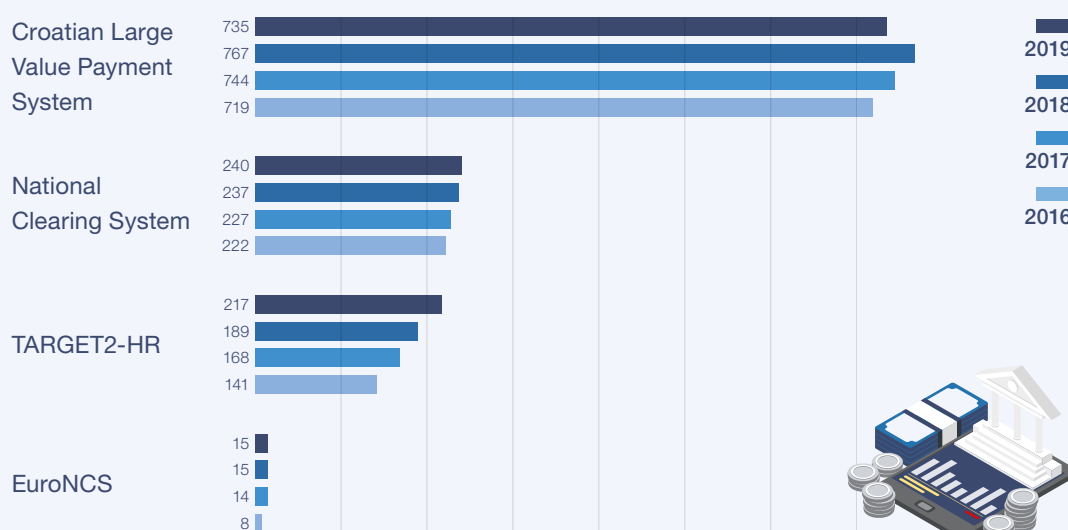
The payment infrastructure allows financial market participants to settle their financial liabilities between participants by providing the services of clearing and settlement of payment transactions in a safe and standardised manner.

Payment systems, as payment infrastructure, are the key component of any financial system since they provide the services necessary for a smooth and efficient functioning of payment operations. Payment systems function according to regulations, operational procedures, business processes and technical solutions that enable the transfer of cash among system participants. Payment infrastructure in the Republic of Croatia comprises four payment systems: the Croatian Large Value Payment System (CLVPS), the National Clearing System (NCS), TARGET2-HR and EuroNCS.

The Croatian Large Value Payment System (CLVPS) is a payment system for the settlement of large value payment transactions in kuna among its

Payment systems in the Republic of Croatia – overview of turnover

as % of GDP



Note: EuroNCS became operational in May 2016.

SOURCE: CNB.

participants (banks, CNB and Central Depository and Clearing Company (CDCC)) in which payment transactions are settled in real time on a gross basis. The CLVPS is administered by the CNB. Payment transactions are settled in the CLVPS for the purpose of implementing the monetary policy measures of the CNB, the supply of cash to banks, the final settlement of other payment systems, the execution of payment transactions linked to participation in the capital market and other payment transactions of system participants. In 2019, the rules of operation of the CLVPS were modified to ensure support to the future system for the settlement of instant payment transactions under the HRK SCTInst payment scheme.

The National Clearing System (NCS) is a payment system for the clearing of a large number of credit transfer and direct debit payment transactions in kuna that are of relatively low value, based on a multilateral net principle, processed in accordance with the national scheme that adheres to SEPA standards. The Financial Agency (FINA) is the operating manager of the NCS, and the CNB has a special role of a bank – settlement agent in the NCS, since the settlement of clearings from the NCS is carried out in the CLVPS.

TARGET2-HR is a component of the TARGET2⁴ payment system that serves for the settlement of payment transactions of large amounts in euro in real time on a gross basis, consisting of national components operated by the central banks of the EU member states with a single technical platform that offers the same level of service to all participants. The CNB is the TARGET2-HR operator. In 2019, all participants in the TARGET2-HR system, including the CNB, began preparations for the launch of the T2-T2S consolidated platform⁵. This platform will replace the existing TARGET2 payment system with the aim of offering enhanced services of payment transaction settlement and liquidity management to its participants. The new platform will be launched in November 2021, so that participants in the current TARGET2-HR system will continue their activities, i.e. preparing for the launch of the new platform.

TIPS⁶ is a service, available from 30 November 2018 within TARGET2-HR, enabling its participants to settle instant transactions, i.e. payment transactions

4 Trans-European Automated Real-time Gross settlement Express Transfer System.

5 A project to consolidate TARGET2 and TARGET2-Securities services, with the aim of harmonising and enhancing technical and functional aspects of the services. For more details on the project, see [the official ECB website](#).

6 TARGET Instant Payment Settlement.

in euro settled within seconds, at any time of the day, throughout the year. So far, no Croatian credit institutions have expressed an interest in participating in the TIPS service. Despite this, the CNB continuously ensures all infrastructure preconditions for a potential future inclusion of participants in TIPS.

The EuroNCS is a payment system that processes SEPA credit transfer⁷ payment transactions of relatively low value in euro. The Financial Agency is the operating manager of the EuroNCS. The CNB has a special role of the bank – settlement agent in the EuroNCS, since the settlement of clearings from the EuroNCS is carried out in TARGET2-HR.

The project of the implementation of the SEPA instant kuna credit transfer scheme (HRK SCTInst payment scheme) continued in the Republic of Croatia in 2019. This payment scheme will enable service users to initiate and receive payments constantly in real time (24/7/365). The payment transaction execution time is ten seconds and the amount of the individual payment transaction is limited to HRK 100,000. In 2019, the testing of the operation of the system began as well as initial tests to ensure the liquidity of the system, and the payment scheme will be fully operational in 2020.

Payment statistics reports

In accordance with the [Decision on the obligation to submit data on the payment system and electronic money](#), the CNB collects, processes and publishes statistical data in the area of payment operations and electronic money from payment service providers.

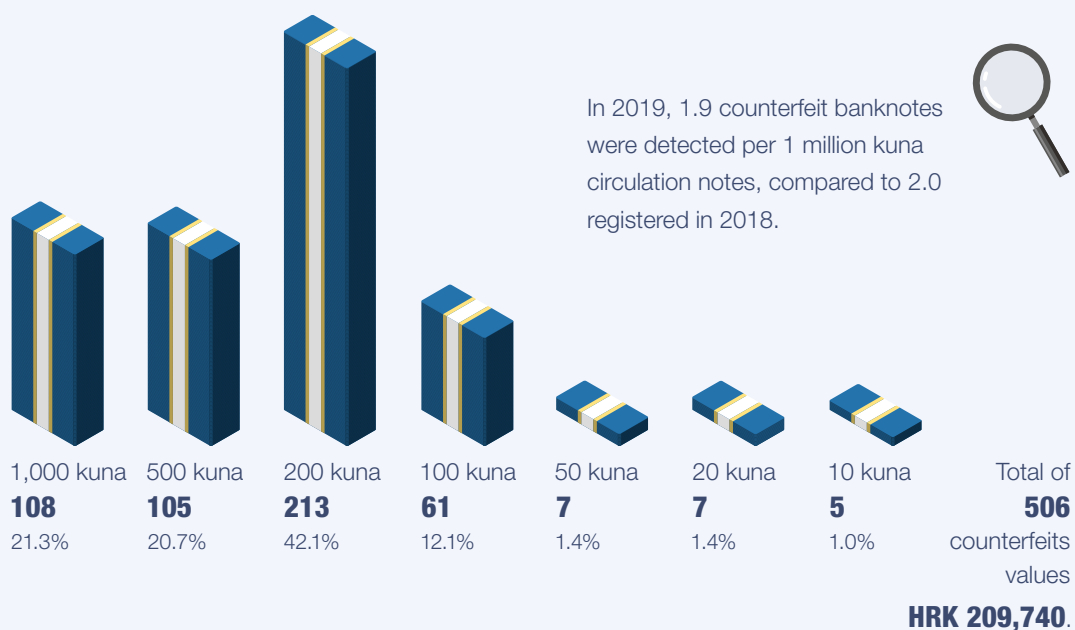
In 2019, reporting entities, such as banks or electronic money institutions, operated through 964 business units or branches, 111,172 POS (EFTPOS) terminals and 5,446 ATMs.

At the end of 2019, individuals and business entities held a total of 7,025,684 transaction accounts with banks⁸. Of the total number of accounts, 94.3% were held by individuals (consumers), while the remaining 5.7% were held by business entities. With regard to the availability of use of payment instruments (services) by held transaction accounts, individuals contracted internet

⁷ SEPA credit transfer is a payment initiated by the payer, which is made in a Single Euro Payments Area. For more information on SEPA, see [the official website of the Croatian National Bank](#).

⁸ Not including blocked transaction accounts.

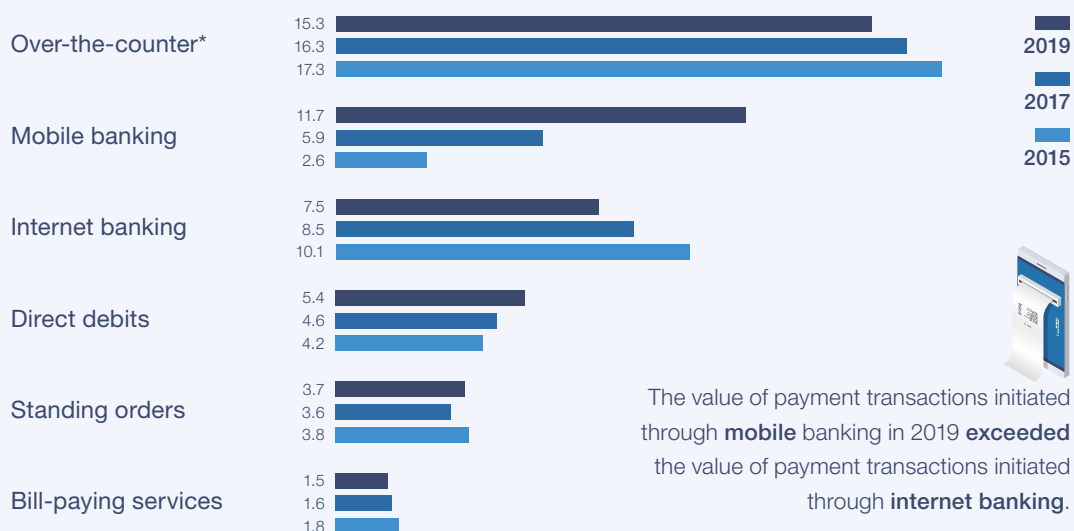
Registered counterfeit kuna banknotes in 2019 by denomination



SOURCE: CNB.

Value of payment transactions of individuals (consumers)

shown by channels as % of GDP



* Paper-based payment orders initiated over-the-counter at credit institutions or other persons that, on the basis of a contract, are acting on behalf and for the account of credit institutions (e.g. FINA, HP etc.)

SOURCE: CNB.

banking for 2,147,608 accounts, while mobile banking was contracted for 2,256,774 accounts. Business entities had contracted internet banking for 259,515 accounts, and mobile banking for 126,808 accounts.

In 2019, individuals most frequently initiated payment transactions over-the-counter, i.e. 30% in the number and 34% in the value of total payment transactions initiated. Mobile banking is the second most represented channel, accounting for 26% in the number and 26% in the value of total transactions, while internet banking is the third channel accounting for 13% in the number and 17% in the value of total initiated payment transactions. Online channels, in particular mobile banking, are becoming increasingly represented.

In 2019, the number of transactions initiated through mobile banking increased by 40% and their value increased by 48%, while the number of transactions initiated through internet banking decreased by 10% and their value decreased by 2% from 2018.

With regard to the manner of initiation of payment transactions, business entities prefer electronic to paper-based methods of order initiation. Of all initiated payment transactions in 2019, 93% in the number and a high 95% in the value of transactions were initiated electronically.

Table 11.1 Channels and methods of initiation of payment transactions of individuals for 2019

Channel/method	Number of transactions	Share	Value of transactions (in HRK billion)	Value of transactions (as % of GDP)	Share
Over-the-counter*	69,770,995	30	61.031	15	34
Mobile banking	61,268,724	26	46.746	12	26
Internet banking	29,721,599	13	29.997	7	17
Direct debits	27,365,135	12	21.584	5	12
Standing orders	23,274,350	10	14.890	4	8
Bill-paying services	19,964,061	9	5.806	1	3
Total	231,364,864	100	180.057	45	100

* Paper-based payment orders initiated over-the-counter at credit institutions or other persons that, on the basis of a contract, are acting on behalf of and for the account of credit institutions (e.g. FINA, Hrvatska pošta, etc.).

Note: GDP in current prices for 2019 stood at HRK 400bn.

SOURCES: CBS AND CNB.

Internet banking was the most represented channel for the initiation of transactions, while mobile banking was still less used, despite a growing trend. In 2019, 35% more in the number and 56% more in the value of transactions were initiated through the mobile banking channel than in 2018.

On 31 December 2019, there were in all 9,224,852⁹ registered payment cards in circulation in the Republic of Croatia, of which 94.97% payment cards were issued to individuals.

The reason for the smaller use of internet banking is in the growing popularity and acceptance of mobile banking.

Business entities accounted for 5.03% of the payment cards issued. Of the total number of cards, on 31 December 2019, 3,610,694 (39.14%) had not been used at all in the past year. With respect to payment card types, debit cards accounted for the largest share in the total number of cards, 74.75%. With regard to the technological development of cards and their functionalities, contactless technologies have been introduced intensively in the recent period. In the last few years, the growing trend of the issuance of contactless payment cards continued in the Republic of Croatia, so that their number in 2019 increased by 55.17% from 2018. On 31 December 2019, 3,554,151 contactless payment cards had been issued in the market of the Republic of Croatia, accounting for 38.53% of the total number of issued payment cards. Although contact cards are replaced by those containing contactless technology upon the expiry of card validity, the new technology is also being introduced because of the increasing demands of users for simpler and faster payment methods.

A more detailed overview and an analysis of data compiled within the payment statistics are published in the publications [Payment Cards and Card Transactions](#) and [Payment Transactions and Accounts](#) as well as in the [Report on cashless payment transactions In the Republic of Croatia](#).

⁹ Includes used, unused and blocked payment cards in circulation.

On 31 December 2019, due to the replacement of payment cards for the same user, in some reporting entities both payment cards were active (the old one that was being terminated and the new one replacing it).

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13 Currency department operations

One of the tasks of the CNB is to ensure a smooth supply and an adequate amount of cash in the Republic of Croatia. In this regard, the CNB is responsible for planning the manufacturing, delivery, storage, processing and organisation of the distribution of cash, its protection against counterfeiting and the destruction of cash unfit for circulation and manages the logistic and strategic cash reserves. In addition, the CNB defines the standards applied in the processing of cash at other institutions and monitors the implementation of regulations governing cash operations, the supply, processing and redistribution of cash, with the aim of ensuring the quality of cash in circulation in accordance with public needs.

Cash issuance and supply

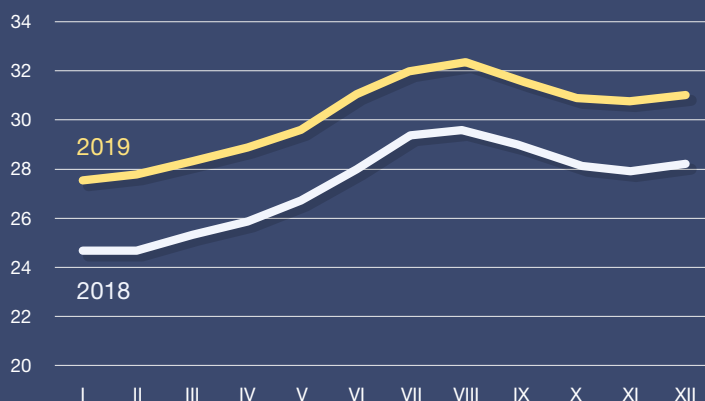
The issuance of banknotes and coins and the supply of banknotes and coins in circulation in the Republic of Croatia is one of the CNB's basic tasks. The supply of banks with cash implies the conduct of activities aimed at ensuring a sufficient amount of cash for banks and their clients (consumers and business entities), and it is based on the Decision on the supply of banks with cash. It is organised through eight cash supply centres, which cover all parts of the Republic of Croatia.

Currency outside banks

The trend of the growth of currency outside banks has continued since 2011. As at 31 December 2019, currency in circulation amounted to HRK 31bn, which is an increase of 10.09% from the end of 2018.

Cash in circulation

Cash in circulation, end of period



billion HRK
end of period

31.0 →
28.1 → **+10.3%**

As at 31 Dec. 2019,
there were
265.68 million
banknotes in circulation
outside the CNB and
cash centres

Most represented banknotes in 2019

200 kuna
33.8%



10 kuna
19.8%



in the total value of **HRK 18.51 billion**
or **49.9%** of the total value of banknotes in 2019

The denomination
of **200 kuna** is most
often used by banks
for payments via ATMs.
As a result, this
banknote denomination
accounts for a large
share in the structure of
banknotes outside the
CNB and cash centres.

Most represented coins in 2019

By quantity: **10 lipa**
587.6 million pieces

23.1%
of the total quantity
of coins in 2019



By value: **5 kuna**
HRK 625.3 million

38.1%
of the value
of coins in 2019



SOURCE: CNB.



In 2019, the number of banknotes outside the CNB and cash centres increased by 7.7% from the end of 2018, their total value rising by 10.7%.

Due to a long-term growing trend, currency in circulation doubled from the beginning of 2011 until the end of 2019. Circulation means the volume of cash outside the CNB vault and cash centres (CCs) minus the volume of cash in banks' vaults.

If the balance at banks' cash desks and in their vaults is added to the circulation, on 31 December 2019, there were 265.68 million banknotes outside the CNB vault and CCs, worth HRK 37.10bn. From the end of 2018, the number of banknotes outside the CNB vault and CCs rose by 7.73% in 2019, while their total value increased by 10.68%.

Of banknotes outside the CNB vault and CCs, 200 kuna banknotes, with a share of 33.8%, and 10 kuna banknotes, with a share of 19.8%, were the most numerous in 2019 and accounted for HRK 18.51bn, or 49.9% of the total value of banknotes.

The large share of 200 kuna banknotes in total banknotes outside the CNB vault and CCs is due to their widespread use in ATM withdrawals.

Of coins in circulation, the most numerous were 10 lipa coins (587.6 million pieces, or 23.1% of the total number of coins outside the CNB vault and CCs). In terms of value, 5 kuna coins accounted for the largest share (HRK 625.3m, or 38.10% of the total value of coins outside the CNB vault and CCs).

Issues of commemorative coins and numismatic coin sets

In 2019, the CNB issued the 25 kuna commemorative coin in circulation to mark the 25th anniversary of the introduction of the kuna as the monetary unit of the Republic of Croatia (30 May 1994 – 30 May 2019) (Figure 12.1).

In addition to the 25 kuna commemorative coin in circulation to mark the 25th anniversary of the introduction of the kuna as the monetary unit of the Republic of Croatia, in the same year the CNB issued the 25 kuna commemorative coin in circulation to mark the 350th anniversary of the founding of the University of Zagreb (Figure 12.2).

Figure 12.1 Obverse and reverse of the 25 kuna commemorative circulation coin

marking the 25th anniversary of the introduction of the kuna as the monetary unit of the Republic of Croatia, 30 May 1994 – 30 May 2019



Figure 12.2 Obverse and reverse of the 25 kuna commemorative circulation coin

marking the 350th anniversary of the founding of the University of Zagreb



The CNB also issued a numismatic set of the Croatian kuna and lipa circulation coins, with the year of issue 2019, consisting of all denominations.

Withdrawal of banknotes and coins

The CNB withdraws banknotes and coins unfit for circulation and replaces them. A total of 34.57 million banknotes were processed in 2019, of which 85.3% or 29.5 million banknotes were destroyed as the banknotes failed to meet the quality standards set for circulation banknotes. In addition, 1.88 million items or 5.4% of the processed banknotes were sorted as damaged, to be destroyed subsequently.

Counterfeit banknotes and coins and their prevention

In 2019, in all, 506 counterfeit kuna banknotes, worth a total of HRK 209,740.00 were registered, of which 96.1% were counterfeits with a poor quality of reproduction. The number of registered counterfeit kuna banknotes increased by 1.4% from 2018. Taking it into account that the number

of banknotes outside the CNB vault and CCs averaged 265,170,824 items, 1.9 counterfeits were detected per 1 million kuna circulation notes in 2019. In 2018, two counterfeit banknotes were detected per 1 million kuna circulation banknotes.

For the sake of comparison, in 2018 two counterfeit kuna coins were registered, while in 2019, three counterfeit 5 kuna coins were registered.

With regard to foreign currencies, in all, 4,389 counterfeits were registered, of which the largest number, 4,280, was of counterfeit euro banknotes, followed by counterfeit US dollar banknotes (59), counterfeit pound sterling banknotes (27), counterfeit Swiss franc banknotes (15), and the remaining eight banknotes were counterfeits of the Bosnian convertible mark, Japanese yen, Swedish krona and Australian dollar. The number of registered counterfeit euro banknotes increased by 2,792 items or 187.6% from 2018. Individual cases of fraud in which a natural person received suspect banknotes from an unknown perpetrator accounted for 87.9% or 3,762 counterfeit euro banknotes with a poor quality of reproduction.

In 2019, 128 counterfeit euro coins were registered (there were 110 2-euro and 18 1-euro coins). The number of registered counterfeit euro coins decreased by 38 or 22.9% from 2018.

The CNB continued implementing the National Training Programme on Banknote and Coin Authentication for Bank and Financial Institution Employees. In 2019, a total of 19 specialist courses for employees of banks,

Educational video on security features of kuna banknotes.



institutions specialised in cash operations and the trade sector were held. In all, 291 employees of the above categories received training.

In order to further familiarise the public with the banknote authenticity checking, in 2019, the CNB released a series of educational videos on the security features of kuna banknotes. For each kuna banknote denomination, the CNB has made a video that explains in detail the authenticity checking procedure. The educational videos can be viewed on the CNB website or on the CNB YouTubechannel.

14 FinTech and Innovation Hub

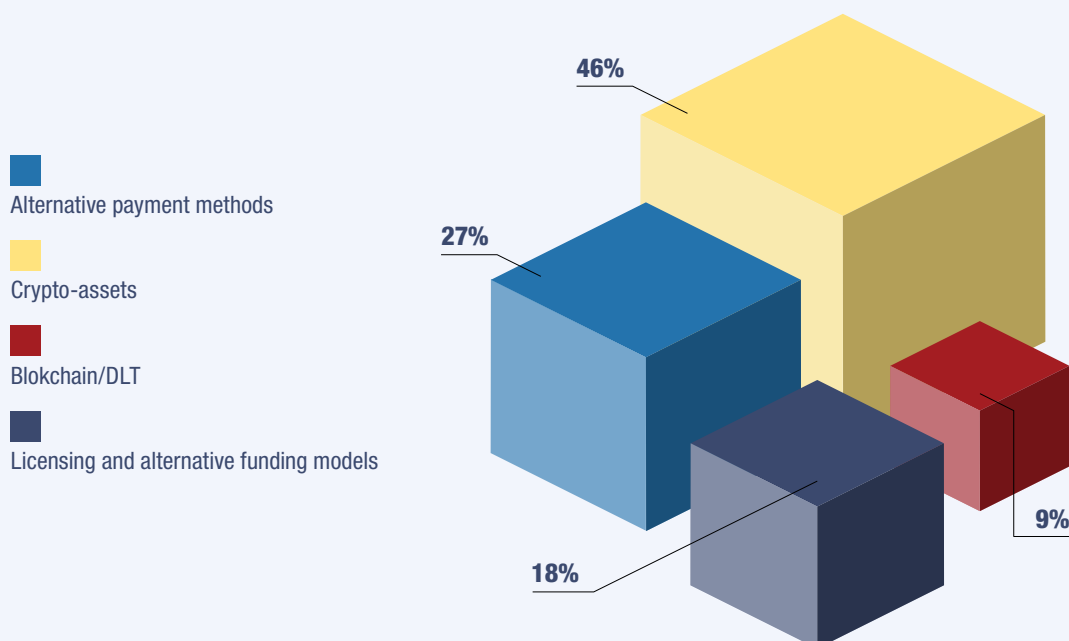
In the broadest sense of the word, FinTech means innovative technology-based financial products and services. The CNB has been working actively on FinTech since 2017, i.e. since the establishment of the CNB intersectoral working group for FinTech that deals with advanced technology-related banking and payment services as well as with a wider range of topics examining the impact of technological trends on the objective and tasks of the central bank. The Innovation Hub is a communication and information platform established in 2019 with the aim of providing non-binding and informal support to business entities developing an innovative FinTech product or service.

FinTech

In the broadest sense of the word, FinTech means innovative technology-based financial products and services. FinTech changes existing business models, creates new business opportunities, but also introduces new risks into the financial system. Regulators are faced with the fundamental challenge of finding the balance between encouraging innovations and entrepreneurship on the one side and the timely recognition and potential regulation of risks on the other side.

The CNB has been working actively on FinTech since 2017, i.e. since the establishment of the CNB FinTech Working Group. The FinTech Working Group is an intersectoral multidisciplinary group of CNB experts who monitor the impact of FinTech on the areas within the competence of CNB, in particular the provision of individual banking and payment services as well as matters affected by technologies and trends closely related to the tasks of the central bank. Over the past two years, there has been a lot of discussion about the

Structure of FinTech queries in 2019



SOURCE: CNB.

possibility of issuing a Central Bank Digital Currency (CBDC), due to the issuance of crypto currencies and stablecoins. The FinTech Working Group also responds to public queries in the area of FinTech. In 2019, most of the questions received were from the area of crypto-assets and alternative payment methods.

Topical issues from the area of FinTech in 2019 included crypto-assets, CBDC issuance, payments with crypto currencies and others.

CNB Innovation Hub

One of the activities of the CNB's FinTech Working Group in 2019 was the establishment of the FinTech Innovation Hub, which was launched late in the year. The Innovation Hub is a communication and information platform set up with the aim of providing non-binding and informal support to business entities developing an innovative FinTech product or service. It is also a well-known and established practice of many central banks and financial regulators in communication with the economy.

INOVACIJSKI HUB

POČETNA | O NAMA | KONTAKT | FAQ | INFO | EN

Tvrtka ste s inovacijama na području bankovnih ili platnih usluga i imate pitanja u vezi s regulatornim zahtjevima...

SAZNAJTE VIŠE O INOVACIJSKOM HUBU >

OBRATITE NAM SE >

Molimo vas da popunite i pošaljete obrazac za kontakt.

Pitanja i odgovori

Kako kontaktirati Inovacijski hub HNB-a?

S Inovacijskim hubom u kontakt možete stupiti slanjem popunjenog obrasca koji se nalazi u rubrici Obratite nam se.

The Innovation Hub was launched at the end of 2019.

It is intended for all business entities that are developing or have already developed some technological innovation related to the provision of banking or payment services, regardless of whether they have been previously authorised by the CNB to provide a particular type of service. By establishing the Innovation Hub, a step forward was made in the communication between regulators and business entities with regard to the implementation of the regulatory framework in the case of new and innovative financial products and services and the protection of users of financial services. All of this together should have a positive impact on the stability of the financial system and the development of the FinTech industry in Croatia. The CNB Innovation Hub can be accessed via the following website: <https://fintechhub.hnb.hr/>.

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Public relations

Public relations

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15 Public relations

One of the key tasks of the Croatian National Bank is to provide the fullest and most comprehensible information possible to the domestic and international public on its operations, objectives and the measures needed to attain them. Press releases, responses to inquiries, notifications for consumers, publications, conferences, meetings with journalists, economic workshops, lectures for schoolchildren and students, schoolchildren's debates and communication via social media were all employed by the Croatian National Bank in 2019 to enhance the provision of information to the general public. The Croatian National Bank has paid particular attention to strengthening two-way communication.

In 2019, the CNB continued to inform and educate the public about its activity using various communication channels. Press releases on the decisions of the CNB Council were regularly reported on, as were other activities undertaken as part of the fulfilment of the tasks of the central bank. The professional and the general public were also informed of the activity of the CNB through the appearances of the Bank's officials and employees in the media, as well as at various thematic meetings. Meetings were held with journalists who cover the financial and banking sector to inform them about the activities of the central bank related to monetary policy, payment services and other tasks of the central bank, and to enable them to inform the professional and the general public as fully and comprehensibly as possible. Throughout the year, communication was intensified by means of all communication formats, including social media, to open the possibility of questions and answers, i.e. communication with the public, the media and all other members of the public interested in the activity of the CNB.

The CNB publishes all news about its activity, regulations and measures from within its activity on its website www.hnb.hr. The website also features regular publications and the research and working paper series of the Bank's employees.

Innovation Hub – a subsite of the CNB website launched for the purpose of non-binding and informal support to business entities developing an innovative FinTech product or service¹.

Over the course of 2019, the CNB received more than 1,800 written and oral inquiries from members of the public, companies, media representatives, government institutions, embassies and others. These requests for information were related to all CNB areas of operation and efforts were made to reply within the shortest possible period.

The CNB is increasingly communicating through its official profiles on [YouTube](#), [Facebook](#), [Twitter](#), [LinkedIn](#) and [Flickr](#). This further strengthens the communication with all segments of the public and promotes content from the central bank's competence. A series of educational videos on the security features of kuna banknotes was released in the beginning of July. The animations showing the authentication process for each banknote denomination had a large number of views on social media and raised interest among the public. The eight videos were viewed more than 150,000 times.

The animations of the authentication procedure of each banknote denomination recorded more than 150,000 views on social media.

The mHNB mobile application, launched in 2017, was improved with additional information. In addition to the searchable list of information regarding the conditions under which banks grant loans and the comparison of fees charged by banks for their most frequently used services, as of April 2019, it is also possible to view the CNB exchange rate list. The application, which is available for Android and iPhone, had been installed in 9,358 devices by the end of 2019.

¹ For more details, see Chapter 13 "FinTech and Innovation Hub".



Author Tomislav Bilić speaks about the exhibition marking the 25th anniversary of the kuna. The picture also features Darko Horvat, Minister of the Economy, Željko Reiner, Deputy Speaker of the Croatian Parliament, Andrej Plenković, Prime Minister of the Government of the Republic of Croatia, Boris Vujčić, Governor of the Croatian National Bank and Gari Cappelli, Minister of Tourism.

The CNB launched the **Innovation Hub** – a new subsite on the CNB website. The Innovation Hub aims to provide non-binding and informal support to business entities developing an innovative FinTech product or service. The platform is intended for those that are developing or have already developed a technological innovation related to the provision of banking or payment services regardless of whether they have been previously authorised by the CNB to provide a particular type of service.

The first of the eight meetings entitled “Talks about the Euro” was held at the CNB in February. The meetings with the Governor and the closest circle of his associates brought together economists, sociologists, philosophers, political analysts, PR specialists and other public servants – in all, 46 of them. The talks with public figures who represent a broad range of opinions about the adoption of the euro were aimed at contributing to expanding and encouraging public discussion about the important aspects of this topic.

The 25th anniversary of the introduction of the kuna as the monetary unit of the Republic of Croatia was marked on 30 May 2019.

The 25th anniversary of the introduction of the kuna as the monetary unit of the Republic of Croatia was marked in May 2019. The exhibition was inaugurated on the date of the anniversary – 30 May 2019 – at the Archaeological Museum in Zagreb. The exhibits included all issues of banknotes and coins and commemorative circulation coins of the Republic of Croatia during the 25 years of use, including from the period in which the kuna and lipa were created. The CNB released the new 14th issue of the 25 kuna coin in circulation to mark the occasion. The exhibition was inaugurated by the Prime Minister of the Government of the Republic of Croatia Andrej Plenković and the attendees were addressed by the Governor of the Croatian National Bank Boris Vujčić, the Director of the Archaeological Museum in Zagreb Sanjin Mihelić and the author of the exhibition, Tomislav Bilić.

The CNB organised several expert meetings and conferences in 2019. A round table with participants from the CNB and the Croatian Chamber of Economy was held in the beginning of May at the CNB, on the topics of macroeconomic developments, financial stability, banking system, credit activities and interest rates and their expected movements in 2019.

The 25th jubilee international economic conference was held in June in Dubrovnik. The conference is traditionally an encounter and venue for dialogue among distinguished foreign and domestic researchers and the representatives of numerous international financial institutions, including the International Monetary Fund, the World Bank, the European Central Bank, the European Investment Bank, the European Bank for Reconstruction and Development, the Bank for International Settlements, etc. The conference also hosts economists from other institutions and financial sector representatives. Twelve interviews with eminent guests were recorded during the conference, starting the video-archive of this internationally recognised professional conference, available on the CNB's YouTube channel.

In June 2019, the 25th jubilee international economic conference was held in Dubrovnik.

The CNB and the International Monetary Fund held a joint conference that took place in Dubrovnik for the second consecutive year, this time entitled "Demographics, Jobs and Growth: Navigating the Future in Central, Eastern and Southeastern Europe". This topic sparked great public

Education in 2019

A total of

4,289 pupils, students, teachers and other interested parties from Croatia and abroad participated in education organised in 2019

378

primary school pupils

25

teachers

2,576

secondary school pupils

171

teachers

1,056

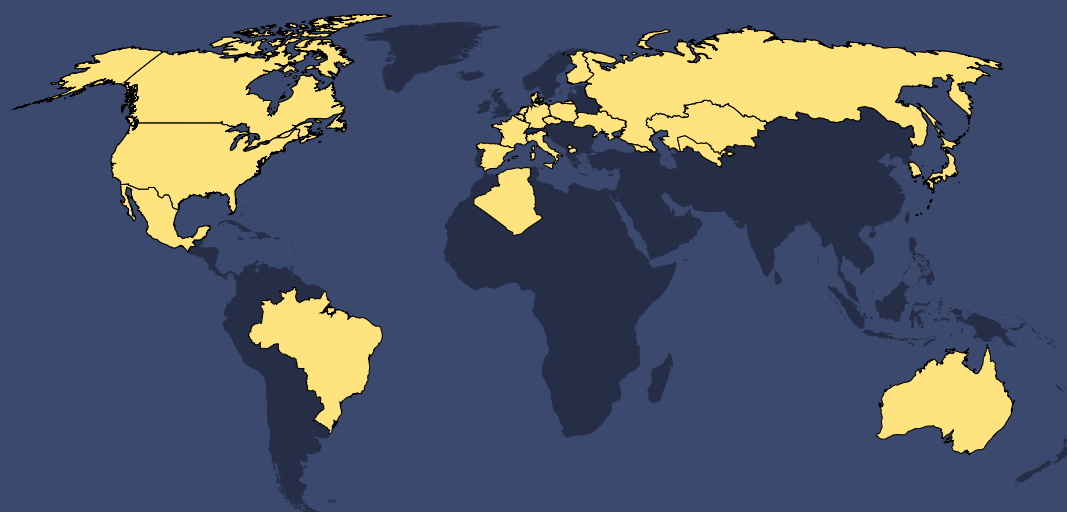
students

33

teachers

50

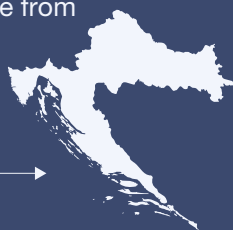
others



Croatian primary and secondary schoolchildren came from

34

cities



Other participants came from

26

countries





At the fourth large student debate, not only the debaters, but also the secondary school students in the audience actively discussed whether a financial literacy test should be a precondition for borrowing.

interest. Presentations and round tables focused on the labour market and demographic challenges, the future of labour and policies needed to sustain economic growth and to attain Western European levels of income. In addition to the CNB Governor and the Deputy Managing Director of the IMF Tao Zhang, the conference was attended by high-ranking Croatian officials, including the Prime Minister and about fifteen CESEE central bank governors and finance ministers, the representatives of the World Bank, the European Commission, the Bank for International Settlements and other institutions, as well as eminent experts from the universities of Oxford, London and Tartu.

In September, the CNB organised a lecture by the Governor of the Portuguese central bank Carlos da Silva Costa on Portugal's twenty years of experience with the euro. The experiences of other euro area member states with the euro as the official currency are important to Croatia, in particular in the light of Croatia's efforts to join the Exchange Rate Mechanism (ERM II) and the subsequent adoption of the euro as the country's official currency.

A workshop on Croatia's joining the Single Resolution Mechanism was held in December, organised in cooperation with the Single Resolution Board and the State Agency for Deposit Insurance and Bank Resolution.

In December, the CNB also hosted the conference "The Economist: The World in 2020", organised by the Diplomacy & Commerce magazine. Conference participants included the Prime Minister of the Republic of Croatia Andrej Plenković, the Governor of the CNB Boris Vujčić and numerous prominent foreign and domestic figures.

Interest in educational programmes organised by the CNB was large, so that in 2019 the CNB was visited by primary and secondary school students, teachers and other interested members of the public.



Four CNB economic workshops were organised in 2019, open to the academic and professional public at which new papers of the Croatian central bank's employees were presented, as well as interesting papers of other authors from domestic and international institutions.

Interest in educational programmes organised by the CNB on topics pertaining to the area of operations of the central bank continued in 2019. During the year, the CNB was visited by 4,289 pupils, students, teachers and other members of the public interested in broadening their knowledge of the activity of the Croatian central bank and current economic and monetary trends in the country. The CNB also continued marking Global Money Week through a large number of lectures on the topic of financial literacy organised for secondary school students in March. A large student debate was the most important event of the week.¹

In cooperation with the CNB, the European Central Bank organised and inaugurated an exhibition of contemporary Croatian art in its seat in Frankfurt. Mario Draghi, President of the European Central Bank and Boris Vujčić, Governor of the Croatian National Bank, opened the exhibition, as a part of the "Contemporary art from the Member States of the European Union" series. From 26 June to 18 October 2019, visitors could see the works of Igor Grubić, Tina Gverović, Kristian Kožul, Lonac, David Maljković, Ana Mušćet, Damir Očko, OKO, Lala Raščić, Goran Trbuljak, Nora Turato and Zlatan Vehabović. The European Central Bank bought a number of Croatian artists' works for its permanent exhibition.

¹ For more details, see the Chapter "Consumer protection policy implementation: Financial education".



Croatian contemporary artists participated in the series of exhibitions "Contemporary art from the Member States of the European Union" held at the European Central Bank, which bought a number of works for its permanent exhibition. Zlatan Vehabović presents his work to visitors. Photo: Bernd Hartung/ECB

In 2019, interested members of the public could also visit the CNB's main building in Trg hrvatskih velikana in Zagreb, take a tour of the Round Hall of the former Zagreb Stock and Commodity Exchange and learn more about its history. In addition to learning more about the architecture and the work of architect Viktor Kovačić, visitors could also take part in education on the security features of kuna banknotes. Over 400 visitors of all generations had the opportunity to learn how to check whether kuna banknotes are originals or counterfeits, while Currency Department employees answered the many questions asked about banknotes and coins.

Organisation, human resources, management and internal organisation

Organisation, human resources, management and internal organisation

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17 The management and the internal organisation
of the Croatian National Bank
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16 Organisation and human resources

The goal of human resource management at the Croatian National Bank is to attract, select, develop and retain experts of various profiles whose professional approach to work, knowledge, skills and competences coupled with a high level of commitment will contribute to the fulfilment of CNB operational objectives.

The Bank takes care of human resources on an ongoing basis. Employees, among other things, have the opportunity to have a good balance between business and private life and equal professional opportunities for women and men. This way the Croatian National Bank can be included in the very top of the rare employers who are oriented equally to the achievement of good business results and to the satisfaction, personal affinities and preferences of employees.

Job definitions and organisational design

In 2019, the Regulation on the CNB organisational structure was amended with the aim of improving the organisational structure and processes. A revision of job descriptions continued in order to create the professional and legal foundations for an adjustment to the new requirements of business functions and their operational needs. These activities are continuously necessary to enable the easier management of changes in the area of job definition and organisational design.

Amendments to the Regulation on the organisational structure of the CNB, which entered into force on 10 April 2019, also brought in changes to the names of certain organisational units, the establishment of new divisions and the abolition of old divisions, and the establishment of two new departments.

Within the Support Services Area, a new Department for business protocol was set up, which enables the systematic monitoring of event organisation (including those that are protocolary in nature), organisation of the business trips of Bank employees as well as the systematic monitoring of representation costs at the Bank level. The General Economic Statistics and Statistical Information Systems Department was set up within the Statistics Area. This Department performs centralised tasks of collecting, controlling and processing statistics for the purposes of the Statistics Area as well as of other data that serve as a basis for adopting measures of monetary and macroprudential policies of the CNB. In addition, it designs statistical indicators in the field of general economic statistics and develops statistical methodology and statistical information systems.

In 2019, three new areas, two offices and two departments were established, with the aim of better organisation and adjustment to new business requirements.

Amendments to the Regulation on the organisational structure of the CNB, which entered into force on 1 June 2019, determine the organisational transformation within several organisational units, and the most important change includes the comprehensive reorganisation and establishment of the new organisational structure of the supervision function. In line with the Strategic Plan of the Croatian National Bank for entry into the exchange rate mechanism, the supervision function was entrusted with the additional task of preparing for the conclusion of the agreement on close cooperation with the European Central Bank under which the Croatian National Bank becomes part of the Single Supervisory Mechanism.

For this purpose, an analysis of the compliance of the existing organisational structure of the supervision function with the SSM was carried out, including an overview of existing resources and products/information resulting from the work of the supervision function, analysis of the existing tasks established by the Regulation on the organisational structure of the CNB and analysis of the tasks to be additionally taken on. As regards supervision over the prevention of money laundering and the financing of terrorism, it is envisaged to strengthen and centralise the monitoring component in question as part of the organisational structure of the supervision function. Also, the need for

harmonisation of the organisational structure on the principle of proportionality with the organisational structure of the ECB was expressed in view of the close cooperation involved in the joining of the SSM. These requirements have resulted in a new organisation of the supervision function in the form of one office and three areas, within which there are eight departments.

Women account for the majority of CNB employees and one half of management positions.

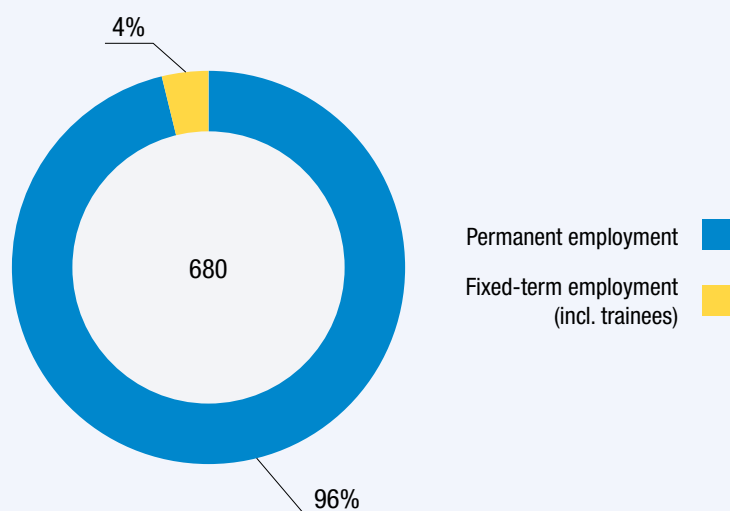
Amendments to the Regulation on the organisational structure of the CNB, which entered into force on 1 September 2019, relate to the introduction of an independent business compliance function with the establishment of a new Compliance Office. This function addresses ethical compliance issues, in line with good practice at the level of the European Central Bank.

Recruitment and employment relationships

As at 31 December 2019, the Croatian National Bank had a staff of 680 employees, or 3% more than at the end of 2018 (661). Of this number, 654 employees were in permanent employment and 26 in fixed-term employment.

In 2019, women continued to account for the majority of total Croatian National Bank employees (441 employees or 65%). The appropriate representation of women is evident both within professional occupations and in senior and middle management.

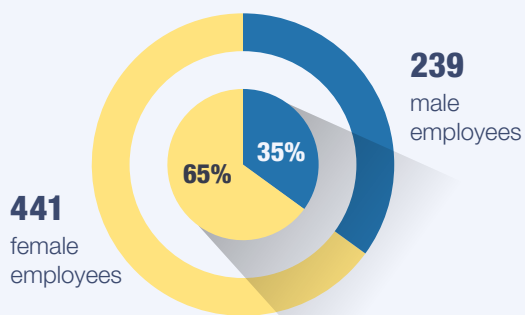
Figure 14.1 Employment status of employees



SOURCE: CNB.

Employee structure

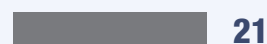
Total number



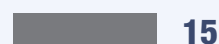
Average age



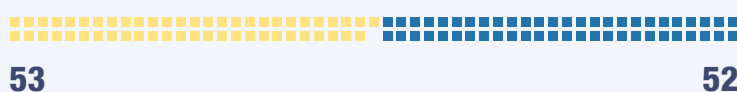
Average total years of employment



Average work experience in the Bank



Managing positions



52



2019	New employees	Employees with the right to return	2019	Departing employees	Suspension of the employment relationship
▲	40	18	▼	20	15

The CNB continued the upward trend in employment dynamics. In 2019, a total of 40 employees were hired and 18 employees exercised their right to return. In twenty-five cases, new employees were hired on a permanent basis in order to fill in vacancies resulting from the termination of employment and the need to cover new operations or an increase in the volume of the existing operations. The remaining 15 employees were in fixed-term employment, mostly in the cases of traineeships and of replacements for employees on leave of absence. New employees are mainly assigned to associate and advisory positions. Most of them come from the economics profession, followed by IT and other professions.

The trend of withdrawing advertisements because of the impossibility of selecting candidates who met the job requirements, and who were at the same time willing to accept the conditions offered by the Bank as an employer, was the most prominent in the field of information technology. However, by adjusting the internal regulation, the manner of recruitment and the terms and conditions that were additionally offered to candidates, we successfully responded to this challenge. In 2019, a total of 20 employees left the Bank, while 15 employees requested the suspension of the employment relationship. To a

large extent, departing CNB employees either terminated their employment by mutual consent or retired.

The average age of CNB employees is 45 years and they have an average of 21 years of employment and an average of 15 years work experience in the Bank.

Employee development

A total of 814 employees participated in various forms of education in 2019 (70% of the total planned). Compared to the number of participants in 2018, this is a significant 49% increase.

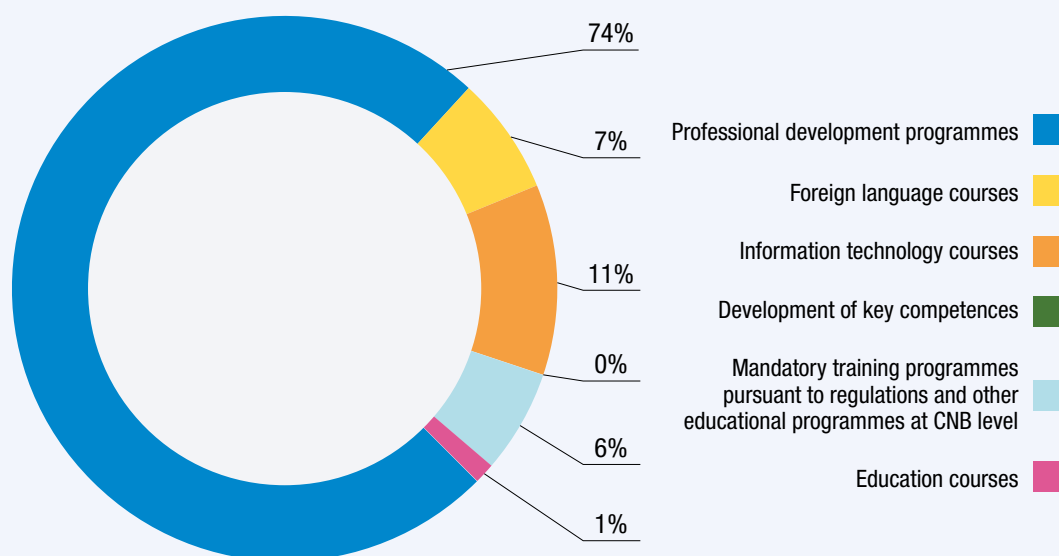
Most of the employees participated in professional development programmes (605) in Croatia and abroad (74%), followed by employees who completed an IT course (11%), a foreign language course (7%), mainly business or banking English, and employees who completed mandatory training programmes pursuant to regulations (6%). A small number of employees participated in competence development programmes (cooperation, result orientation and leadership) and in education courses.

CNB employees in almost equal proportion participated in domestic (331) and foreign (274) educational programmes. The most common topics of professional development were in the areas of supervision, macroeconomics, payment operations, money markets, money laundering prevention, risk management, monetary policy implementation, accounting and regulatory and legal issues.

Emphasis on in-house education

In 2019, more than usual, attention was paid to organising and conducting workshops within the Bank's business premises. In-house workshops were held primarily to meet the business needs of supervisors and statistics and, at the initiative and with the support of Human Resources, the business needs of other functions of the Bank.

The topics of the workshops were various and included examination and analysis of banks, prevention of money laundering, management skills, improvement of teamwork, cooperation and communication and the development of presentation skills in English.

Figure 14.2 Share of participants by type of education

SOURCE: CNB.

In addition to training for professional development and competence development, the Bank also held IT user courses in basic and advanced Excel, Access, SQL and the like.

Furthermore, for the needs of ESCB employees, in 2019, Human Resources organised and implemented a programme called: “Heading for leadership (day-to-day management)”. On that occasion, the Croatian National Bank hosted the implementation of the programme and hosted 14 participants from various EU central banks.

Satisfaction survey of the Bank’s employees

In 2019, the Bank conducted a survey of job satisfaction of certain organisational units. Their commitment to work, degree of satisfaction with career development, relationships and communication, work organisation and prospects for further development in the Bank were examined. This is a step towards continuous, longitudinal monitoring of employee satisfaction levels.

Based on the results of the survey, a large part of the employees surveyed are satisfied with almost all of the examined parameters. There is still room for improvement, both in terms of career advancement and career development of CNB employees.



Women are appropriately represented both within professional occupations and in senior and middle management. In the photo: Boris Vujčić, Governor, Sandra Švaljek, Deputy Governor, Martina Drvar, Vicegovernor.

In order to collect new, original ideas, a workshop was held for individual organisational units with the aim of encouraging thinking about the possibilities and ways of employee advancement and career development. Work on this challenge will continue.

Student scholarships

Student scholarships have proven to be one of the successful ways to obtain the appropriate profile of employees needed to work at the Bank. Some of the former scholarship holders today work at the Croatian National Bank in demanding professional and managerial positions.

The Croatian National Bank announced two scholarship competitions in 2019. The announcements were for scholarships in the fields of informatics, mathematics and economics. The two competitions resulted in the selection of a total of seven scholarship awardees, three on the basis of the first and four on the basis of the second competition, and two former scholarship holders were employed by the CNB in 2019.

Student scholarships have proven to be a good practice of the Bank and, if the Bank continues to have an interest based on its business needs and

capabilities, it will continue to award scholarships in 2020. However, in this case, if necessary, the priority professions will be redefined and/or the expansion of professions for the award of CNB scholarships will be considered.

Performing student internship at the CNB

In 2019, the Croatian National Bank also announced a competition for student internships. A total of 46 students applied and 12 student internships were completed. Moreover, in 2019 two of the scholarship holders had internships in the Bank in accordance with the terms of the scholarship.

17 The management and the internal organisation of the Croatian National Bank

Members of the Council of the Croatian National Bank

Boris Vujčić, Governor

Sandra Švaljek, Deputy Governor

Michael Faulend, Vicegovernor

Bojan Fras, Vicegovernor

Martina Drvar, Vicegovernor

Slavko Tešija, Vicegovernor

Roman Šubić, Vicegovernor

Neven Barbaroša, Vicegovernor (until 25 October 2019)

Chief Economist: **Vedran Šošić**

Chief Operating Officer: **Tomislav Presečan**

Executive directors

Research Area

Ljubinko Jankov

Controlling and Accounting Area

Diana Jakelić

Information Technology Area

Mario Žgela

Support Services Area

Boris Zaninović

Central Banking Operations Area

Irena Kovačec

Communications Area

Alemka Lisinski

Statistics Area

Tomislav Galac

Prudential Regulation and Methodology Area (from 1 June 2019)

Sanja Petrinić Turković

Expert Supervision and Oversight Area (from 1 June 2019)

Damir Blažeković

Prudential Supervision Area (from 1 June 2019)

Renata Samodol

Legal Area (from 1 June 2019)

Dražen Odorčić

Payment Operations Area

Ivan Biluš

International Relations Area

Sanja Tomičić

Directors of the Offices

Security Office

Zoran Bogdanović

Internal Audit Office

Boris Bušac

Foreign Exchange Regulation Office

Zoran Jurak

Compliance Office (from 20 September 2019)

Vjekoslav Kozina

Consumer Protection Monitoring Office

Snježana Levar

Credit Institutions Resolvability Assessment Office

Lidija Pranjić

Succession Issues Coordination Office

Snježana Raić

Office of the Governor

Nina Srkalović

Office for Coordination of Prudential Supervision, Oversight and Risk Management Activities

Mario Varjačić

COUNCIL OF THE CROATIAN NATIONAL BANK

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CROATIAN NATIONAL BANK • ANNUAL REPORT

2019



HNB

FINANCIAL STATEMENTS

For the year ended 31 December 2019

CROATIAN NATIONAL BANK

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Independent Auditors' Report to the Council of the Croatian National Bank

Opinion

We have audited the financial statements of the Croatian National Bank, which comprise the statement of financial position as at 31 December 2019, the income statement and the statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information (further referred to as "the financial statements").

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Croatian National Bank as at 31 December 2019, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union ("EU IFRS").

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Croatian National Bank in accordance with the ethical requirements that are relevant to our audit of the financial statements in Croatia and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Matter

The financial statements of the Croatian National Bank as at and for the year ended 31 December 2018 were audited by another auditor who expressed an unmodified opinion on those financial statements on 15 March 2019.

Responsibilities of the Council of the Croatian National Bank for the Financial Statements

The Council of the Croatian National Bank is responsible for the preparation of the financial statements that give a true and fair view in accordance with EU IFRS, and for such internal control as the Council of the Croatian National Bank determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Council of the Croatian National Bank is responsible for assessing the Croatian National Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in accordance with the relevant legislation.

The Council of the Croatian National Bank is responsible for overseeing the Croatian National Bank's financial reporting process.



Independent Auditors' Report to the Council of the Croatian National Bank (continued)

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with International Standards on Auditing, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Croatian National Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council of the Croatian National Bank.
- Conclude on the appropriateness of the Council of the Croatian National Bank's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Croatian National Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Croatian National Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



Independent Auditors' Report to the Council of the Croatian National Bank (continued)

Auditors' Responsibilities for the Audit of the Financial Statements (continued)

We communicate with the Council of the Croatian National Bank regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

KPMG Croatia d.o.o. za reviziju

Croatian Certified Auditors
Eurotower, 17th floor
Ivana Lučića 2a
10000 Zagreb
Croatia

KPMG Baltics AS

Vesetas iela 7
Riga, LV 1013
Latvia

For and on behalf of KPMG Croatia d.o.o.:

For and on behalf of KPMG Baltics AS:

KPMG Croatia
d.o.o. za reviziju
Eurotower, 17. kat
Ivana Lučića 2a, 10000 Zagreb
6

Goran Horvat
*President of the Management Board,
Croatian Certified Auditor*

Zagreb, 13 March 2020

Armine Movsisjana
Managing Partner

Riga, 13 March 2020

INCOME STATEMENT

(All amounts are expressed in thousands of kuna)	NOTES	2019	2018
Interest income calculated using the effective interest method	3	659,380	589,978
Other interest income	3	169,471	135,722
Interest expenses	4	(324,986)	(233,094)
NET INTEREST INCOME		503,865	492,606
Fee and commission income	5a	53,762	49,513
Fee and commission expenses	5b	(22,834)	(20,927)
NET FEE AND COMMISSION INCOME	5	30,928	28,586
Dividend income		5,419	5,111
Net investment result – equity method		2,119	3,407
Net result from financial assets at fair value through profit or loss	6	(116,317)	(76,623)
Net result from debt securities at fair value through other comprehensive income	7	74,821	53,330
Net exchange differences	8	833,626	(602,950)
Other income	9	11,038	5,634
OPERATING PROFIT/(LOSS)		1,345,499	(90,899)
Operating expenses	10	(395,251)	(373,964)
Impairment losses	11	(10,109)	(4,493)
Decrease/(increase) in provisions	12	(13,001)	983
PROFIT/(LOSS)	35	927,138	(468,373)
– Allocated to general reserves		(809,729)	–
– Allocated to the State Budget		(117,409)	–
– Covered from general reserves		–	468,373

The notes on pages 175 to 251 form an integral part of these financial statements.

STATEMENT OF COMPREHENSIVE INCOME

(All amounts are expressed in thousands of kuna)	NOTES	2019	2018
PROFIT/(LOSS)		927,138	(468,373)
OTHER COMPREHENSIVE INCOME/(LOSS)		952,541	(108,234)
<i>OTHER COMPREHENSIVE INCOME ITEMS THAT WILL NOT BE RECLASSIFIED TO PROFIT OR LOSS IN SUBSEQUENT PERIODS</i>		23,308	—
Change in revaluation reserves for fixed assets		23,308	—
<i>OTHER COMPREHENSIVE INCOME ITEMS THAT ARE OR WILL BE RECLASSIFIED TO PROFIT OR LOSS IN SUBSEQUENT PERIODS</i>		929,233	(108,234)
Debt securities at fair value through other comprehensive income:		929,233	(108,234)
Gains/(losses) from remeasurement		1,003,403	(52,609)
(Gains)/losses from trading transferred to profit or loss		(74,821)	(53,330)
Net changes in loss allowances for expected credit losses		651	(2,295)
TOTAL COMPREHENSIVE INCOME/(LOSS)		1,879,679	(576,607)

The notes on pages 175 to 251 form an integral part of these financial statements.

STATEMENT OF FINANCIAL POSITION

(All amounts are expressed in thousands of kuna)	NOTES	31/12/2019	31/12/2018
ASSETS			
Cash and current accounts with other banks	13	7,351,114	9,524,804
Deposits with other banks	14	15,321,900	11,426,141
Financial assets at fair value through profit or loss	15	39,405,122	39,709,543
Loans	16	1,914,408	2,029,317
Reverse repo agreements	17	11,467,170	21,278,988
Debt securities at amortised cost	18	14,365,394	682,112
Balances with the International Monetary Fund	19	9,428,524	9,248,636
Debt securities at fair value through other comprehensive income	20	47,439,374	43,995,277
Equity securities at fair value through other comprehensive income – irrevocable election	21	59,165	60,218
Investments accounted for using the equity method	22	25,736	23,617
Other assets	23	5,007,400	2,577,237
Property, plant, equipment and intangible assets	24	620,824	579,046
TOTAL ASSETS		152,406,131	141,134,936
LIABILITIES			
Banknotes and coins in circulation	25	38,734,616	35,046,160
Due to banks and other financial institutions	26	74,624,796	69,807,221
Repo agreements	27	5,998,829	9,219,306
Due to the State and State institutions	28	6,712,594	2,898,000
Due to the International Monetary Fund	29	9,414,492	9,230,974
Other liabilities	30	687,097	461,838
TOTAL LIABILITIES		136,172,424	126,663,499
EQUITY			
Initial capital	31	2,500,000	2,500,000
Reserves	31	13,733,707	11,971,437
TOTAL EQUITY		16,233,707	14,471,437
TOTAL EQUITY AND LIABILITIES		152,406,131	141,134,936

The financial statements set out on pages 4 to 90 were approved on 13 March 2020:

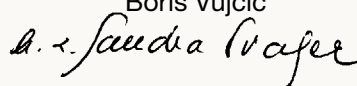
Director of the Accounting Department:

Mario Varović



Governor:

Boris Vujčić



The notes on pages 175 to 251 form an integral part of these financial statements.

STATEMENT OF CHANGES IN EQUITY

(All amounts are expressed in thousands of kuna)	INITIAL CAPITAL	GENERAL RESERVES	FAIR VALUE RESERVES FOR DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	REVALUATION RESERVES ON PROPERTY	TOTAL RESERVES	PROFIT OR LOSS FOR THE YEAR	TOTAL EQUITY
AS AT 1 JANUARY 2018	2,500,000	11,284,037	930,127	333,880	12,548,044	–	15,048,044
Profit/(Loss)	–	–	–	–	–	(468,373)	(468,373)
Other comprehensive income/(loss)	–	–	(108,234)	–	(108,234)	–	(108,234)
Total comprehensive income/(loss)	–	–	(108,234)	–	(108,234)	(468,373)	(576,607)
Depreciation of revalued property	–	5,233	–	(5,233)	–	–	–
Loss covered from general reserves (Note 35)	–	(468,373)	–	–	(468,373)	468,373	–
AS AT 31 DECEMBER 2018	2,500,000	10,820,897	821,893	328,647	11,971,437	–	14,471,437
AS AT 1 JANUARY 2019	2,500,000	10,820,897	821,893	328,647	11,971,437	–	14,471,437
Profit/(Loss)	–	–	–	–	–	927,138	927,138
Other comprehensive income/(loss)	–	–	929,233	23,308	952,541	–	952,541
Total comprehensive income/(loss)	–	–	929,233	23,308	952,541	927,138	1,879,679
Depreciation of revalued property	–	5,234	–	(5,234)	–	–	–
Profit allocated to general reserves (Note 35)	–	809,729	–	–	809,729	(809,729)	–
Profit allocated to the State Budget (Note 35)	–	–	–	–	–	(117,409)	(117,409)
AS AT 31 DECEMBER 2019	2,500,000	11,635,860	1,751,126	346,721	13,733,707	–	16,233,707

The notes on pages 175 to 251 form an integral part of these financial statements.

STATEMENT OF CASH FLOWS

(All amounts are expressed in thousands of kuna)	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Interest received	959,561	924,676
Interest paid	(307,182)	(251,999)
Fees and commissions received	53,029	49,010
Fees and commissions paid	(12,710)	(11,321)
Dividends received and proceeds from share in profit	5,419	6,933
Other receipts	91,879	66,796
Payment of material, administrative and other expenses, services and staff costs	(324,575)	(324,156)
Inflows/(outflows) in deposits and reverse repo agreements with other banks	6,220,402	(12,703,865)
Inflows/(outflows) in loans	134,507	(750,091)
Sale/(purchase) of held-for-trading securities	502,715	(12,131,436)
Inflows/(outflows) in assets under management with international financial institutions	39,453	24,523
Sale/(purchase) of securities held at amortised cost	(13,677,771)	(683,331)
Sale/(purchase) of securities held at fair value through other comprehensive income	(2,284,580)	4,073,147
Inflows/(outflows) in other assets	(266,294)	(110,788)
Outflows in amounts due to the International Monetary Fund	(50)	(51)
Issuance/(withdrawal) of currency in circulation	3,688,456	3,354,736
Inflows/(outflows) in repo agreements and other amounts due to banks and other financial institutions	(942,434)	8,760,785
Inflows/(outflows) in amounts due to the State and State institutions	3,710,334	(42,311)
Inflows/(outflows) in other liabilities	249,382	(263,244)
NET CASH FROM OPERATING ACTIVITIES	(2,160,459)	(10,011,987)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of property, equipment and intangible assets	(30,061)	(30,056)
Repayment of part of paid-up capital to the ECB	1,053	–
NET CASH FROM INVESTING ACTIVITIES	(29,008)	(30,056)
CASH FLOWS FROM FINANCING ACTIVITIES		
Inflows/(outflows) in lease liabilities	(992)	–
NET CASH FROM FINANCING ACTIVITIES	(992)	–
EFFECT OF CHANGES IN EXCHANGE RATES – POSITIVE/(NEGATIVE) EXCHANGE DIFFERENCES ON CASH AND CASH EQUIVALENTS	67,280	(174,602)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	(2,123,179)	(10,216,645)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	12,278,317	22,494,962
CASH AND CASH EQUIVALENTS AT END OF YEAR (NOTE 34)	10,155,138	12,278,317

The notes on pages 175 to 251 form an integral part of these financial statements.

Note 1 – General information and accounting standards

1.1 General information

The Croatian National Bank is the central bank of the Republic of Croatia with headquarters in Zagreb, Trg hrvatskih velikana 3. Its status has been defined by the Act on the Croatian National Bank. The Croatian National Bank is owned by the Republic of Croatia, which guarantees for all its obligations. The Croatian National Bank is autonomous and independent in fulfilling its objective and carrying out its tasks. The primary objective of the Croatian National Bank is maintaining price stability.

The Croatian National Bank reports to the Croatian Parliament on the financial condition, the degree of price stability and the fulfilment of monetary policy goals, and is represented by the Governor of the Croatian National Bank.

The tasks performed by the Croatian National Bank as provided by the Constitution and the Act include:

- Determining and implementing monetary and foreign exchange policies;
- Maintaining and managing international reserves of the Republic of Croatia;
- Issuing of banknotes and coins;
- Issuing and withdrawing authorisations and approvals in accordance with laws regulating credit institutions, credit unions, payment institutions, electronic money institutions and payment systems, foreign exchange operations and operations of authorised foreign exchange offices;
- Performing supervision and oversight in accordance with laws regulating the operations of credit institutions, credit unions, payment institutions and electronic money institutions and payment systems;
- Maintaining accounts of credit institutions and performing payment transactions on those accounts, issuing loans to, and receiving deposit funds from credit institutions;
- Regulating and improving the payment system;
- Performing tasks on behalf of the Republic of Croatia as defined by law;
- Promulgating regulations from its area of competence;
- Contributing to overall stability of the financial system; and
- Performing other tasks specified by law.

The bodies of the Croatian National Bank are the Council of the Croatian National Bank and the Governor of the Croatian National Bank.

The Council of the Croatian National Bank comprises eight members: Governor, Deputy Governor and six Vicegovernors of the Croatian National Bank.

The Council of the Croatian National Bank is competent and responsible for the achievement of the objective and for the carrying out of the tasks of the Croatian National Bank and defines policies with respect to the activities of the Croatian National Bank.

Members of the Council of the Croatian National Bank:

- Prof. D. Sc. Boris Vujčić, Governor
- D. Sc. Sandra Švaljek, Deputy Governor
- D. Sc. Michael Faulend, Vicegovernor (until 5 July 2019 and from 12 July 2019)
- Bojan Fras, Vicegovernor (until 5 July 2019 and from 12 July 2019)
- Neven Barbaroša, Vicegovernor (until 25 October 2019)
- M. Sc. Slavko Tešija, Vicegovernor
- D. Sc. Roman Šubić, Vicegovernor
- M. Sc. Martina Drvar, Vicegovernor.

1.2 Accounting standards

The separate financial statements of the Croatian National Bank have been prepared in accordance with the International Financial Reporting Standards, which comprise the International Accounting Standards (IAS), together with the related Amendments and Interpretations, and the International Financial Reporting Standards (IFRS), together with the related Amendments and Interpretations, as adopted by the European Commission, and published in the Official Journal of the European Union. The preparation of the financial statements of the Croatian National Bank in accordance with the International Financial Reporting Standards as adopted in the European Union is regulated by the Act on the Croatian National Bank and the Accounting Act.

1.2.1 Application of new and revised standards and changes in accounting policies

In 2017, 2018 and 2019, a new standard, amendments to the existing standard and interpretation of the International Financial Reporting Interpretations Committee as well as amendments to the existing standards with mandatory application in the EU for the annual periods commencing from 1 January 2019 were published, as presented in the following table.

OFFICIAL JOURNAL OF THE EU	STANDARD
OJ L 291, 9.11.2017	IFRS 16 – Leases (new)
OJ L 82, 26.3.2018	IFRS 9 – Financial Instruments (amendments)
OJ L 265, 24.10.2018	IFRIC 23 – Uncertainty over Income Tax Treatments
OJ L 39, 11.2.2019	IAS 28 – Investments in Associates and Joint Ventures (amendments)
OJ L 72, 14.3.2019	IAS 19 – Employee Benefits (amendments)
OJ L 73, 15.3.2019	Annual Improvements to IFRS Standards, 2015 – 2017 Cycle: IAS 12 – Income Taxes (amendments) IAS 23 – Borrowing Costs (amendments) IFRS 3 – Business Combinations (amendments) IFRS 11 – Joint Arrangements (amendments)

These standards and interpretation were applied in the compilation of the financial statements for 2019 and did not have a significant impact on the financial statements of the Croatian National Bank.

The accounting policies of the Croatian National Bank applicable to reporting periods beginning on 1 January 2019 are different from accounting policies applied in the preparation of the last financial statements of the Croatian National Bank with regard to the method of recognising leases as the former IAS 17 – Leases was superseded by the new standard IFRS 16 – Leases. Under IAS 17, there were two types of leases (finance and operating) and the lease was classified as operating lease if it did not transfer substantially all the risks and rewards incidental to ownership. The Croatian National Bank classified all its leases as operating leases under IAS 17 and lease payments under an operating lease were recognised as an expense on a straight-line basis over the lease term. Under IAS 17, operating leases were not included in the statement of financial position. In contrast, IFRS 16 introduces one model of lease accounting for lessees according to which lease assets and liabilities are recognised in the lessee's financial statements.

At inception of a contract, the Croatian National Bank assesses whether the contract is, or contains, a lease. Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Croatian National Bank does not separate non-lease components from lease components, and instead accounts for each lease component and any associated non-lease components as a single lease component.

In accordance with IFRS 16, the Croatian National Bank recognises a right-of-use asset and a lease liability at the commencement date. The right-of-use asset is initially measured at costs, and after the commencement date, the right-of-use asset is measured applying a cost model. The Croatian National Bank does not recognise the right-of-use asset of short-term leases and leases for which the underlying asset is of low value.

The Croatian National Bank has applied IFRS 16 to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 Determining whether an Arrangement contains a Lease. The Croatian National Bank has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised as an adjustment to the opening balance of retained earnings at the date of initial application. Accordingly, the comparative information has not been restated. The Croatian National Bank has recognised the right-of-use asset at the date of initial application for leases previously classified as an operating lease applying IAS 17. The right-of-use asset is measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the statement of financial position immediately before the date of initial application.

The effect of the implementation of IFRS 16 is presented in the following table.

(All amounts are expressed in thousands of kuna)	BOOK VALUE AS AT 1 JANUARY 2019	BOOK VALUE AS AT 31 DECEMBER 2019
Right-of-use asset	256	7.761
Lease liability	256	6.834

As the right-of-use asset was recognised in the amount equal to the lease liability, the implementation of IFRS 16 had no effect on the opening balance of the general reserves of the Croatian National Bank as at 1 January 2019.

1.2.2 Standards and interpretations endorsed in the EU which were not applied in the preparation of the financial statements for 2019

In 2019, amendments to the existing standards with mandatory application in the EU for annual periods commencing from 1 January 2020 were published, as presented in the following table.

OFFICIAL JOURNAL OF THE EU	STANDARD
OJ L 316, 6.12.2019	Amendments to References to the Conceptual Framework in IFRS Standards (several standards and interpretations)
OJ L 318, 10.12.2019	Definition of the term "material": IAS 1 – Presentation of Financial Statements (amendments) IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors (amendments)

The application of these amendments to IFRS standards will not have a significant impact on the financial statements of the Croatian National Bank.

The Croatian National Bank did not early adopt new standards, amendments to standards and their interpretations, adopted by the EU, whose adoption in 2019 is optional (non-binding), given that the commencement of the financial year is set as 1 January.

1.2.3 Standards and interpretations which are not endorsed in the EU

The International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) issued additional standards and interpretations, which have not yet been endorsed in the European Union. It is estimated that their application will not have a significant impact on the preparation of the financial statements of the Croatian National Bank.

1.3 Basis of preparation

The financial statements have been prepared under the accrual basis of accounting and using the historical cost convention, except for financial assets at fair value through profit or loss, debt securities in financial assets at fair value through other comprehensive income and buildings and land measured at revalued amount, which is their fair value at the revaluation date less subsequent accumulated depreciation of buildings and subsequent accumulated impairment losses.

The functional and presentation currency of the Croatian National Bank is the kuna. The financial statements are expressed in thousands of kunas.

These financial statements are prepared using going concern assumption.

1.4 Use of judgements and estimates

In preparing the financial statements for 2019, the management has made judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expense. The estimates are based on the management's best estimate of current events and operations, and actual results may differ from these estimates.

The costs of printing banknotes are initially deferred and recognised in the Income Statement over a period of ten years, and the cost of minting coins over a period of twelve years. Deferrals are based on the assessment of the useful life of banknotes and coins which includes the storage of banknotes and coins in the vault (the logistic cash reserves for regular supply of cash centres and the strategic cash reserves, as well as the storage of banknotes and coins unfit for circulation until they are destroyed) and the average time of their circulation.

The significant judgements made by the management in applying the accounting policies and the key sources of estimation uncertainty were the same as those used in the preparation of the annual financial statements for 2018.

1.4.1 Fair value and fair value hierarchy

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price).

Valuation techniques that are used in determining the fair values are the market approach, cost approach and income approach. The market approach uses prices and other relevant information from market transactions with identical or similar assets or liabilities. The cost approach is a valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost). The income approach converts future amounts (e.g. cash flows or income and expenses) to a single current (i.e. discounted) amount.

The fair value hierarchy consists of three levels of data included in the valuation techniques which are used to measure fair value:

- Level 1 – inputs are quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 – inputs other than quoted prices observable for the asset or liability, either directly or indirectly;
- Level 3 – inputs are unobservable inputs for the asset or liability (not available and verifiable market data).

In the process of fair value measurements, suitable valuation techniques for which the necessary data are available are used, with maximum use of observable inputs and minimal use of inputs that are not observable in an active market.

The Croatian National Bank recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

More detailed disclosures on fair value measurements of financial assets and liabilities are presented in Note 36.

1.4.2 Losses on impairment of financial assets

Financial assets are reviewed at each reporting date to determine whether there is objective evidence of impairment as described in the accounting policy Impairment of financial assets.

1.4.3 Estimation uncertainty relating to litigations and claims

The Croatian National Bank provided HRK 36,545 thousands (2018: HRK 24,822 thousands) in respect of liabilities for court cases. The management estimates these provisions as sufficient. Detailed disclosures regarding provisions for court cases are stated in Note 30.

Note 2 – Summary of significant accounting policies

2.1 Interest income and expense

Interest income includes coupons earned on fixed income financial instruments. Interest income is increased for amortised discount and reduced for amortised premium on purchased securities.

Interest income on financial instruments at amortised cost and financial assets at fair value through other comprehensive income are recognised in the Income Statement using the effective interest method.

When calculating interest income, the effective interest rate is applied to gross carrying amount of financial assets, except in:

- a purchased or originated credit-impaired financial asset (for such financial assets the effective interest rate adjusted by credit risk is applied to amortised cost of the financial assets from initial recognition); and
- a financial asset that is not a purchased or originated credit-impaired financial asset, but which has subsequently become a credit-impaired financial asset (for such financial assets the effective interest rate is applied to amortised cost).

Interest income on debt securities at fair value through profit or loss is recognised based on the nominal coupon interest rate and presented in line item Other interest income in the Income Statement.

Accrued interest on financial assets with negative interest rate is recognised as interest expense.

Accrued interest on financial liabilities with negative interest rate is recognised as interest income.

2.2 Fee and commission income and expense

Fee and commission income from services provided by the Croatian National Bank is recognised when the service is provided.

Fee and commission expense is included in the Income Statement for the period in which services are received.

2.3 Dividend income

Dividend income on equity investments is recognised in the Income Statement when the right to receive dividends is established.

2.4 Foreign exchange gains and losses

Transactions in foreign currencies are translated into Croatian kuna at the rates of exchange in effect at the dates of the transactions. At each reporting date, items denominated in foreign currencies are retranslated at the exchange rates in effect on that date. Gains and losses on translation of monetary items are recognised in profit or loss in the period in which they arise. Translation is performed using the midpoint exchange rates of the Croatian National Bank.

Gains and losses arising from trading in foreign currencies are included in realised income and expenses in the period in which they occur. All other foreign exchange differences are reported as unrealised gains or losses in the period in which they occur.

Non-monetary assets and liabilities denominated in foreign currencies stated at historical cost at the exchange rate valid on the date of transaction are not retranslated at the date of the Statement of Financial Position, i.e. the exchange differences are not recognised for these items.

The exchange rates of major foreign currencies at 31 December 2019 were as follows:

USD 1 = HRK 6.649911 (2018: HRK 6.469192)

EUR 1 = HRK 7.442580 (2018: HRK 7.417575)

XDR 1 = HRK 9.227696 (2018: HRK 9.047556).

2.5 Provisions

Provisions are recognised in the Income Statement at the end of the reporting period.

The Croatian National Bank recognises a provision when it has a present legal or constructive obligation as a result of a past event; when it is probable that an outflow of resources will be required to settle the obligation; and when a reliable estimate can be made of the obligation. No provision is recognised unless all of these conditions have been met.

2.6 Financial instruments

At recognition, valuation and classification of financial assets, the Croatian National Bank applies the provisions of IFRS 9 – Financial Instruments.

2.6.1 Recognition and derecognition of financial assets

The Croatian National Bank recognises a financial asset in its Statement of Financial Position only when it becomes party to the contractual provisions of the instrument.

A regular way purchase or sale of financial assets is recognised and derecognised using settlement date accounting. The settlement date is the date that an asset is delivered to or by the CNB.

Deposits and loans are initially recognised on the commitment date.

The Croatian National Bank derecognises a financial asset only when:

- the contractual rights to the cash flows from the financial asset expire;
- it transfers the financial asset in a way that it transfers the contractual rights to receive the cash flows of the financial asset or retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients;
- it transfers substantially all the risks and rewards of ownership of the financial asset; and
- it neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, and it has not retained control of the financial asset.

2.6.2 Initial and subsequent measurement of financial assets

Financial assets at fair value through profit and loss are initially measured at fair value without transaction costs, whereas for financial assets not designated at fair value through profit and loss fair value is increased by transaction costs.

Following the initial measurement, the Croatian National Bank measures financial assets:

- at amortised cost;
- at fair value through other comprehensive income; or
- at fair value through profit or loss.

The cost of the sold securities is determined using the weighted average cost method.

Measurement at amortised cost

The amortised cost of financial assets is the amount according to which financial assets are measured at initial recognition, minus principal repayments, plus or minus cumulative amortisation, using the effective interest method of any differences between the initial amount and the maturity amount and adjusted for any loss allowance.

The effective interest method is the method of calculating amortised cost of financial assets and allocating and recognising interest income through profit and loss during a certain period.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial assets instrument against the gross carrying amount of financial assets.

The gross carrying amount of financial assets is the amortised cost of financial assets prior to loss allowance provisions.

2.6.3 Classification of financial assets

The Croatian National Bank classifies financial assets as assets subsequently measured at amortised cost, at fair value through other comprehensive income or through profit or loss based on:

- the business model of financial asset management; and
- the characteristics of financial assets with contractual cash flows.

The business model reflects the manner in which the Croatian National Bank manages its financial assets to generate cash flows. The Croatian National Bank applies the following business models:

- the business model to hold the financial assets in order to collect contractual cash flows;
- the business model whose objective is achieved by both collecting contractual cash flows and selling financial assets;
- other business models.

The Croatian National Bank manages the financial assets, held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, to realise cash flows by collecting contractual payments over the life of the instrument. In determining whether cash flows are going to be realised by collecting the financial assets' contractual cash flows, it is necessary to consider the frequency, value and timing of sales in prior periods, the reasons for those sales and expectations about future sales activity. In particular, such sales may be consistent with a business model whose objective is to hold financial assets in order to collect contractual cash flows if those sales are infrequent or insignificant in value both individually and in aggregate.

The Croatian National Bank holds financial assets in a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Compared to a business model whose objective is to hold financial assets to collect contractual cash flows, this business model will typically involve greater frequency and value of sales. This is because selling financial assets is integral to achieving the business model's objective instead of being only incidental to it.

The Croatian National Bank manages the financial assets held within other business models whose objective is to realise cash flows through the sale of the assets. The decision is made based on the assets' fair values. Even though the Croatian National Bank will collect contractual cash flows while it holds the financial assets, the objective of such a business model is not achieved by both collecting contractual cash flows and selling financial assets.

For financial assets that are held within a business model whose objective is to hold assets in order to collect contractual cash flows or within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, it is necessary to determine whether the contractual cash flows of the assets are solely payments of principal and interest on the principal amount outstanding. Only those financial assets that meet the "solely payments of principal and interest" condition can be classified into the category of financial assets measured at amortised cost or into the category of financial assets at fair value through other comprehensive income.

It is estimated that the contractual cash flows of the financial assets are solely payments of principal and interest and that they comply with the conditions of the so-called SPPI test (Solely Payments of Principal and Interest) if the financial assets have the following characteristics:

- if they contain a fixed coupon;
- if the principal value is paid at the bond maturity date;
- if they have no linked options, such as conversion, call or put option.

The Croatian National Bank is obliged, only if it changes its business model of financial asset management, to reclassify all financial assets affected by the change of the business model.

2.6.3.1 Financial assets at amortised cost

A financial asset is measured at amortised cost if both of the following conditions are met:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For financial assets classified into the category of financial assets measured at amortised cost, interest income calculated using the effective interest method, foreign currency gains or losses and expected credit losses are recognised directly in profit or loss. In the event of derecognition of financial assets, gains or losses are recognised in profit or loss.

The category of financial assets measured at amortised cost comprises debt securities, cash, deposits with banks and financial institutions, reverse repo agreements, loans, trade and other receivables complying with the definition of financial instruments.

2.6.3.2 Financial assets at fair value through other comprehensive income

A financial asset is measured at fair value through other comprehensive income if both of the following conditions are met:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A gain or loss on debt securities measured at fair value through other comprehensive income are recognised in other comprehensive income, except for loss allowance gains or losses and foreign exchange gains and losses, until the financial asset is derecognised or reclassified.

All foreign exchange gains and losses on monetary assets are recognised in profit or loss.

If debt securities are derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment.

Interest calculated using the effective interest method is recognised in profit or loss.

For debt securities measured at fair value through other comprehensive income, the amounts that are recognised in profit or loss are the same as the amounts that would have been recognised in profit or loss if the asset had been measured at amortised cost.

Debt securities held within the business model aimed at collecting contractual cash flows and sales, while cash flows represent solely principal and interest payments, are classified as financial assets at fair value through other comprehensive income.

2.6.3.3 Financial assets at fair value through profit or loss

Financial assets are measured at fair value through profit or loss if they are not measured at amortised cost or at fair value through other comprehensive income.

The Croatian National Bank may, at initial recognition, designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency (“accounting mismatch”) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.

Gains or losses on financial assets at fair value through profit or loss are recognised in profit or loss.

2.6.3.4 Investment in equity instruments

The Croatian National Bank subsequently measures investments in equity instruments at fair value through other comprehensive income.

A change in the fair value of investment in equity instruments is recognised in other comprehensive income. The amounts recognised in other comprehensive income are not subsequently transferred to profit and loss. Cumulative gain or loss may be transferred within equity.

Such an investment is not a monetary item. Accordingly, the gain or loss that is presented in other comprehensive income includes any related foreign exchange component.

Dividends on investment in equity instruments are recognised in profit or loss.

Investments in equity securities are designated as financial assets at fair value through other comprehensive income and include investments in BIS shares, SWIFT shares and ECB paid-up capital.

These investments are measured at cost because they do not have quoted market prices on an active market and their fair value cannot be reliably measured.

The Croatian National Bank is obliged, only if it changes its business model of financial asset management, to reclassify all financial assets affected by the change of the business model.

2.6.4 Impairment of financial assets

The Croatian National Bank recognises loss allowances for expected credit losses on a financial asset measured at amortised cost and at fair value through other comprehensive income, a lease receivable and a contract asset.

Loss allowances for financial assets measured at fair value through other comprehensive income are recognised through other comprehensive income and are not reduced from book value of financial assets in the statement of financial position.

If the credit risk of a financial instrument has not increased significantly since initial recognition until the reporting date, the loss allowance is measured at an amount equal to expected credit losses in a twelve month period.

If the credit risk of a financial instrument has increased significantly since initial recognition, the loss allowance is measured at an amount equal to lifetime expected credit losses of the instrument.

The Croatian National Bank recognises impairment gain or loss in profit or loss in the amount of expected credit losses or reversals.

At each reporting date it is determined whether the credit risk of a financial instrument has increased significantly since initial recognition.

It is assumed that the credit risk of a financial instrument has not had a significant increase since initial recognition if the credit risk of a financial instrument is determined as low at the reporting date.

The credit quality of a financial instrument at initial recognition and a change in the credit quality of a financial instrument since initial recognition are monitored through three stages of credit quality.

Stage 1 includes financial instruments with a low credit risk at initial recognition or with no significant increase in credit risk after initial recognition. For this stage loss allowances are calculated at an amount equal to the amount of expected credit losses in a twelve month period, with interest calculated on the gross carrying amount of the financial asset.

Stage 2 includes financial instruments with a significant increase in credit risk since initial recognition. For financial instruments in this stage loss allowances are calculated at an amount equal to lifetime expected credit losses of the instrument, with interest calculated on the gross carrying amount of the financial asset.

Stage 3 includes financial instruments with a significant increase in credit risk since initial recognition and the financial asset is considered credit impaired. For financial instruments in this stage expected credit losses are calculated for a lifetime of the instrument, with interest calculated based on the amortised cost of the financial asset.

It is assumed that a significant increase in the credit risk of a financial instrument has occurred if the long-term credit rating of a financial instrument, which at initial recognition was within the investment grade, fell below investment grade.

The basic criteria for the transfer of a financial instrument from stage 1 to stage 2 include:

- a downgrade of the long-term credit rating of the financial instrument below the Fitch rating agency's investment grade, and if there is no rating, then the ratings of Moody's and Standard&Poor's are used as a secondary source; and
- contractual payments are more than 30 days past due.

The basic criteria for the classification of a financial instrument into stage 3 include:

- a downgrade of the long-term credit rating of the financial instrument below the Fitch rating agency's investment grade, and if there is no rating, then the ratings of Moody's and Standard&Poor's are used as a secondary source; and
- contractual payments are more than 90 days past due.

The value of a financial asset is credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include important data about the following events:

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the granting of a concession(s) by the lender(s) to the borrower for economic or contractual reasons related to the borrower's financial difficulties, which the lender would not otherwise consider;
- probability that the borrower will enter bankruptcy or other financial reorganisation;
- the disappearance of an active market for that financial asset because of financial difficulties; and
- the purchase or origination of a financial asset at a deep discount that reflects the incurred credit loss.

In addition to the basic criteria for determining the stage of credit quality when determining whether a significant increase in credit risk has occurred after initial recognition also taken into account is reasonable and supportable information that is available without undue costs or effort, which may influence the credit risk of a financial instrument.

The Croatian National Bank measures expected credit losses on a financial instrument in the manner that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available on the reporting date without undue costs or effort about past events, current conditions and forecasts of future economic conditions.

If the credit risk of a financial instrument, for which loss allowances were calculated at an amount equal to lifetime expected credit losses of the instrument in the previous reporting period, decreases to the extent that the financial instrument is transferred to stage 1, loss allowances are calculated at an amount equal to the amount of expected credit losses in a twelve month period.

Expected credit losses represent an assessment of credit losses based on probability (current value of all cash shortfalls) through the expected lifetime of the financial instrument. The cash shortfall is the difference between all contractual cash flows that are due to the Croatian National bank and cash flows expected by the Croatian National Bank. The model for the calculation of expected credit losses is described in Note 37.1.3.

Write-off

The gross carrying amount of a financial asset is directly reduced when there are no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. A write-off constitutes a derecognition event.

2.6.5 Financial liabilities

The Croatian National Bank recognises a financial liability in its Statement of Financial Position only when it becomes party to the contractual provisions of the instrument. A financial liability is initially recognised on the commitment date.

A financial liability is removed from the Statement of Financial Position when, and only when, it is extinguished – i.e. when the obligation specified in the contract is discharged or cancelled or expires.

At initial recognition, a financial liability is measured at fair value minus, in the case of a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the issue of the financial liability.

The Croatian National Bank classifies its liabilities as liabilities subsequently measured at amortised cost, with the exception of banknotes and coins in circulation which are measured at their nominal value. Financial liabilities are not reclassified.

2.7 Repo and reverse repo agreements

The Croatian National Bank enters into securities purchase/sale agreements under which it agrees to resell/repurchase the same instrument on a specific future date at a fixed price. Securities purchased with the obligation to resell them in the future are not recognised in the Statement of Financial Position.

Payments arising from those agreements are recognised as amounts due from banks or other financial institutions, and are collateralised by securities underlying the repurchase agreement. Securities sold under repurchase agreements are not derecognised and continue to be recognised in the Statement of Financial Position. Receipts from sales of securities are recognised as amounts due to banks and other financial institutions. The difference between the sale and the repurchase price is included in interest income or expense and accrued over the period of the transaction.

2.8 Deposits with other banks

Amounts due from domestic and foreign banks represent balances on non-transactional accounts.

2.9 International Monetary Fund

Balances with the International Monetary Fund consist of membership quota, current account and deposit with the International Monetary Fund and the due to the International Monetary Fund consists of bills of exchange, International Monetary Fund accounts number 1 and 2 and net cumulative allocations.

The current account and deposit as well as the net cumulative allocations with the International Monetary Fund are denominated in Special Drawing Rights (XDR). Other accounts with the International Monetary Fund are denominated in kunas.

2.10 Investments accounted for using the equity method

The Croatian National Bank has significant influence in the Croatian Monetary Institute and under IAS 28 the Croatian Monetary Institute represents an associate. The Croatian National Bank accounts for its investment in an associate using the equity method.

The equity method is a method of accounting whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets. The investor's profit or loss includes its share of the investee's profit or loss and the investor's other comprehensive income includes its share of the investee's other comprehensive income.

2.11 Precious metals

Precious metals that are quoted on the world markets are recognised at their market price. Gains and losses on changes in fair value are included in the Income Statement for the period in which they arise.

2.12 Currency in circulation

The official currency in the Republic of Croatia is the Croatian kuna. Banknotes and coins in circulation are carried at nominal value.

2.13 Cash and cash equivalents

For the purpose of the Statement of Cash Flows, cash and cash equivalents is defined as cash on hand, foreign currency cash in the CNB treasury vault, current accounts with foreign banks, balances with the International Monetary Fund, funds in the CNB's account at the Croatian Large Value Payment System (CLVPS) and in the account of the CNB in the TARGET2 system.

2.14 Taxation

In accordance with relevant legislation the Croatian National Bank is not subject to Croatian income tax.

2.15 Property, plant, equipment and intangible assets

Property, plant, equipment and intangible assets are reported in the Statement of Financial Position at cost less accumulated depreciation and impairment losses, except for land and buildings which are carried at revalued amount, representing their fair value at the revaluation date, decreased by accumulated depreciation for buildings, and any impairment losses. Depreciation is provided under the straight-line method.

Gains on revaluation are included as a separate component of other comprehensive income. Losses on revaluation are charged to the revaluation reserve account to the extent of the revaluation surplus previously recognised in equity, and any loss in excess of the previously recognised surplus is charged to the Income Statement for the reporting period.

The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to general reserves when the asset is derecognised. This may involve transferring the whole of the surplus when the asset is retired or disposed of. However, the revaluation surplus is transferred as the asset is used. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Transfers from revaluation surplus to general reserves are not made through profit or loss.

The following annual depreciation and amortization rates are used:

ASSET CLASS	EXPECTED USEFUL LIFE IN 2019 (NUMBER OF YEARS)	EXPECTED USEFUL LIFE IN 2018 (NUMBER OF YEARS)
Property	20 – 50	20 – 50
Computers and computing infrastructure	5 – 8	5 – 8
Furniture and equipment	4 – 20	4 – 20
Motor vehicles	4	4
Software and licences	2 – 10	2 – 10

2.16 Impairment of non-financial assets

The carrying value of non-financial assets is assessed at the end of each reporting period to determine whether there is any indication that the asset may be impaired. If any such indication exists, the recoverable amount of that asset is estimated. For assets with indefinite useful life and intangible assets not yet available for use, recoverable amount is estimated on every reporting date.

An impairment loss is recognised if the carrying amount of an asset or cash-generating unit is greater than its recoverable amount. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The cash-generating unit for the Croatian National Bank is the Croatian National Bank as a whole.

Impairment loss is recognised in profit or loss.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs of disposal and its value in use. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit.

Value in use is estimated by discounting expected future cash flows with the discount rate that reflects current market assessments of time value of money and the risks specific to these assets.

An impairment loss recognised in prior periods is assessed at the end of each reporting period to determine if there is any indication that impairment may have decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of an asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

2.17 Staff costs

The Croatian National Bank pays contributions to the obligatory pension funds. The Croatian National Bank has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefits in the Income Statement as they are incurred.

Liabilities for long-term employee benefits, such as jubilee rewards and statutory severance pay, are presented in the balance sheet as the net amount of present value of liabilities for defined benefits on a reporting date. The projected credit unit method is used in the calculation of present value of these liabilities.

2.18 Allocation of the surplus of income over expenditures and coverage of the shortfall between income and expenditures

The surplus of income over expenditures is allocated to general reserves and to the State Budget in accordance with Article 57 of the Act on the Croatian National Bank. The Council of the Croatian National Bank determines the amount of the surplus of income over expenditures to be allocated to general reserves. General reserves for the current financial year may neither be lower than net profit from the value adjustment of balance sheet items to changes in the exchange rate or market prices, nor higher than 20% of the accumulated surplus of income over expenditures. By way of exception, if the surplus of income over expenditures is lower than net profit from the value adjustment of balance sheet items to changes in the exchange rate or market prices, the total surplus of income over expenditures shall be allocated to general reserves. The surplus of income over expenditures remaining after the allocation

to general reserves constitutes extraordinary revenue to the State Budget. The Croatian National Bank covers any shortfall between income and expenditures from general reserves. Any shortfall between income and expenditures that cannot be covered from general reserves is covered from the State Budget.

Note 3 – Interest income

(All amounts are expressed in thousands of kuna)	2019	2018
Foreign currency deposits	62,608	6,438
Securities at amortised cost	3,945	2,431
Debt securities at fair value through other comprehensive income	412,740	432,487
Loans to domestic banks	24,874	16,028
Foreign currency reverse repo agreements	101,322	75,659
Foreign currency repo agreements (negative interest)	53,122	54,382
Other	769	2,553
<i>TOTAL INTEREST INCOME CALCULATED USING THE EFFECTIVE INTEREST METHOD</i>	<i>659,380</i>	<i>589,978</i>
Held-for-trading securities	169,471	135,722
<i>TOTAL OTHER INTEREST INCOME</i>	<i>169,471</i>	<i>135,722</i>
TOTAL INTEREST INCOME	828,851	725,700

Note 4 – Interest expenses

(All amounts are expressed in thousands of kuna)	2019	2018
Foreign currency deposits (negative interest)	56,687	44,754
Foreign currency repo agreements	89,310	65,079
Foreign currency reverse repo agreements (negative interest)	119,135	121,741
Ministry of Finance deposits	59,776	1,520
Leases	78	–
	324,986	233,094

Note 5 – Net fee and commission income

(All amounts are expressed in thousands of kuna)	2019	2018
Fee and commission income	53,762	49,513
Fee and commission expenses	(22,834)	(20,927)
	<u>30,928</u>	<u>28,586</u>

a) Fee and commission income

(All amounts are expressed in thousands of kuna)	2019	2018
Fees for the supervision of credit institutions	46,511	42,351
Other	7,251	7,162
	<u>53,762</u>	<u>49,513</u>

The Croatian National Bank charges the fee for the supervision of credit institutions based on the Credit Institutions Act. Entities subject to supervision fees are credit institutions with head offices in the Republic of Croatia and branches of credit institutions with head offices outside the Republic of Croatia. The level, calculation method and payment method for the supervision fee is determined by the Decision on supervision fees for credit institutions issued by the Governor of the Croatian National Bank.

b) Fee and commission expenses

(All amounts are expressed in thousands of kuna)	2019	2018
Securities deposit and custody costs	11,660	10,144
Obligatory contribution to EBA budget	4,011	3,806
Other	7,163	6,977
	<u>22,834</u>	<u>20,927</u>

Regulation (EU) No 1093/2010 establishing a European Supervisory Authority (*European Banking Authority* – EBA), defines that competent authorities shall form part of a European System of Financial Supervision (ESFS), which also comprises the European Banking Authority (EBA). In accordance with the above Regulation, the Croatian National Bank, as the authority competent for the supervision of credit institutions, forms part of the European System of Financial Supervision (ESFS), and a representative of the Croatian National Bank participates as a member in the Board of Supervisors (BoS), EBA's managing authority. Every year, the EBA budget is adopted by the Board of Supervisors, in the manner laid down in Article 63 of the Regulation. The revenues of EBA funding the budget also consist, among other things, of obligatory contributions from the national competent authorities, which are made in accordance with a formula based on the weighting of votes.

Note 6 – Net result from financial assets at fair value through profit or loss

(All amounts are expressed in thousands of kuna)	2019	2018
Net securities trading result, including net changes in fair value of held-for-trading securities	(156,365)	(101,903)
Net result from assets under management with international financial institutions	38,762	25,391
Net result from revaluation of precious metals	1,286	(111)
	<u>(116,317)</u>	<u>(76,623)</u>

Note 7 – Net result from debt securities at fair value through other comprehensive income

(All amounts are expressed in thousands of kuna)	2019	2018
Net result from sale of debt securities	74,821	53,330
	<u>74,821</u>	<u>53,330</u>

In 2019, the Croatian National Bank generated gain from the sale of debt securities at fair value through other comprehensive income in the amount of HRK 74,821 thousands.

Note 8 – Net exchange differences

(All amounts are expressed in thousands of kuna)	2019	2018
Net unrealised exchange differences	809,729	(592,039)
Net realised exchange differences	23,897	(10,911)
	<u>833,626</u>	<u>(602,950)</u>

Increase in the EUR/HRK exchange rate (0.34%) and increase in the USD/HRK exchange rate (2.79%) between the two reporting dates had the biggest effect on the net exchange differences.

Note 9 – Other income

(All amounts are expressed in thousands of kuna)	2019	2018
Sale of numismatics and investment gold	3,880	315
Other revenues	7,158	5,319
	11,038	5,634

Note 10 – Operating expenses

(All amounts are expressed in thousands of kuna)	2019	2018
Staff costs (Note 10.1)	186,407	173,649
Materials, services and administrative expenses	104,858	103,352
Costs of production of banknotes and coins of Croatian kuna	68,002	62,166
Depreciation and amortisation costs	35,984	34,797
	395,251	373,964

Materials, services and administrative expenses include the costs of maintenance of office buildings and other fixed assets, overheads, network programmes maintenance costs, office supplies costs, small inventory costs, professional development costs and other current costs. Rental costs for short-term leases and leases for which the underlying asset is of low value amounted to HRK 1,862 thousands in 2019.

Depreciation costs for the right-of-use asset amount to HRK 1,208 thousands and are reported under Depreciation and amortisation costs. The right-of-use asset is depreciated under the straight-line method, from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

Note 10.1 – Staff costs

(All amounts are expressed in thousands of kuna)	2019	2018
Net salaries	93,157	85,121
Contributions from and contributions on salaries	49,399	46,675
Taxes and surtaxes	20,217	18,617
Other employee related expenses	23,634	23,236
	186,407	173,649

The average number of employees during 2019 was 671 (2018: 659). Total staff costs for 2019 amount to HRK 186,407 thousands, of which the amount of HRK 30,503 thousands relates to contributions for pension insurance (2018: HRK 173,649 thousands, of which HRK 28,403 thousands was related to contributions for pension insurance).

Note 11 – Impairment losses

(All amounts are expressed in thousands of kuna)	2019	2018
Impairment for expected credit losses (Note 11.a)	9,519	4,493
Impairment of property (Note 11.b)	590	–
	<u>10,109</u>	<u>4,493</u>

a) Impairment for expected credit losses

(All amounts are expressed in thousands of kuna)	2019	2018
LOSS ALLOWANCES FOR EXPECTED CREDIT LOSSES		
New loss allowances for expected credit losses according to IFRS 9	47,787	20,390
Reversal of loss allowances for expected credit losses according to IFRS 9	(38,268)	(15,897)
	<u>9,519</u>	<u>4,493</u>

There was no collection of financial assets that are referred to as stage 3 of credit quality of financial instruments. Changes in loss allowances for expected credit losses during the year are presented in Note 37.1.4.

b) Impairment of property

(All amounts are expressed in thousands of kuna)	2019	2018
Impairment losses on property (Note 24)	590	–
	<u>590</u>	<u>–</u>

Note 12 – Increase/(decrease) in provisions

(All amounts are expressed in thousands of kuna)	2019	2018
PROVISIONS FOR RISKS AND CHARGES		
New provisions	23,223	9,146
Released provisions	(10,222)	(10,129)
	13,001	(983)

Note 13 – Cash and current accounts with other banks

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Cash on hand	970	1,286
Foreign currency cash in the CNB treasury vault	2,962,825	2,955,058
Current accounts with foreign banks	4,327,949	6,513,329
CNB account in TARGET2 system	59,574	55,428
	7,351,318	9,525,101
Loss allowance for expected credit losses	(204)	(297)
	7,351,114	9,524,804

Note 14 – Deposits with other banks

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Deposits with foreign central banks	15,194,343	11,297,498
Deposits with foreign commercial banks	133,421	130,025
Deposits with domestic commercial banks	2,946	5,368
	15,330,710	11,432,891
Loss allowance for expected credit losses	(8,810)	(6,750)
	15,321,900	11,426,141

Geographical concentration of deposits with other banks:

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Croatia	2,938	5,347
Europe	15,318,962	11,420,794
	15,321,900	11,426,141

Note 15 – Financial assets at fair value through profit or loss

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Held-for-trading securities (Note 15.a)	38,065,903	38,407,144
Assets under management with international financial institutions (Note 15.b)	1,331,694	1,296,161
Precious metals	7,525	6,238
	<u>39,405,122</u>	<u>39,709,543</u>

a) Held-for-trading securities

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
EUR-denominated securities	32,265,349	32,471,228
USD-denominated securities	5,800,554	5,935,916
	<u>38,065,903</u>	<u>38,407,144</u>

Held-for-trading securities include accrued interest in the amount of HRK 93,281 thousands at 31 December 2019 (31 December 2018: HRK 90,083 thousands).

b) Assets under management with international financial institutions

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
USD-denominated funds entrusted to the management of international financial institutions	1,331,694	1,296,161
	<u>1,331,694</u>	<u>1,296,161</u>

Note 16 – Loans

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Loans to domestic banks	1,914,914	2,029,851
Other loans	34	41
	<u>1,914,948</u>	<u>2,029,892</u>
Loss allowance for expected credit losses	(540)	(575)
	<u>1,914,408</u>	<u>2,029,317</u>

Loans to domestic banks comprise collateralised credits, which are the instrument to be used to conduct open market operation regulated by the Decision on monetary policy implementation of the Croatian National Bank. A collateralised credit is a reverse transaction used by the Croatian National Bank to provide liquidity to a counterparty against collateral by securities transferred to the pool of eligible assets.

Total fair value of collateral obtained for collateralised credits as at 31 December 2019 amounted to HRK 2,144,026 thousands (31 December 2018: HRK 2,457,666 thousands).

Note 17 – Reverse repo agreements

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Foreign currency reverse repo agreements	11,467,741	21,280,067
	11,467,741	21,280,067
Loss allowance for expected credit losses	(571)	(1,079)
	11,467,170	21,278,988

Total fair value of collateral obtained by foreign currency reverse repo agreements (sovereign bonds of countries rated Aaa to Baa1, securities of international financial institutions rated Aaa to Aa1 and guaranteed bonds rated Aaa) as at 31 December 2019 amounts to HRK 11,492,828 thousands (31 December 2018: HRK 21,584,610 thousands).

Note 18 – Debt securities at amortised cost

Investments in foreign currency securities at amortised cost comprise the following:

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Debt securities	14,308,359	679,403
Accrued interest	64,722	2,793
	14,373,081	682,196
Loss allowance for expected credit losses	(7,687)	(84)
	14,365,394	682,112

Note 19 – Balances with the international monetary fund

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Membership quota	6,619,913	6,490,722
Special Drawing Rights (XDR)	2,803,820	2,753,217
Deposits	4,791	4,697
	<u>9,428,524</u>	<u>9,248,636</u>

Note 20 – Debt securities at fair value through other comprehensive income

Investments in securities at fair value through other comprehensive income comprise the following:

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Debt securities	47,174,201	43,756,015
Accrued interest	265,173	239,262
	<u>47,439,374</u>	<u>43,995,277</u>

Loss allowances for expected credit losses on debt securities at fair value through other comprehensive income amount to HRK 12,363 thousands (2018: HRK 11,712 thousands).

Note 21 – Equity securities at fair value through other comprehensive income – irrevocable election

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
BIS shares	41,914	41,914
SWIFT shares	80	80
ECB paid-up capital	17,171	18,224
	<u>59,165</u>	<u>60,218</u>

Equity securities comprise paid-up capital of the European Central Bank (ECB), BIS shares and SWIFT shares. In line with goods practices of the central banks, these investments are measured at cost because they do not have quoted market prices on an active market and their fair value cannot be reliably measure. The Croatian National Bank does not intent to sell them in the future.

Based on the ownership holding of 2,441 shares of the Bank for International Settlements (BIS), in the nominal value of XDR 5,000 per share, the Croatian National Bank is a member of the BIS, which enables it the option to use services which the BIS provides to central banks and other financial organisations. In accordance with the Statute of the BIS, 25% of the shares subscribed was paid, while the remaining 75% is payable upon call for payment. In 2019, the Croatian National Bank received a dividend in the amount of HRK 5,419 thousands (2018: HRK 5,111 thousands).

The Croatian National Bank is also a member of the Society for Worldwide Interbank Financial Telecommunication (SWIFT). Based on this membership, the Croatian National Bank participates in international transfers of financial messages. Six SWIFT shares in the nominal value of EUR 125 per share which the Croatian National Bank holds are fully paid in.

The paid-up capital of the European Central Bank (ECB) represents participating interest of the Croatian National Bank in the ECB. According to Article 28 of the Statute of the European System of Central Banks (ESCB), the national central banks (NCBs) of the ESCB are the only subscribers of the ECB's capital. Subscriptions depend on the shares which are regulated by Article 29 of the Statute of the ESCB and the amounts are adjusted every five years. The last adjustment of the capital keys was made with effect from 1 January 2019.

In accordance with the Council Decision (2003/517/EC) of 15 July 2003 on the statistical data to be used for the adjustment of the key for subscription to the capital of the European Central Bank, NCBs' shares in the key for capital subscription are adjusted from 1 January 2019 by means of transfer of funds between the NCBs.

Table 1: Key for subscription to the ECB's capital

NSB	KEY FOR SUBSCRIPTION TO THE ECB'S CAPITAL	
	UNTIL 31/12/2018 (%)	FROM 1/1/2019 (%)
Nationale Bank van België/ Banque Nationale de Belgique	2.4778	2.5280
Deutsche Bundesbank	17.9973	18.3670
Eesti Pank	0.1928	0.1968
Central Bank of Ireland	1.1607	1.1754
Bank of Greece	2.0332	1.7292
Banco de España	8.8409	8.3391
Banque de France	14.1792	14.2061
Banca d'Italia	12.3108	11.8023
Central Bank of Cyprus	0.1513	0.1503

NSB	KEY FOR SUBSCRIPTION TO THE ECB'S CAPITAL	
	UNTIL 31/12/2018 (%)	FROM 1/1/2019 (%)
Latvijas Banka	0.2821	0.2731
Lietuvos bankas	0.4132	0.4059
Banque centrale du Luxembourg	0.2030	0.2270
Central Bank of Malta	0.0648	0.0732
De Nederlandsche Bank	4.0035	4.0677
Oesterreichische Nationalbank	1.9631	2.0325
Banco de Portugal	1.7434	1.6367
Banka Slovenije	0.3455	0.3361
Národná banka Slovenska	0.7725	0.8004
Suomen Pankki – Finlands Bank	1.2564	1.2708
SUBTOTAL FOR EURO AREA NCBS	70.3915	69.6176
Българска народна банка (Bulgarian National Bank)	0.8590	0.8511
Česká národní banka	1.6075	1.6172
Danmarks Nationalbank	1.4873	1.4986
Hrvatska narodna banka	0.6023	0.5673
Magyar Nemzeti Bank	1.3798	1.3348
Narodowy Bank Polski	5.1230	5.2068
Banca Națională a României	2.6024	2.4470
Sveriges Riksbank	2.2729	2.5222
Bank of England	13.6743	14.3374
SUBTOTAL FOR NON-EURO AREA NCBS	29.6085	30.3824
TOTAL	100.00	100.00

Since the Republic of Croatia is not part of the euro area, transitional provisions of Article 47 of the ESCB's Statute are applied, according to which the Croatian National Bank had an obligation to subscribe and pay in 3.75% of the capital to the ECB as a contribution to cover ECB's operating costs. The Croatian National Bank, as a national central bank outside the euro area is not entitled to receive an appropriate share of the profit distribution of the ECB, and there is no obligation to cover the loss of the ECB. Following the changes in ECB's capital keys effective since 1 January 2019, the contribution of the Croatian National Bank in paid-up capital was decreased and amounts to EUR 2,302,884.94.

Table 2: Subscribed and paid-up capital of the ECB

(All amounts are expressed in euro)

NSB	SUBSCRIBED CAPITAL UNTIL 31/12/2018	PAID-UP CAPITAL UNTIL 31/12/2018	SUBSCRIBED CAPITAL UNTIL 1/1/2019	PAID-UP CAPITAL UNTIL 1/1/2019
Nationale Bank van België / Banque Nationale de Belgique	268,222,025.17	268,222,025.17	273,656,178.72	273,656,178.72
Deutsche Bundesbank	1,948,208,997.34	1,948,208,997.34	1,988,229,048.48	1,988,229,048.48
Eesti Pank	20,870,613.63	20,870,613.63	21,303,613.91	21,303,613.91
Central Bank of Ireland	125,645,857.06	125,645,857.06	127,237,133.10	127,237,133.10
Bank of Greece	220,094,043.74	220,094,043.74	187,186,022.25	187,186,022.25
Banco de España	957,028,050.02	957,028,050.02	902,708,164.54	902,708,164.54
Banque de France	1,534,899,402.41	1,534,899,402.41	1,537,811,329.32	1,537,811,329.32
Banca d'Italia	1,332,644,970.33	1,332,644,970.33	1,277,599,809.38	1,277,599,809.38
Central Bank of Cyprus	16,378,235.70	16,378,235.70	16,269,985.63	16,269,985.63
Latvijas Banka	30,537,344.94	30,537,344.94	29,563,094.31	29,563,094.31
Lietuvos bankas	44,728,929.21	44,728,929.21	43,938,703.70	43,938,703.70
Banque centrale du Luxembourg	21,974,764.35	21,974,764.35	24,572,766.05	24,572,766.05
Central Bank of Malta	7,014,604.58	7,014,604.58	7,923,905.17	7,923,905.17
De Nederlandsche Bank	433,379,158.03	433,379,158.03	440,328,812.57	440,328,812.57
Oesterreichische Nationalbank	212,505,713.78	212,505,713.78	220,018,268.69	220,018,268.69
Banco de Portugal	188,723,173.25	188,723,173.25	177,172,890.71	177,172,890.71
Banka Slovenije	37,400,399.43	37,400,399.43	36,382,848.76	36,382,848.76
Národná banka Slovenska	83,623,179.61	83,623,179.61	86,643,356.59	86,643,356.59
Suomen Pankki – Finlands Bank	136,005,388.82	136,005,388.82	137,564,189.84	137,564,189.84
SUBTOTAL FOR EURO AREA NCBS*	7,619,884,851.40	7,619,884,851.40	7,536,110,121.69	7,536,110,121.69
Българска народна банка (Bulgarian National Bank)	92,986,810.73	3,487,005.40	92,131,635.17	3,454,936.32
Česká národní banka	174,011,988.64	6,525,449.57	175,062,014.33	6,564,825.54
Danmarks Nationalbank	161,000,330.15	6,037,512.38	162,223,555.95	6,083,383.35
Hrvatska narodna banka	65,199,017.58	2,444,963.16	61,410,265.11	2,302,884.94
Magyar Nemzeti Bank	149,363,447.55	5,601,129.28	144,492,194.37	5,418,457.29
Narodowy Bank Polski	554,565,112.18	20,796,191.71	563,636,468.10	21,136,367.55
Banca Națională a României	281,709,983.98	10,564,124.40	264,887,922.99	9,933,297.11
Sveriges Riksbank	246,041,585.69	9,226,559.46	273,028,328.31	10,238,562.31
Bank of England	1,480,243,941.72	55,509,147.81	1,552,024,563.60	58,200,921.14
SUBTOTAL FOR NON-EURO AREA NCBS*	3,205,122,218.22	120,192,083.17	3,288,896,947.92	123,333,635.55
TOTAL*	10,825,007,069.61	7,740,076,934.57	10,825,007,069.61	7,659,443,757.27

* Due to rounding, the amount does not have to equal the sum of individual amounts presented.

Note 22 – Investments accounted for using the equity method

(All amounts are expressed in thousands of kuna)

	31/12/2019	31/12/2018
Investment in Croatian Monetary Institute	25,736	23,617
	25,736	23,617

The investment of the Croatian National Bank in the Croatian Monetary Institute represents investment in an associate in accordance with IAS 28 and it is accounted for using the equity method. The Croatian Monetary Institute does not have quoted market prices on an active market. The portion of the Croatian National Bank share in the capital of the Croatian Monetary Institute is 42.6%.

The portion of the Croatian National Bank share in the profit of the Croatian Monetary Institute for the year 2019 amounts to HRK 2,119 thousands (2018: HRK 3,407 thousands) and is calculated by multiplying realised profit or loss of the Croatian Monetary Institute for the respective year and the share of 42.6%.

The Croatian Monetary Institute is a domestic company whose core operation is the production of coins and medals of gold and other precious metals, production of coins and commemorative circulation coins, manufacturing of jewellery and related products, trade in gold and other precious metals, trade with jubilee coins and with medals of gold and other precious metals, production of license plates and other registered activities associated with those listed here.

The following table presents summarised financial information of the Croatian Monetary Institute:

(All amounts are expressed in thousands of kuna)

	2019	2018
TOTAL ASSETS	106,074	74,503
Non-current assets	36,522	26,376
Current assets	69,275	47,816
Prepayments and accrued income	277	311
TOTAL LIABILITIES	44,784	19,033
Provisions	500	500
Current liabilities	44,274	18,522
Accruals and deferred income	10	11
EQUITY AND PROVISIONS	61,290	55,470
TOTAL REVENUE	87,026	86,515
TOTAL EXPENSES	(79,929)	(77,848)
PROFIT BEFORE TAX	7,097	8,667
Income tax	(1,277)	(1,588)

(All amounts are expressed in thousands of kuna)	2019	2018
PROFIT FOR THE PERIOD	5,820	7,079
OTHER COMPREHENSIVE INCOME	–	–
TOTAL COMPREHENSIVE INCOME	5,820	7,079

The summarised financial information of the Croatian Monetary Institute for 2019 is presented based on the preliminary financial statements of the Croatian Monetary Institute for 2019 as the final official financial statements of the Croatian Monetary Institute for 2019 were not yet available at the time of preparation of these financial statements.

Note 23 – Other assets

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Accrued interest	7,917	10,742
Other participants funds in TARGET2	4,467,861	2,061,243
Other financial assets	27,889	48,768
	4,503,667	2,120,753
Loss allowance for expected credit losses	(7,526)	(7,564)
TOTAL OTHER FINANCIAL ASSETS	4,496,141	2,113,189
Prepaid expenses	443,181	431,888
Numismatics	9,458	12,415
Other non-financial assets	58,620	19,745
TOTAL OTHER NON-FINANCIAL ASSETS	511,259	464,048
TOTAL OTHER ASSETS	5,007,400	2,577,237

The major portion of prepaid expenses in the amount of HRK 429,393 thousands (2018: HRK 418,184 thousands) relates to the prepaid expenses of printing banknotes and minting coins.

Note 24 – Property, plant, equipment and intangible assets

(All amounts are expressed in thousands of kuna)	PROPERTY (LAND AND BUILDINGS)	COMPUTERS AND COMM-PUTING INFRASTRUCTURE	FURNITURE AND EQUIPMENT	MOTOR VEHICLES	ASSETS UNDER DEVELOPMENT – PROPERTY, PLANT, EQUIPMENT	TOTAL PROPERTY, PLANT AND EQUIPMENT	SOFTWARE AND LICENCES	ASSETS UNDER DEVELOPMENT – INTANGIBLE ASSETS	TOTAL INTANGIBLE ASSETS	TOTAL PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS
BALANCE AT 1 JANUARY 2018										
Cost or revaluation	500,282	193,654	41,996	9,431	9,736	755,099	87,336	9,739	97,075	852,174
Accumulated depreciation/amortisation	(29,110)	(135,686)	(35,500)	(9,180)	–	(209,476)	(58,401)	–	(58,401)	(267,877)
NET BOOK VALUE	471,172	57,968	6,496	251	9,736	545,623	28,935	9,739	38,674	584,297
FOR THE YEAR ENDED 31 DECEMBER 2018										
Opening net book amount	471,172	57,968	6,496	251	9,736	545,623	28,935	9,739	38,674	584,297
Additions	–	–	–	–	27,487	27,487	–	2,067	2,067	29,554
Brought into use	999	19,037	1,788	229	(22,053)	–	1,940	(1,940)	–	–
Net written off	–	–	(8)	–	–	(8)	–	–	–	(8)
Depreciation/amortisation (charge for the year)	(8,191)	(19,532)	(2,178)	(103)	–	(30,004)	(4,793)	–	(4,793)	(34,797)
CLOSING NET BOOK AMOUNT	463,980	57,473	6,098	377	15,170	543,098	26,082	9,866	35,948	579,046
AS AT 31 DECEMBER 2018										
Cost or revaluation	501,282	211,511	43,230	9,241	15,170	780,434	89,270	9,866	99,136	879,570
Accumulated depreciation/amortisation	(37,302)	(154,038)	(37,132)	(8,864)	–	(237,336)	(63,188)	–	(63,188)	(300,524)
NET BOOK VALUE	463,980	57,473	6,098	377	15,170	543,098	26,082	9,866	35,948	579,046

(All amounts are expressed in thousands of kuna)	PROPERTY OWNED BY THE CNB (LAND AND BUILDINGS)	RIGHT-OF-USE BUILDINGS (OFFICE BUILDINGS)	COMPUTERS AND EQUIPMENT	MOTOR VEHICLES	ASSETS UNDER DEVELOPMENT – PROPERTY, PLANT, EQUIPMENT	TOTAL SOFTWARE LICENCES AND DEVELOPMENT – INTANGIBLE ASSETS	ASSETS UNDER DEVELOPMENT – INTANGIBLE ASSETS	TOTAL INTANGIBLE ASSETS	TOTAL PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS
BALANCE AT 1 JANUARY 2019 (REPORTED)									
Cost or revaluation	501,282	–	211,511	43,230	9,241	15,170	89,270	9,866	879,570
Accumulated depreciation/amortisation	(37,302)	–	(154,038)	(37,132)	(8,864)	–	(63,188)	–	(300,524)
NET BOOK VALUE	463,980	–	57,473	6,098	377	15,170	26,082	9,866	579,046
<i>First application of IFRS 16</i>									
	–	256	–	–	–	–	–	–	256
BALANCE AT 1 JANUARY 2019 (RESTATED)	463,980	256	57,473	6,098	377	15,170	26,082	9,866	579,302
FOR THE YEAR ENDED 31 DECEMBER 2019									
Opening net book amount	463,980	256	57,473	6,098	377	15,170	26,082	9,866	579,302
Additions	–	8,713	–	–	–	43,140	–	2,949	54,802
Brought into use	2,911	–	32,115	3,394	208	(38,628)	10,364	(10,364)	–
Revaluation	23,308	–	–	–	–	–	–	–	23,308
Impairment	(590)	–	–	–	–	–	–	–	(590)
Net written off	–	–	(1)	(14)	–	–	–	–	(15)
Depreciation/amortisation (charge for the year)	(8,228)	(1,208)	(19,582)	(2,493)	(117)	–	(4,355)	–	(35,983)
CLOSING NET BOOK AMOUNT	481,381	7,761	70,005	6,985	468	19,682	32,091	2,451	620,824
AS AT 31 DECEMBER 2019									
Cost or revaluation	481,381	8,969	238,696	45,707	9,449	19,682	99,634	2,451	905,969
ACCUMULATED DEPRECIATION/AMORTISATION	–	(1,208)	(168,691)	(38,722)	(8,981)	–	(67,543)	–	(285,145)
NET BOOK VALUE	481,381	7,761	70,005	6,985	468	19,682	32,091	2,451	620,824

Revalued amounts of land and buildings were determined based on appraisals performed by independent experts in 2019, and the revaluation effect is presented in other comprehensive income. Valuation technique used to determine fair value was the cost method. Certain significant inputs for valuation were not observable market data (Level 3 of fair value hierarchy).

The input data were data from the property market information system “eNekretnine” and construction indicators for a model object from the Bulletin of Institut IGH d.d. which were used in individual assessments of the property value pursuant to the Property Valuation Act and the Ordinance on the property valuation methods as well as other relevant regulations on property valuation.

If the land and buildings were carried at cost less depreciation, their net book value as at 31 December 2019 would be HRK 134,660 thousands. Property, plant and equipment of the Croatian National Bank are not pledged, either as part of mortgage agreements or as a fiduciary relationship. At the reporting date, there were no intangible assets with indefinite useful life. As at 31 December 2019, contractual commitments for the acquisition of property, plant and equipment amounted to HRK 1,798 thousands, and contractual commitments for the acquisition of intangible assets amounted to HRK 2,191 thousands.

The gross carrying amount of fully depreciated assets amounts to HRK 152,516 thousands (2018: 143,544 thousands). The carrying amount of land that is not depreciated amounts HRK 114,178 thousands (2018: HRK 91,329 thousands).

Note 25 – Banknotes and coins in circulation

(All amounts are expressed in thousands of kuna)	2019	2018
Banknotes and coins in circulation as at January 1	35,046,160	31,691,425
Increase/(decrease) of banknotes and coins in circulation during the year	3,688,456	3,354,735
BANKNOTES AND COINS IN CIRCULATION – TOTAL AS AT DECEMBER 31	38,734,616	35,046,160

IN HRK	NOMINAL VALUE	31/12/2019		31/12/2018	
		PIECES	VALUE IN THOUSANDS OF KUNA	PIECES	VALUE IN THOUSANDS OF KUNA
Coins	0.01	127,787,238	1,278	127,112,305	1,271
Coins	0.02	85,742,921	1,715	85,032,936	1,701
Coins	0.05	405,827,534	20,291	388,085,489	19,404
Coins	0.10	587,529,874	58,753	562,603,334	56,260
Coins	0.20	455,328,197	91,066	432,115,443	86,423
Coins	0.50	266,209,895	133,105	252,008,177	126,004
Coins	1	302,798,298	302,798	285,547,074	285,547
Coins	2	186,122,191	372,244	173,131,930	346,264
Coins	5	125,010,988	625,055	115,028,414	575,142
Coins	25	1,315,613	32,890	1,242,984	31,075
Banknotes	5	4,124,081	20,620	4,126,781	20,634
Banknotes	10	52,586,315	525,863	49,360,032	493,600
Banknotes	20	37,171,874	743,438	34,932,870	698,658
Banknotes	50	20,042,177	1,002,109	20,042,044	1,002,102
Banknotes	100	45,031,262	4,503,126	41,562,344	4,156,234
Banknotes	200	89,916,703	17,983,341	82,108,672	16,421,734
Banknotes	500	8,971,768	4,485,884	7,500,941	3,750,471
Banknotes	1,000	7,831,040	7,831,040	6,973,636	6,973,636
TOTAL			38,734,616		35,046,160

Note 26 – Due to banks and other financial institutions

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Kuna reserve requirements	24,890,304	23,482,632
Foreign currency accounts of TARGET2 system participants	4,467,861	2,061,243
Other deposits from domestic banks	44,993,153	44,210,060
Deposits from foreign banks and other financial institutions	72	72
Court-mandated deposits	273,406	53,214
	74,624,796	69,807,221

Due to banks and other financial institutions also comprises foreign currency accounts of participants in TARGET2 system. TARGET2 (Trans-European Automated Real-time Gross settlement Express Transfer system) is a payment system for the settlement of payment transactions in euro on a gross basis in real time. TARGET2 is a system with the Single Shared Platform (SSP), jointly administered by Banca d'Italia, Banque de France and Deutsche Bundesbank on behalf of the Eurosystem. In addition to this Note to the financial statements, business activities related to TARGET2 are presented in the balance sheet positions "Cash and current accounts with other banks" (Note 13) and "Other assets" (Note 23).

Court-mandated deposits of banks are assets foreclosed pursuant to the Act on the Execution of Enforcement over Monetary Assets.

Note 27 – Repo agreements

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Foreign currency repo agreements	5,998,829	9,219,306
	<u>5,998,829</u>	<u>9,219,306</u>

Total fair value of collateral given in repo agreements as at 31 December 2019 amounted to HRK 5,956,987 thousands (31 December 2018: HRK 9,239,198 thousands).

Note 28 – Due to the state and state institutions

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Domestic currency account balances	6,642,591	2,866,339
Foreign currency deposits	70,003	31,661
	<u>6,712,594</u>	<u>2,898,000</u>

Note 29 – Due to the international monetary fund

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Kuna-denominated bills of exchange	6,600,618	6,472,018
Net cumulative allocations	2,797,255	2,742,649
Other IMF's accounts	16,619	16,307
	<u>9,414,492</u>	<u>9,230,974</u>

The bills of exchange denominated in the Croatian kuna relate to the membership of the Republic of Croatia in the International Monetary Fund.

Pursuant to the Resolution of the Board of Governors of the International Monetary Fund approving allocation of special drawing rights for the ninth basic period adopted in 2009, the Republic of Croatia has been assigned funds in the amount of SDR 271 million (general allocation). Moreover, pursuant to the Resolution of the Board of Governors of the International Monetary Fund on the Fourth Amendment of the Articles of Agreement, the Republic of Croatia has been provided a special one-time allocation of SDRs in the amount of SDR 32 million in 2009. The Government of the Republic of Croatia may adopt a special decision on the withdrawal of funds or a portion of funds provided through the general and special one-time allocations.

Note 30 – Other liabilities

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Accrued interest	13,694	17,647
Amounts due to employees	8,241	7,459
Taxes and contributions	6,764	6,478
Obligations to European Commission in EUR	484	793
Obligations to European Commission in HRK	414,609	334,614
Due to the Ministry of Finance	133,153	15,202
Trade payables	31,339	17,807
Long-term provisions for risks and charges	59,767	46,766
Other liabilities	19,046	15,072
	687,097	461,838

The European Commission has opened EUR and HRK transaction accounts and the European Development Fund Account in euro with the Croatian National Bank for the performance of payment transactions.

Included in long-term provisions for risks and charges HRK 36,545 thousands (2018: HRK 24,822 thousands) are in respect of legal actions and HRK 23,222 thousands (2018: HRK 21,944 thousands) in respect of provisions for employee benefits.

Line item Other liabilities for the year 2019 shows the present value of the lease liability of HRK 6,834 thousands and the liabilities for short-term leases and leases for which the underlying asset is of low value of HRK 176 thousands. The present value of the lease liability is calculated using the discount rate of the Croatian National Bank which stood at 3% on 31 December 2019.

The following tables present movements in long-term provisions for risks and charges:

(All amounts are expressed in thousands of kuna)	COURT CASES	EMPLOYEE BENEFITS	TOTAL
AS AT 1 JANUARY 2019	24,822	21,944	46,766
Released provisions	–	(10,222)	(10,222)
New provisions	11,723	11,500	23,223
Recognised in profit or loss	11,723	1,278	13,001
AS AT 31 DECEMBER 2019	36,545	23,222	59,767

(All amounts are expressed in thousands of kuna)	COURT CASES	EMPLOYEE BENEFITS	TOTAL
AS AT 1 JANUARY 2018	24,822	22,927	47,749
Released provisions	–	(10,129)	(10,129)
New provisions	–	9,146	9,146
Recognised in profit or loss	–	(983)	(983)
AS AT 31 DECEMBER 2018	24,822	21,944	46,766

Note 31 – Equity

The equity funds of the Croatian National Bank consist of the capital and reserves.

The capital in the amount of HRK 2,500,000 thousands may not be transferred or pledged. Reserves comprise general and specific reserves. General reserves are formed for the purpose of covering general operational risks of the Croatian National Bank, they are not limited in size, and they are formed in accordance with the Act on the Croatian National Bank. Specific reserves are formed for the purpose of covering identified losses in accordance with decisions of the Council of the Croatian National Bank.

Total reserves as at 31 December 2019 amount to HRK 13,733,707 thousands, which is an increase of HRK 1,762,270 thousands from 31 December 2018 when they stood at HRK 11,971,437 thousands. The increase in total reserves resulted from the rise in general reserves brought about by the allocation of a portion of the profit for 2019 into the general reserves (HRK 809,729 thousands), as well as from other comprehensive income of HRK 952,541 thousands.

Note 32 – Maturity analysis of assets and liabilities

The following table presents maturity analysis of assets and liabilities depending on the expected maturity date or the settlement date:

- twelve months after the reporting period,
- more than twelve months after the reporting period.

32.1 Maturity analysis of assets and liabilities

(All amounts are expressed in thousands of kuna)	UP TO 12 MONTHS	MORE THAN 12 MONTHS	TOTAL
AS AT 31 DECEMBER 2019			
ASSETS			
Cash and current accounts with other banks	7,351,114	–	7,351,114
Deposits with other banks	15,318,962	2,938	15,321,900
Financial assets at fair value through profit or loss	38,065,903	1,339,219	39,405,122
Loans	94,721	1,819,687	1,914,408
Reverse repo agreements	11,467,170	–	11,467,170
Debt securities at amortised cost	–	14,365,394	14,365,394
Balances with the International Monetary Fund	2,803,820	6,624,704	9,428,524
Debt securities at fair value through other comprehensive income	47,439,374	–	47,439,374
Equity securities at fair value through other comprehensive income – irrevocable election	–	59,165	59,165
Investments accounted for using the equity method	–	25,736	25,736
Other assets	4,578,007	429,393	5,007,400
Property, plant, equipment and intangible assets	48	620,776	620,824
TOTAL ASSETS	127,119,119	25,287,012	152,406,131
LIABILITIES			
Banknotes and coins in circulation	38,734,616	–	38,734,616
Due to banks and other financial institutions	74,624,724	72	74,624,796
Repo agreements	5,998,829	–	5,998,829
Due to the State and State institutions	6,712,594	–	6,712,594
Due to the International Monetary Fund	–	9,414,492	9,414,492
Other liabilities	686,581	516	687,097
TOTAL LIABILITIES	126,757,344	9,415,080	136,172,424
NET POSITION	361,775	15,871,932	16,233,707

Note: According to convention, the amount of the kuna component of reserve requirements of HRK 24,890,304 thousands is stated in the position Due to banks and other financial institutions with a maturity of less than 12 months. The calculation, maintenance and allocation of reserve requirements is performed on a monthly basis, and a change in the amount of reserves may result from changes in the base for calculation, the reserve requirement rate and the percentage of the reserves banks are required to hold in their accounts with the Croatian National Bank. In practice, these liabilities may be considered as having a maturity of over 12 months and in that case the short-term liabilities would be lower than the short-term assets. Debt securities at fair value through other comprehensive income and at fair value through profit

or loss are included in the period up to 12 months due to their high tradability in the secondary market, regardless of their contractual maturities. Assets and liabilities without contractual maturities are included in the period over 12 months.

(All amounts are expressed in thousands of kuna)	UP TO 12 MONTHS	MORE THAN 12 MONTHS	TOTAL
AS AT 31 DECEMBER 2018			
ASSETS			
Cash and current accounts with other banks	9,524,804	–	9,524,804
Deposits with other banks	11,420,794	5,347	11,426,141
Financial assets at fair value through profit or loss	38,407,144	1,302,399	39,709,543
Loans	–	2,029,317	2,029,317
Reverse repo agreements	21,278,988	–	21,278,988
Debt securities at amortised cost	–	682,112	682,112
Balances with the International Monetary Fund	2,753,217	6,495,419	9,248,636
Debt securities at fair value through other comprehensive income	43,995,277	–	43,995,277
Equity securities at fair value through other comprehensive income – irrevocable election	–	60,218	60,218
Investments accounted for using the equity method	–	23,617	23,617
Other assets	2,159,053	418,184	2,577,237
Property, plant, equipment and intangible assets	6	579,040	579,046
TOTAL ASSETS	129,539,283	11,595,653	141,134,936
LIABILITIES			
Banknotes and coins in circulation	35,046,160	–	35,046,160
Due to banks and other financial institutions	69,807,149	72	69,807,221
Repo agreements	9,219,306	–	9,219,306
Due to the State and State institutions	2,898,000	–	2,898,000
Due to the International Monetary Fund	–	9,230,974	9,230,974
Other liabilities	461,215	623	461,838
TOTAL LIABILITIES	117,431,830	9,231,669	126,663,499
NET POSITION	12,107,453	2,363,984	14,471,437

Note: According to convention, the amount of the kuna component of reserve requirements of HRK 23,482,632 thousands is stated in the position Due to banks and other financial institutions with a maturity of less than 12 months. The calculation, maintenance and allocation of reserve requirements is performed on a monthly basis, and a change in the amount of reserves may result from changes in the base for calculation, the reserve requirement rate and the percentage of the reserves banks are required to hold in their accounts with the Croatian National Bank. In practice, these liabilities may be considered as having

a maturity of over 12 months and in that case the short-term liabilities would be lower than the short-term assets. Debt securities at fair value through other comprehensive income and at fair value through profit or loss are included in the period up to 12 months due to their high tradability in the secondary market, regardless of their contractual maturities. Assets and liabilities without contractual maturities are included in the period over 12 months.

Note 33 – Contingent liabilities and commitments and treasury inventory system

Legal actions: At 31 December 2019, there were several legal actions outstanding against the Croatian National Bank. In the opinion of the management and internal legal advisers of the Croatian National Bank, the Bank may lose certain cases. As a result, provisions for potential losses on such cases were made by the Bank in the amount of HRK 36,545 thousands (refer to Note 30).

Capital commitments: As at 31 December 2019, the capital commitments of the Croatian National Bank amounted to HRK 3,754 thousands (2018: HRK 4,050 thousands).

Treasury inventory system

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Banknotes and coins not in circulation	44,546,507	50,672,208
Inventory of government stamps and bill-of-exchange forms	102,318	141,629
	44,648,825	50,813,837

Note 34 – Cash and cash equivalents

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Cash on hand (Note 13)	970	1,286
Foreign currency cash in the CNB treasury vault (Note 13)	2,962,825	2,955,058
Current accounts with foreign banks (Note 13)	4,327,949	6,513,329
Funds with the IMF (Note 19)	2,803,820	2,753,216
CNB account in TARGET2 system (Note 13)	59,574	55,428
	10,155,138	12,278,317

Note 35 – Result for the year

(All amounts are expressed in thousands of kuna)	31/12/2019	31/12/2018
Surplus of income over expenditures/(shortfall between income and expenditures)	927,138	(468,373)
Allocated to general reserves	(809,729)	–
Allocated to the State Budget	(117,409)	–
Covered from general reserves	–	468,373
	–	–

The Croatian National Bank realised the surplus of income over expenditures for the year 2019 in the amount of HRK 927,138 thousands.

Given that in 2019 net unrealised exchange differences of HRK 809,729 thousands (refer to Note 8) were positive and higher than 20% of the surplus of income over expenditures of HRK 185,428 thousands and that the sum of the net unrealised losses on financial assets at fair value through profit or loss and the results from investment measured under equity method was negative (HRK 124,689 thousands), net unrealised exchange differences are allocated to the general reserves. The rest is allocated to the State Budget.

The Croatian National Bank realised the shortfall between income and expenditures for the year 2018 in the amount of HRK 468,373 thousands. The financial result was mainly due to the impact of net unrealised exchange differences for 2018 which were negative and amounted to HRK 592,039 thousands (refer to Note 8). The shortfall between income and expenditures for 2018 in the amount of HRK 468,373 thousands was covered from general reserves.

Note 36 – Fair values and classification of financial assets and liabilities

In the process of determination of the fair value of financial assets and liabilities a market approach is used as a valuation technique. As a part of a hierarchical approach to the determination of fair value, the Croatian National Bank uses the first hierarchical valuation level (Level 1), which means that inputs are observable market values which reflect quotation prices for the same assets or liabilities in active markets. If price quotations are not available, fair value is calculated based on the models recognized by GIPS standards (Global Investment Performance Standards). The input data used are observable market values (interest rates), which correspond to Level 2 of fair value hierarchy.

During the reporting period there were no reclassifications between the levels of fair value hierarchy.

36.1 Financial assets and liabilities measured at fair value

The following table presents the fair value hierarchy for financial assets measured at fair value.

(All amounts are expressed in thousands of kuna)	31/12/2019		
	LEVEL 1	LEVEL 2	TOTAL
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS			
<i>FOREIGN CURRENCY SECURITIES HELD FOR TRADING</i>			
Government securities	24,949,818	7,673,427	32,623,245
Guaranteed bonds	3,416,440	–	3,416,440
Securities of international financial institutions	685,337	219,450	904,787
Bank bonds with government guarantees	677,569	443,862	1,121,431
<i>TOTAL SECURITIES HELD FOR TRADING (NOTE 15.A)</i>	<i>29,729,164</i>	<i>8,336,739</i>	<i>38,065,903</i>
<i>ASSETS UNDER MANAGEMENT WITH INTERNATIONAL FINANCIAL INSTITUTIONS (NOTE 15.B)</i>	<i>1,331,694</i>		<i>1,331,694</i>
<i>PRECIOUS METALS</i>	<i>7,525</i>	<i>–</i>	<i>7,525</i>
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	31,068,383	8,336,739	39,405,122
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME			
<i>FOREIGN CURRENCY SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME</i>			
Government securities	43,170,073	–	43,170,073
Guaranteed bonds	657,082	–	657,082
Securities of international financial institutions	2,541,175	–	2,541,175
Bank bonds with government guarantees	838,478	232,566	1,071,044
<i>TOTAL DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (NOTE 20)</i>	<i>47,206,808</i>	<i>232,566</i>	<i>47,439,374</i>
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	47,206,808	232,566	47,439,374
TOTAL	78,275,191	8,569,305	86,844,496

(All amounts are expressed in thousands of kuna)	31/12/2018		
	LEVEL 1	LEVEL 2	TOTAL
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS			
<i>FOREIGN CURRENCY SECURITIES HELD FOR TRADING</i>			
Government securities	22,194,327	12,445,864	34,640,191
Guaranteed bonds	1,671,505	–	1,671,505
Securities of international financial institutions	1,448,282	–	1,448,282
Bank bonds with government guarantees	298,237	348,929	647,166
<i>TOTAL SECURITIES HELD FOR TRADING (NOTE 15.A)</i>	<i>25,612,351</i>	<i>12,794,793</i>	<i>38,407,144</i>
<i>ASSETS UNDER MANAGEMENT WITH INTERNATIONAL FINANCIAL INSTITUTIONS (NOTE 15.B)</i>	<i>1,296,161</i>	<i>–</i>	<i>1,296,161</i>

(All amounts are expressed in thousands of kuna)	31/12/2018		
	LEVEL 1	LEVEL 2	TOTAL
<i>PRECIOUS METALS</i>	6,238	–	6,238
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	26,914,750	12,794,793	39,709,543
Financial assets at fair value through other comprehensive income			
Foreign currency securities at fair value through other comprehensive income			
Government securities	40,991,916	257,318	41,249,234
Securities of international financial institutions	2,221,105	–	2,221,105
Bank bonds with government guarantees	524,938	–	524,938
TOTAL DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (NOTE 20)	43,737,959	257,318	43,995,277
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	43,737,959	257,318	43,995,277
TOTAL	70,652,709	13,052,111	83,704,820

36.2 Financial assets and liabilities not measured at fair value

The comparison of book and fair values of loans and debt securities at amortised cost is presented in the following table.

(All amounts are expressed in thousands of kuna)	31/12/2019			
	LEVEL 1	LEVEL 2	TOTAL FAIR VALUE	BOOK VALUE
Loans	–	1,912,469	1,912,469	1,914,408
Debt securities at amortised cost	14,292,217	–	14,292,217	14,365,394

(All amounts are expressed in thousands of kuna)	31/12/2018			
	RAZINA 1	RAZINA 2	TOTAL FAIR VALUE	BOOK VALUE
Loans	–	2,027,992	2,027,992	2,029,317
Debt securities at amortised cost	693,107	–	693,107	682,112

Investments in equity securities are designated as financial assets at fair value through other comprehensive income and include investments in BIS shares, SWIFT shares and ECB paid-up capital. For these investments, the cost represents the best estimate of fair value.

Special drawing rights within Balances with the IMF are short-term assets translated into kuna using XDR exchange rate at the reporting date; hence, their book value may be regarded as their fair value. Membership quota and liabilities with the IMF have no contractual maturities and because of their nature, they are considered long-term instruments and their fair value cannot be reliably estimated.

The fair values of remaining financial assets and liabilities of the Croatian National Bank are approximately equal to the book values due to the short maturities of the instruments.

36.3 Classification of financial assets and liabilities

Classification of financial assets and liabilities for 2019

(All amounts are expressed in thousands of kuna)		INCOME STATEMENT					OTHER COMPREHENSIVE INCOME	
CATEGORY OF FINANCIAL ASSETS/ LIABILITIES	BOOK VALUE AS AT 31/12/2019	INTEREST INCOME CALCULATED USING THE EFFECTIVE INTEREST METHOD	OTHER INTER- EST INCOME	INTER- EST EX- PENSES	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	NET CHANGES IN FAIR VALUE	TRANSFERRED TO PROFIT OR LOSS
FINANCIAL ASSETS AT AMORTISED COST:*	64,344,651	192,749	–	– (175,822)	–	–	–	–
Cash and current accounts with other banks	7,351,114							
Deposits with other banks	15,321,900	62,608	–	– (56,687)	–	–	–	–
Loans	1,914,408	24,874	–	–	–	–	–	–
Reverse repo agreements	11,467,170	101,322	–	– (119,135)	–	–	–	–
Debt securities at amortised cost	14,365,394	3,945	–	–	–	–	–	–
Balances with the International Monetary Fund	9,428,524							
Other assets**	4,496,141	–	–	–	–	–	–	–
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME:	47,498,539	412,740	–	–	–	74,821	1,004,054	(74,821)
Debt securities at fair value through other comprehensive income	47,439,374	412,740	–	–	–	74,821	1,004,054	(74,821)
Equity securities at fair value through other comprehensive income – irrevocable election	59,165	–	–	–	–	–	–	–

(All amounts are expressed in thousands of kuna)			INCOME STATEMENT				OTHER COMPREHENSIVE INCOME	
CATEGORY OF FINANCIAL ASSETS/ LIABILITIES	BOOK VALUE AS AT 31/12/2019	INTEREST INCOME CALCULATED USING THE EFFECTIVE INTEREST METHOD	OTHER INTER- EST INCOME	INTER- EST EX- PENSES	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	NET CHANGES IN FAIR VALUE	TRANSFERRED TO PROFIT OR LOSS
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS:	39,405,122	-	169,471	-	(116,317)	-	-	-
<i>Held-for-trading securities</i>	38,065,903	-	169,471	-	(156,365)	-	-	-
<i>Non-trading financial assets mandatorily at fair value through profit or loss</i>	1,339,219	-	-	-	40,048	-	-	-
Assets under management with international financial institutions	1,331,694	-	-	-	38,762	-	-	-
Precious metals	7,525	-	-	-	1,286	-	-	-
FINANCIAL LIABILITIES AT AMORTISED COST:*	97,378,041	53,891	-	(149,164)	-	-	-	-
Due to banks and other financial institutions	74,624,796	6	-	-	-	-	-	-
Repo agreements	5,998,829	53,122	-	(89,310)	-	-	-	-
Due to the State and State institutions	6,712,594	732	-	(59,776)	-	-	-	-
Due to the International Monetary Fund	9,414,492	-	-	-	-	-	-	-
Other liabilities**	627,330	31	-	(78)	-	-	-	-

Classification of financial assets and liabilities for 2018

(All amounts are expressed in thousands of kuna)		INCOME STATEMENT				OTHER COMPREHENSIVE INCOME	
CATEGORY OF FINANCIAL ASSETS/ LIABILITIES	BOOK VALUE AS AT 31/12/2018	INTEREST INCOME CALCULATED USING THE EFFECTIVE INTEREST METHOD	OTHER INTER- EST INCOME	INTER- EST EX- PENSES	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	NET CHANGES IN FAIR VALUE TO PROFIT OR LOSS
FINANCIAL ASSETS AT AMORTISED COST:	56,303,187	100,556	—	(166,495)	—	—	—
Cash and current accounts with other banks	9,524,804	—	—	—	—	—	—
Deposits with other banks	11,426,141	6,438	—	(44,754)	—	—	—
Loans	2,029,317	16,028	—	—	—	—	—
Reverse repo agreements	21,278,988	75,659	—	(121,741)	—	—	—
Debt securities at amortised cost	682,112	2,431	—	—	—	—	—
Balances with the International Monetary Fund	9,248,636	—	—	—	—	—	—
Other assets*	2,113,189	—	—	—	—	—	—
FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME:	44,055,495	432,487	—	—	—	53,330	(54,904) (53,330)
Debt securities at fair value through other comprehensive income	43,995,277	432,487	—	—	—	53,330	(54,904) (53,330)
Equity securities at fair value through other comprehensive income – irrevocable election	60,218	—	—	—	—	—	—

(All amounts are expressed in thousands of kuna)		INCOME STATEMENT				OTHER COMPREHENSIVE INCOME	
CATEGORY OF FINANCIAL ASSETS/ LIABILITIES	BOOK VALUE AS AT 31/12/2018	INTEREST INCOME CALCULATED USING THE EFFECTIVE INTEREST METHOD	OTHER INTER- EST INCOME	INTER- EST EX- PENSES	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	NET RESULT FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	NET CHANGES IN FAIR VALUE TO PROFIT OR LOSS
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS:	39,709,543	-	135,722	-	(76,623)	-	-
<i>Held-for-trading securities</i>	38,407,144	-	135,722	-	(101,903)	-	-
<i>Non-trading financial assets mandatorily at fair value through profit or loss</i>	1,302,399	-	-	-	25,280	-	-
Assets under management with international financial institutions	1,296,161	-	-	-	25,391	-	-
Precious metals	6,238	-	-	-	(111)	-	-
FINANCIAL LIABILITIES AT AMORTISED COST:	91,570,573	56,935	-	(66,599)	-	-	-
Due to banks and other financial institutions	69,807,221	8	-	-	-	-	-
Repo agreements	9,219,306	54,382	-	(65,079)	-	-	-
Due to the State and State institutions	2,898,000	2,497	-	(1,520)	-	-	-
Due to the International Monetary Fund	9,230,974	-	-	-	-	-	-
Other liabilities*	415,072	48	-	-	-	-	-

* During the reporting period there were no effects of the derecognition of financial assets at amortised cost.

** Other assets include negative interest on repo agreements, and other liabilities include negative interest on financial assets.

Note 37 – Risk management

The Croatian National Bank manages international reserves of the Republic of Croatia based on the principles of liquidity and safety. The Bank maintains high liquidity of international reserves and appropriate risk exposures, and seeks to achieve a favourable return on its investments within the defined limits.

Risks inherent to managing international reserves consist primarily of financial risks such as credit risk, liquidity risk and market risk. However, attention is given also to operating risk.

Operating risk is the risk of loss due to inappropriate or inefficient internal processes, employees or systems or due to the events external to the Bank. Operating risk is managed by strict segregation of duties and responsibilities, formalised methodologies and procedures and by conducting regular internal and external audits.

Note 37.1 – Credit risk

Credit risk is the risk that the counterparty will not settle its liability i.e. the possibility that invested funds will not be recovered in full or within the planned schedule.

The Croatian National Bank manages its credit risk exposure by investing its international reserve funds into high-quality instruments with minimum risk, such as government bonds, government guaranteed bonds, bank bonds with government guarantees and guaranteed bonds, into instruments of international financial institutions with high credit rating and into both collateralised and non-collateralised deposits. Collateralised deposits represent deposits secured by government bonds in the amount equal to, or in excess of the value of the deposit. Uncollateralised deposits are invested only with central banks and international financial institutions.

Its assessment of counterparties' creditworthiness is based on ratings of major internationally recognized rating agencies (Moody's, Standard & Poor's, and Fitch).

International reserves placements are limited per types of issuer and per types of financial institutions, which diversifies credit risk.

The Croatian National Bank invests the international reserve funds in government bonds and government guaranteed bonds of countries rated Aaa to Baa3 (Moody's), guaranteed bonds with ratings from Aaa to Aa2, reverse repo agreements with commercial banks with ratings of Aaa to Baa3, deposits with

central banks rated Aaa to Baa3, instruments with international financial institutions rated Aaa to A2, and deposits placed with commercial banks rated Aaa to A3 for the purpose of carrying out foreign currency transactions.

Presentation of financial assets exposed to credit risk in the tables Maximum exposure to credit risk and credit risk by counterparty credit rating and Geographical concentration of credit risk (Notes 37.1.1 and 37.1.2) differ from the presentation in the Statement of Financial Position as they are based on management reports. Reconciliation is not practicable. Some of the differences are:

- Line item Deposits in Notes 37.1.1 and 37.1.2 includes line items Cash and current accounts with other banks, Deposits with other banks and Balances with the International Monetary Fund from the Statement of Financial Position. Additionally, deposits are split by currency and recipient (international financial institutions, foreign and domestic banks). Balances of deposits presented in Notes 37.1.1 and 37.1.2 include accrued negative interest, included in line item Other liabilities in the Statement of Financial Position.
- Securities are divided by financial asset category in the Statement of Financial Position, while they are additionally divided by issuer and currency in tables Maximum exposure to credit risk and credit risk by counterparty credit rating and Geographical concentration of credit risk.
- Line item Reverse repo agreements from the Statement of Financial Position is divided per currency in Notes 37.1.1 and 37.1.2 and includes accrued negative interest presented in line item Other liabilities in the Statement of Financial Position.
- Line item Other financial assets denominated in foreign currency and Other financial assets in kuna presented in Notes 37.1.1 and 37.1.2 are part of line item Other assets in the Statement of Financial Position.

37.1.1 Maximum exposure to credit risk and credit risk by counterparty credit rating

(All amounts are expressed in thousands of kuna)

	RATING (MOODY'S)	31/12/2019	31/12/2018
FOREIGN CURRENCY SECURITIES HELD FOR TRADING			
Government securities			
	Aaa	18,683,460	16,405,704
	Aa1	853,951	541,447
	Aa2	4,133,020	9,133,250
	Aa3	67,922	185,661
	A2	–	371,597
	Baa1	1,192,419	3,045,501
	Baa3	4,356,714	3,559,857
	AAA ^a	3,222,420	539,210
	AA+ ^b	–	37,247
	AA ^a	113,339	820,717
TOTAL GOVERNMENT SECURITIES		32,623,245	34,640,191
Guaranteed bonds			
	Aaa	2,892,683	1,671,505
	AAA ^a	523,757	–
TOTAL GUARANTEED BONDS		3,416,440	1,671,505
Securities of international financial institutions			
	Aaa	219,450	248,105
	Aa1	685,337	1,051,631
	No rating ^d	–	148,546
TOTAL SECURITIES OF INTERNATIONAL FINANCIAL INSTITUTIONS		904,787	1,448,282
Bank bonds with government guarantees			
	Aaa	798,931	423,764
	Aa1	322,500	223,402
Total bank bonds with government guarantees		1,121,431	647,166
TOTAL FOREIGN CURRENCY SECURITIES HELD FOR TRADING		38,065,903	38,407,144
FOREIGN CURRENCY SECURITIES AT AMORTISED COST			
Government securities			
	Aaa	822,150	79,168
	Aa1	650,268	–
	Aa2	1,326,726	–
	Aa3	1,538,187	–

(All amounts are expressed in thousands of kuna)

	RATING (MOODY'S)	31/12/2019	31/12/2018
	A2	2,211,561	–
	Baa1	3,771,556	–
	AAA ^e	784,369	257,788
	AA+ ^b	148,822	–
TOTAL GOVERNMENT SECURITIES		11,253,639	336,956
Guaranteed bonds			
	Aaa	975,132	–
	AAA ^b	222,629	–
TOTAL GUARANTEED BONDS		1,197,761	–
Securities of international financial institutions			
	Aaa	298,626	145,176
	Aa1	869,868	200,064
TOTAL SECURITIES OF INTERNATIONAL FINANCIAL INSTITUTIONS		1,168,494	345,240
Bank bonds with government guarantees			
	Aa1	753,187	–
TOTAL BANK BONDS WITH GOVERNMENT GUARANTEES		753,187	–
FOREIGN CURRENCY SECURITIES AT AMORTISED COST		14,373,081	682,196
<i>Expected credit losses</i>		<i>(7,687)</i>	<i>(84)</i>
TOTAL FOREIGN CURRENCY SECURITIES AT AMORTISED COST		14,365,394	682,112
FOREIGN CURRENCY DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME			
Government securities			
	Aaa	9,117,069	6,583,197
	Aa1	6,110,833	6,861,422
	Aa2	19,134,683	19,250,254
	Aa3	5,854,725	6,203,176
	A2	896,384	891,057
	AAA ^e	856,618	830,818
	AA+ ^b	612,663	597,032
	AA ^a	587,098	32,278
TOTAL GOVERNMENT SECURITIES		43,170,073	41,249,234
Guaranteed bonds			
	Aaa	657,082	–
TOTAL GUARANTEED BONDS		657,082	–

(All amounts are expressed in thousands of kuna)

	RATING (MOODY'S)	31/12/2019	31/12/2018
Securities of international financial institutions			
	Aaa	1,556,041	1,469,999
	Aa1	985,134	751,106
TOTAL SECURITIES OF INTERNATIONAL FINANCIAL INSTITUTIONS		2,541,175	2,221,105
Bank bonds with government guarantees			
	Aaa	232,566	
	Aa1	838,478	524,938
TOTAL BANK BONDS WITH GOVERNMENT GUARANTEES		1,071,044	524,938
FOREIGN CURRENCY DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME		47,439,374	43,995,277
TOTAL FOREIGN CURRENCY SECURITIES		99,870,671	83,084,533
FOREIGN CURRENCY REVERSE REPO AGREEMENTS			
	Aaa	6,637,485	7,395,964
	Aa1	–	2,594,708
	Aa2	807,767	3,146,014
	Aa3	731,316	1,004,569
	Baa1	2,155,779	5,440,351
	AAA ^e	187,272	777,228
	AAA ^a	193,328	–
	AA+ ^b	748,791	909,795
FOREIGN CURRENCY REVERSE REPO AGREEMENTS		11,461,738	21,268,629
Expected credit losses		(571)	(1,079)
TOTAL FOREIGN CURRENCY REVERSE REPO AGREEMENTS		11,461,167	21,267,550
FOREIGN CURRENCY DEPOSITS			
	Aaa	4,383,099	6,566,970
	Aa1	96	70
	Aa2	2,198,573	2,099,459
	Aa3	3,139	510
	A1	237	318
	A2	12,990,052	9,193,360
	A3	32	162
	No rating ^c	60	55
TOTAL DEPOSITS		19,575,288	17,860,904
Deposits with international financial institutions		No rating ^d	2,942,032
FOREIGN CURRENCY DEPOSITS		22,517,320	20,748,843

(All amounts are expressed in thousands of kuna)	RATING (MOODY'S)	31/12/2019	31/12/2018
<i>Expected credit losses</i>		(9,006)	(7,026)
TOTAL FOREIGN CURRENCY DEPOSITS		22,508,314	20,741,817
OTHER FOREIGN CURRENCY FINANCIAL ASSETS			
	Aaa	4,467,861	2,061,243
	Aa3	359	1,180
	A1	273	319
	A2	331	–
	Baa1	22	2,311
OTHER FOREIGN CURRENCY FINANCIAL ASSETS		4,468,846	2,065,053
<i>Expected credit losses</i>		–	–
TOTAL OTHER FOREIGN CURRENCY FINANCIAL ASSETS		4,468,846	2,065,053
KUNA LOANS			
	No rating	1,914,948	2,029,892
<i>Expected credit losses</i>		(540)	(575)
TOTAL LOANS IN KUNA		1,914,408	2,029,317
KUNA DEPOSITS			
Other deposits of domestic commercial banks			
	BBB– ^e	1,129	1,232
	No rating	1,817	4,136
KUNA DEPOSITS		2,946	5,368
<i>Expected credit losses</i>		(8)	(21)
TOTAL KUNA DEPOSITS		2,938	5,347
OTHER FINANCIAL ASSETS IN KUNA			
	No rating	34,821	55,700
<i>Expected credit losses</i>		(7,526)	(7,564)
TOTAL OTHER FINANCIAL ASSETS IN KUNA		27,295	48,136
TOTAL		140,253,639	129,241,753

^a The ratings according to Fitch Ratings and Standard&Poor's.

^b The ratings according to Standard & Poor's.

^c Demand funds with Clearstream.

^d Investments in the BIS and IMF which are not rated, but are considered institutions of high-credit score.

^e The ratings according to Fitch Ratings

37.1.2 Geographical concentration of credit risk

(All amounts are expressed in thousands of kuna)

AS AT 31 DECEMBER 2019

INSTRUMENT	EUROPODRUČJE	OSTALO	UKUPNO
Government securities	77,667,745	9,379,212	87,046,957
Guaranteed bonds	5,271,283	–	5,271,283
Securities of international financial institutions	3,910,446	704,010	4,614,456
Bank bonds with government guarantees	2,945,662	–	2,945,662
TOTAL FOREIGN CURRENCY SECURITIES	89,795,136	10,083,222	99,878,358
FOREIGN CURRENCY REVERSE REPO AGREEMENTS	6,210,319	5,251,419	11,461,738
Deposits	19,566,492	8,796	19,575,288
Deposits with international financial institutions	–	2,942,032	2,942,032
TOTAL FOREIGN CURRENCY DEPOSITS	19,566,492	2,950,828	22,517,320
OTHER FOREIGN CURRENCY FINANCIAL ASSETS	–	4,468,846	4,468,846
Loans in Croatia	–	1,914,948	1,914,948
Kuna deposits	–	2,946	2,946
Other financial assets in kuna	–	34,821	34,821
TOTAL 31 DECEMBER 2019	115,571,947	24,707,030	140,278,977
TOTAL EXPECTED CREDIT LOSSES			(25,338)
TOTAL			140,253,639

AS AT 31 DECEMBER 2018

INSTRUMENT	EUROPODRUČJE	OSTALO	UKUPNO
Government securities	69,007,855	7,218,526	76,226,381
Guaranteed bonds	1,671,505	–	1,671,505
Securities of international financial institutions	3,522,728	491,899	4,014,627
Bank bonds with government guarantees	1,172,104	–	1,172,104
TOTAL FOREIGN CURRENCY SECURITIES	75,374,192	7,710,425	83,084,617
FOREIGN CURRENCY REVERSE REPO AGREEMENTS	11,885,761	9,382,868	21,268,629
Deposits	17,855,781	5,123	17,860,904
Deposits with international financial institutions	–	2,887,939	2,887,939
TOTAL FOREIGN CURRENCY DEPOSITS	17,855,781	2,893,062	20,748,843
OTHER FOREIGN CURRENCY FINANCIAL ASSETS	–	2,065,053	2,065,053
LOANS IN CROATIA	–	2,029,892	2,029,892
KUNA DEPOSITS	–	5,368	5,368

OTHER FINANCIAL ASSETS IN KUNA	–	55,700	55,700
TOTAL 31 DECEMBER 2018	105,115,734	24,142,368	129,258,102
TOTAL EXPECTED CREDIT LOSSES			(16,349)
TOTAL			129,241,753

Note: The table shows gross carrying amount of financial instruments.

37.1.3 Model for the calculation of expected credit losses

The calculation of expected credit losses at the Croatian National Bank is made according to the following formula:

$$\text{ECL} = \text{EAD} \times \text{LGD} \times \text{PD}$$

where:

- **EAD** is exposure at default;
- **LGD** is loss given default;
- **PD** is probability of default.

In the ECLC application the CNB calculates the ECL at the lowest technically possible analytical level, taking into account the logic of granularity of the ECL calculation, but guided by the conservatism principle typical of central bank operations.

The estimate of ECL reflects an unbiased and probability weighted amount that is determined by the assessment of three possible scenarios (realistic, pessimistic and optimistic scenarios). According to peer review results, three different PD values are defined according to the realistic, pessimistic and optimistic scenario for ECL calculation. In the pessimistic scenario, the PD/ECL value is 25% higher than in the real scenario, whereas in the optimistic scenario it is 25% lower than in the realistic scenario.

EAD is the gross carrying amount of a financial instrument on the date of initial recognition, that is, on the date of the ECL calculation.

LGD or loss given default means the ratio of loss on exposure due to the default of the other contractual party and the exposure amount at the time of default. LGD determines the amount of the possible loss, that is, the part of the exposure that the CNB can lose.

PD is the probability of default of the other contractual party during a one-year period.

PD for the twelve-month period is calculated by means of three internally developed models:

1. internal model for the calculation of PD for foreign currency financial instruments that are part of international reserves;
2. internal model for the calculation of PD for kuna financial instruments;
3. internal model for other receivables.

PD for the lifetime period is calculated by means of the matrix multiplication concept, with the starting point being the calculated PD value for 12-month ECL calculation.

37.1.4 Changes in loss allowances for expected credit losses

CHANGES IN LOSS ALLOWANCES FOR EXPECTED CREDIT LOSSES 1 JANUARY – 31 DECEMBER 2019

(All amounts are expressed in thousands of kuna)

FINANCIAL ASSETS	LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 1 JANUARY 2019	(DECREASE) IN LOSS ALLOWANCE DURING THE PERIOD	INCREASE IN LOSS ALLOWANCE DURING THE PERIOD	NET EFFECT OF (DECREASE)/ INCREASE IN LOSS ALLOWANCES	LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 31 DECEMBER 2019
Cash and current accounts with other banks	297	(333)	240	(93)	204
Deposits with other banks	6,750	(29,217)	31,277	2,060	8,810
Loans	575	(663)	628	(35)	540
Reverse repo agreements	1,079	(5,886)	5,378	(508)	571
Debt securities at amortised cost	84	(1,112)	8,715	7,603	7,687
Financial assets at fair value through other comprehensive income – debt instruments	11,712	(2,317)	2,968	651	12,363
Other financial assets	7,564	(42)	4	(38)	7,526
TOTAL	28,061	(39,570)	49,210	9,640	37,701

Gains from and losses on loss allowances for expected credit losses are translated into kuna based on the exchange rate valid on the transaction date, while loss allowances for expected credit losses reported in foreign currencies are again translated at the date of the Statement of Financial Position using the exchange rate valid on that date. The total increase in loss allowances for expected credit losses in the reporting period is HRK 9,640 thousands. In the income statement, line item Decrease/(increase) in impairment shows an increase in loss allowances for expected credit losses in the amount of HRK 9,519 thousands (see Note 11), while net negative exchange differences in line items loss allowances for expected credit losses totalling HRK 121 thousands are shown in line item Net unrealised exchange differences (see Note 8).

CHANGES IN LOSS ALLOWANCES FOR EXPECTED CREDIT LOSSES 1 JANUARY – 31 DECEMBER 2018

(All amounts are expressed in thousands of kuna)

FINANCIAL ASSETS	LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 1 JANUARY 2019	(DECREASE) IN LOSS ALLOWANCE DURING THE PERIOD	INCREASE IN LOSS ALLOWANCE DURING THE PERIOD	NET EFFECT OF (DECREASE)/ INCREASE IN LOSS ALLOWANCES	LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 31 DECEMBER 2018
Cash and current accounts with other banks	758	(1,594)	1,133	(461)	297
Deposits with other banks	259	(7,024)	13,515	6,491	6,750
Loans	242	(339)	672	333	575
Reverse repo agreements	853	(4,687)	4,913	226	1,079
Debt securities at amortised cost	–	(9)	93	84	84
Financial assets at fair value through other comprehensive income – debt instruments	14,008	(3,763)	1,467	(2,296)	11,712
Other financial assets	7,603	(47)	8	(39)	7,564
TOTAL	23,723	(17,463)	21,801	4,338	28,061

Gains from and losses on loss allowances for expected credit losses are translated into kuna based on the exchange rate valid on the transaction date, while loss allowances for expected credit losses reported in foreign currencies are again translated at the date of the Statement of Financial Position using the exchange rate valid on that date. The total increase in loss allowances for expected credit losses in the reporting period is HRK 4,338 thousands. In the income statement, line item Decrease/(increase) in impairment shows an increase in loss allowances for expected credit losses in the amount of HRK 4,493 thousands (see Note 11), while net positive exchange differences in line items loss allowances for expected credit losses totalling HRK 155 thousands are shown in line item Net unrealised exchange differences (see Note 8).

37.1.5 Loss allowances for expected credit losses by the stage of credit quality of financial instruments

LOSS ALLOWANCES FOR EXPECTED CREDIT LOSSES BY THE STAGE OF CREDIT QUALITY OF FINANCIAL INSTRUMENTS IN 2019

(All amounts are expressed in thousands of kuna)

FINANCIAL ASSETS	LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 1 JANUARY 2019				LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 31 DECEMBER 2019			
	STAGE 1	STAGE 2	STAGE 3	TOTAL	STAGE 1	STAGE 2	STAGE 3	TOTAL
Cash and current accounts with other banks	297	–	–	297	204	–	–	204
Deposits with other banks	6,750	–	–	6,750	8,810	–	–	8,810
Loans	573	–	2	575	538	–	2	540
Reverse repo agreements	1,079	–	–	1,079	571	–	–	571
Debt securities at amortised cost	84	–	–	84	7,687	–	–	7,687
Financial assets at fair value through other comprehensive income – debt instruments	11,712	–	–	11,712	12,363	–	–	12,363
Other financial assets	74	–	7,490	7,564	36	–	7,490	7,526
TOTAL	20,569	–	7,492	28,061	30,209	–	7,492	37,701

LOSS ALLOWANCES FOR EXPECTED CREDIT LOSSES BY THE STAGE OF CREDIT QUALITY OF FINANCIAL INSTRUMENTS IN 2018

(All amounts are expressed in thousands of kuna)

FINANCIAL ASSETS	LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 1 JANUARY 2018				LOSS ALLOWANCE FOR EXPECTED CREDIT LOSSES AS AT 31 DECEMBER 2018			
	STAGE 1	STAGE 2	STAGE 3	TOTAL	STAGE 1	STAGE 2	STAGE 3	TOTAL
Cash and current accounts with other banks	758	–	–	758	297	–	–	297
Deposits with other banks	259	–	–	259	6,750	–	–	6,750
Loans	240	–	2	242	573	–	2	575
Reverse repo agreements	853	–	–	853	1,079	–	–	1,079
Debt securities at amortised cost	–	–	–	–	84	–	–	84
Financial assets at fair value through other comprehensive income – debt instruments	14,008	–	–	14,008	11,712	–	–	11,712
Other financial assets	113	–	7,490	7,603	74	–	7,490	7,564
TOTAL	16,231	–	7,492	23,723	20,569	–	7,492	28,061

Note: Financial assets in stage 3 are not secured by collateral.

Note 37.2 – Liquidity risk

Liquidity risk is the risk of inability to settle all the liabilities and obligations arising from the operations of the Croatian National Bank as they fall due. Hence, the Croatian National Bank has to ensure, through its strategy, sufficient liquid funds on a daily basis to settle all of its liabilities and commitments.

Liquidity risk is controlled by investing the international reserve funds into highly marketable bonds and partly in deposit instruments with short maturities.

Liquid funds include all assets that are convertible into cash within a period of one to three days. The Croatian National Bank invests international reserves into deposits with maturities of up to three months and into securities with maturities of less than ten years, provided that those securities are readily convertible into cash at any time.

At 31 December 2019, approximately 68% of net international reserves were liquid (2018: approximately 70% of net international reserves were liquid).

In the following tables, the financial liabilities of the Croatian National Bank are classified into relevant groupings by remaining contractual maturity from the reporting date. The tables have been drawn up based on the undiscounted cash flows of financial liabilities on the earliest date on which payment could be required and include both interest and principal cash flows, as well as future interest expenses.

(All amounts are expressed in thousands of kuna)	UP TO 1 MONTH	1 TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	TOTAL	CARRYING AMOUNT
AS AT 31 DECEMBER 2019							
LIABILITIES							
Banknotes and coins in circulation	38,734,616	–	–	–	–	38,734,616	38,734,616
Due to banks and other financial institutions	74,624,724	–	–	–	72	74,624,796	74,624,796
Repo agreements	6,000,453	–	–	–	–	6,000,453	5,998,829
Due to the State and State institutions	6,712,594	–	–	–	–	6,712,594	6,712,594
Due to the International Monetary Fund	–	–	–	–	9,414,492	9,414,492	9,414,492
Other liabilities	492,706	138,962	59,767	–	516	691,951	687,097
TOTAL LIABILITIES	126,565,093	138,962	59,767	–	9,415,080	136,178,902	136,172,424

(All amounts are expressed in thousands of kuna)	UP TO 1 MONTH	1 TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	TOTAL	CARRYING AMOUNT
AS AT 31 DECEMBER 2018							
LIABILITIES							
Banknotes and coins in circulation	35,046,160	–	–	–	–	35,046,160	35,046,160
Due to banks and other financial institutions	69,807,149	–	–	–	72	69,807,221	69,807,221
Repo agreements	9,219,390	–	–	–	–	9,219,390	9,219,306
Due to the State and State institutions	2,898,000	–	–	–	–	2,898,000	2,898,000
Due to the International Monetary Fund	–	–	–	–	9,230,974	9,230,974	9,230,974
Other liabilities	400,752	24,556	46,766	–	623	472,697	461,838
TOTAL LIABILITIES	117,371,451	24,556	46,766	–	9,231,669	126,674,442	126,663,499

Note 37.3 – Market risk

Market risk is the risk of fluctuations in fair value or future cash flows of a financial instrument due to changes in market prices. Market risk includes currency risk, interest rate risk and other price risks.

Foreign exchange risk (risk of changes in value of one currency against another) is the risk of fluctuation in fair value or future cash flows of a financial instrument due to changes in foreign exchange rates.

Interest rate risk is the risk of fluctuations in fair value or future cash flows of a financial instrument due to changes in market interest rates.

Other price risks include the risk of fluctuations in fair value or future cash flows of financial instruments due to changes in market prices that do not arise from interest rate or foreign exchange risk.

Note 37.3.1 – Foreign exchange risk

The Croatian National Bank holds most of its assets in foreign currencies, which exposes it to foreign exchange risk in terms of fluctuations in the exchange rates of the kuna against the euro and the US dollar, which affect the Income Statement and, consequently, the financial performance of the Croatian National Bank.

The Croatian National Bank takes on exposure to foreign exchange risk only in respect of the net international reserves, covering part of the reserves it manages in accordance with its own guidelines. A high proportion of the euro contributes to reducing volatility due to the stable exchange rate of the euro

against the kuna. Although VaR analysis for foreign exchange risk and various stress tests are made, the currency structure is not defined by these measures but primarily by the currency structure of debt and imports. Accordingly, VaR limits are not set, nor is back-testing implemented.

The portion of international reserves formed out of the allocated foreign exchange reserve requirement, the Ministry of Finance funds, repo deals and funds in Special Drawing Rights (XDR) is managed passively, based on the currency structure of foreign currency obligations; hence, there is no exposure to foreign exchange risk on this basis.

Currency VaR for a period of one year with a confidence level of 95% is HRK 3.6 billion.

37.3.1.1 Sensitivity analysis – impact of percentage fluctuations in exchange rates on the Income Statement

2019 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2019	USD	EUR
Exchange rate appreciation/depreciation	±5%	±1%
Impact of fluctuations in exchange rates on the Income Statement	1,004,136/(1,004,136)	1,074,532/(1,074,532)

The table above shows the sensitivity of the result of the CNB reported in the Income Statement for the year in the case of an increase/decrease in the EUR/HRK exchange rate by ±1% and in the case of an increase/decrease in the USD/HRK exchange rate by ±5%. Historically, the yearly volatility of the USD/HRK exchange rate has been five times higher than the EUR/HRK exchange rate volatility.

A positive figure denotes an increase in the result of the Income Statement if the Croatian kuna exchange rate appreciates against the relevant currency by the percentages specified above (i.e. the kuna value depreciates in relation to the relevant currency), while the negative figure denotes a decrease in the result of the Income Statement if the Croatian kuna exchange rate depreciates against the relevant currency (i.e. the kuna value appreciates in relation to relevant currency).

In case of a 1% decrease in the EUR/HRK exchange rate as at 31 December 2019, the result of the CNB reported in the Income Statement for the year would be lower by approximately HRK 1,074,532 thousands, while for a 5% decrease in the USD/HRK exchange rate, the result would be lower by approximately HRK 1,004,136 thousands.

Calculation methodology

The amount of the net euro and net US dollar international reserves as at balance sheet date is multiplied by the difference between the EUR/HRK exchange rate or the USD/HRK exchange rate valid at that date and those rates increased/decreased by the relevant percentages.

2018 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2018	USD	EUR
Exchange rate appreciation/depreciation	±5%	±1%
Impact of fluctuations in exchange rates on the Income Statement	816,681/(816,681)	1,010,146/(1,010,146)

37.3.1.2 CNB exposure to foreign exchange risk – analysis of assets and liabilities by currency

(All amounts are expressed in thousands of kuna)

	EUR	USD	XDR	OTHER FOREIGN CURRENCIES	HRK	TOTAL
AS AT 31 DECEMBER 2019						
ASSETS						
Cash and current accounts with other banks	7,341,123	4,283	–	5,344	364	7,351,114
Deposits with other banks	14,772,299	546,663	–	–	2,938	15,321,900
Financial assets at fair value through profit or loss	32,265,349	7,132,248	–	–	7,525	39,405,122
Loans	–	–	–	–	1,914,408	1,914,408
Reverse repo agreements	9,274,570	2,192,600	–	–	–	11,467,170
Debt securities at amortised cost	14,365,394	–	–	–	–	14,365,394
Balances with the International Monetary Fund	–	–	9,428,524	–	–	9,428,524
Debt securities at fair value through other comprehensive income	35,297,696	12,141,678	–	–	–	47,439,374
Equity securities at fair value through other comprehensive income – irrevocable election	–	–	–	–	59,165	59,165
Investments accounted for using the equity method	–	–	–	–	25,736	25,736
Other assets	4,471,050	9	–	1	536,340	5,007,400
Property, plant, equipment and intangible assets	–	–	–	–	620,824	620,824
TOTAL ASSETS	117,787,481	22,017,481	9,428,524	5,345	3,167,300	152,406,131

(All amounts are expressed in thousands of kuna)	EUR	USD	XDR	OTHER FOREIGN CURRENCIES	HRK	TOTAL
LIABILITIES						
Banknotes and coins in circulation	–	–	–	–	38,734,616	38,734,616
Due to banks and other financial institutions	4,467,861	–	–	–	70,156,935	74,624,796
Repo agreements	4,065,227	1,933,602	–	–	–	5,998,829
Due to the State and State institutions	59,153	6,336	–	4,514	6,642,591	6,712,594
Due to the International Monetary Fund	–	–	9,414,492	–	–	9,414,492
Other liabilities	17,259	15	6,422	15	663,386	687,097
TOTAL LIABILITIES	8,609,500	1,939,953	9,420,914	4,529	116,197,528	136,172,424
NET POSITION	109,177,981	20,077,528	7,610	816	(113,030,228)	16,233,707

AS AT 31 DECEMBER 2018**ASSETS**

Cash and current accounts with other banks	9,518,562	3,783	–	2,106	353	9,524,804
Deposits with other banks	10,986,223	434,571	–	–	5,347	11,426,141
Financial assets at fair value through profit or loss	32,471,228	7,232,077	–	–	6,238	39,709,543
Loans	–	–	–	–	2,029,317	2,029,317
Reverse repo agreements	20,841,834	437,154	–	–	–	21,278,988
Debt securities at amortised cost	682,112	–	–	–	–	682,112
Balances with the International Monetary Fund	–	–	9,248,636	–	–	9,248,636
Debt securities at fair value through other comprehensive income	35,634,483	8,360,794	–	–	–	43,995,277
Equity securities at fair value through other comprehensive income – irrevocable election	–	–	–	–	60,218	60,218
Investments accounted for using the equity method	–	–	–	–	23,617	23,617
Other assets	2,066,974	17	–	–	510,246	2,577,237
Property, plant, equipment and intangible assets	–	–	–	–	579,046	579,046
TOTAL ASSETS	112,201,416	16,468,396	9,248,636	2,106	3,214,382	141,134,936

(All amounts are expressed in thousands of kuna)	EUR	USD	XDR	OTHER FOREIGN CURRENCIES	HRK	TOTAL
LIABILITIES						
Banknotes and coins in circulation	–	–	–	–	35,046,160	35,046,160
Due to banks and other financial institutions	2,061,243	–	–	–	67,745,978	69,807,221
Repo agreements	9,091,635	127,671	–	–	–	9,219,306
Due to the State and State institutions	23,467	6,965	–	1,229	2,866,339	2,898,000
Due to the International Monetary Fund	–	–	9,230,974	–	–	9,230,974
Other liabilities	22,281	18	10,429	2	429,108	461,838
TOTAL LIABILITIES	11,198,626	134,654	9,241,403	1,231	106,087,585	126,663,499
NET POSITION	101,002,790	16,333,742	7,233	875	(102,873,203)	14,471,437

Note: Line items of the Statement of financial position are shown at net carrying amount (minus expected credit losses), as presented in the Statement of financial position.

Note 37.3.2 – Interest rate risk

Interest rate risk is the risk of a decline in the value of the Croatian National Bank's foreign currency portfolios of international reserves due to possible changes in interest rates on the fixed-yield instrument markets.

Net international reserves, which are managed in accordance with its own guidelines, are invested in trading and investment portfolios. An investment portfolio may be formed as a portfolio measured at fair value through other comprehensive income and as a portfolio measured at amortised cost that serve as a long-term source of stable income and are of long average maturity.

The Croatian National Bank has, through the Income Statement, an open exposure to interest rate risk only with the trading portfolios, while with the investment portfolios, it almost has no exposure to interest rate risk.

Trading portfolios have short duration, and thus interest rate risk is minimised. The portfolio measured at amortised cost, from the standpoint of interest rate risk, has no effect on the Income Statement, while securities of the portfolio measured at fair value through other comprehensive income are, generally, sold only in situations favourable to the CNB. However, regardless of that, even for portfolios measured at fair value through other comprehensive income, their duration and interest rate risk are taken into account.

The part of the reserves that consists of the Ministry of Finance funds, the funds based on repo agreements with banks, swap interventions in the domestic foreign exchange market, the membership in the IMF and other property owned by other legal entities, the CNB operates in accordance with commitments, in order to protect it against interest rate risk.

37.3.2.1 Sensitivity analysis – exposure of the CNB's net international reserves to fluctuations in interest rates

2019 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2019	USD	EUR
Yield curve increase/decrease	±1 b. p.	±1 b. p.
Effect of a change in the level of the yield curve on the financial result	(529)/529	(3,300)/3,300

Should as at 31 December 2019 the entire USD yield curve increase by 1 basis point (0.01%), the result of the Croatian National Bank reported in the Income Statement for the year would be lower by approximately HRK 529 thousands, while in the case of the EUR yield curve increasing by 1 basis point, the result would be lower by approximately HRK 3,300 thousands.

For a 1 basis point decrease of the yield curve, the result reported in the Income Statement would be higher by approximately the same amounts.

Calculation methodology

The values of USD and EUR trade portfolios as at 31 December 2019 were multiplied by modified duration and by 1 basis point (0.01%). Modified duration denotes by how many basis points the value of the portfolio will decrease should the interest rate curve increase by 1 percentage point.

2018 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2018	USD	EUR
Yield curve increase/decrease	±1 b. p.	±1 b. p.
Effect of a change in the level of the yield curve on the financial result	(445)/445	(3,602)/3,602

37.3.2.2 Interest rate risk analysis

(All amounts are expressed in thousands of kuna)	UP TO 1 MONTH	1 TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	NON-INTER-EST BEARING	TOTAL	AVERAGE EIR AS AT 31/12
AS AT 31 DECEMBER 2019								
ASSETS								
Cash and current accounts with other banks	4,387,522	–	–	–	–	2,963,592	7,351,114	–0.62
Deposits with other banks	12,673,261	2,652,995	–	–	–	(4,356)	15,321,900	–0.42
Financial assets at fair value through profit or loss	37,972,622	–	–	–	–	1,432,500	39,405,122	–0.10
Loans	–	62,000	27,000	1,792,000	35	33,373	1,914,408	1.22
Reverse repo agreements	11,466,449	–	–	–	–	721	11,467,170	–0.09
Debt securities at amortised cost	–	–	–	2,322,360	11,985,999	57,035	14,365,394	0.06
Balances with the International Monetary Fund	2,803,820	–	–	–	–	6,624,704	9,428,524	0.74
Debt securities at fair value through other comprehensive income	47,174,201	–	–	–	–	265,173	47,439,374	1.01
Equity securities at fair value through other comprehensive income – irrevocable election	–	–	–	–	–	59,165	59,165	–
Investments accounted for using the equity method	–	–	–	–	–	25,736	25,736	–
Other assets	–	–	–	–	–	5,007,400	5,007,400	–
Property, plant, equipment and intangible assets	–	–	–	–	–	620,824	620,824	–
TOTAL ASSETS	116,477,875	2,714,995	27,000	4,114,360	11,986,034	17,085,867	152,406,131	–
LIABILITIES								
Banknotes and coins in circulation	–	–	–	–	–	38,734,616	38,734,616	–
Due to banks and other financial institutions	4,467,861	–	–	–	–	70,156,935	74,624,796	–
Repo agreements	5,997,962	–	–	–	–	867	5,998,829	0.14
Due to the State and State institutions	4,897,969	–	–	–	–	1,814,625	6,712,594	0.30
Due to the International Monetary Fund	2,797,255	–	–	–	–	6,617,237	9,414,492	0.74
Other liabilities	–	–	–	–	–	687,097	687,097	–
TOTAL LIABILITIES	18,161,047	–	–	–	–	118,011,377	136,172,424	–
NET POSITION	98,316,828	2,714,995	27,000	4,114,360	11,986,034	(100,925,510)	16,233,707	–

(All amounts are expressed in thousands of kuna)	UP TO 1 MONTH	1 TO 3 MONTHS	3 MONTHS TO 1 YEAR	1 TO 5 YEARS	OVER 5 YEARS	NON-INTER-EST BEARING	TOTAL	AVERAGE EIR AS AT 31/12
AS AT 31 DECEMBER 2018								
ASSETS								
Cash and current accounts with other banks	6,568,757	–	–	–	–	2,956,047	9,524,804	–0.53
Deposits with other banks	5,731,651	5,694,631	–	–	–	(141)	11,426,141	–0.31
Financial assets at fair value through profit or loss	38,317,061	–	–	–	–	1,392,482	39,709,543	0.12
Loans	–	–	–	2,015,500	41	13,776	2,029,317	1.24
Reverse repo agreements	16,816,159	4,463,460	–	–	–	(631)	21,278,988	–0.49
Debt securities at amortised cost	–	–	–	–	679,403	2,709	682,112	0.43
Balances with the International Monetary Fund	2,753,217	–	–	–	–	6,495,419	9,248,636	1.10
Debt securities at fair value through other comprehensive income	43,756,015	–	–	–	–	239,262	43,995,277	0.96
Equity securities at fair value through other comprehensive income – irrevocable election	–	–	–	–	–	60,218	60,218	–
Investments accounted for using the equity method	–	–	–	–	–	23,617	23,617	–
Other assets	–	–	–	–	–	2,577,237	2,577,237	–
Property, plant, equipment and intangible assets	–	–	–	–	–	579,046	579,046	–
TOTAL ASSETS	113,942,860	10,158,091	–	2,015,500	679,444	14,339,041	141,134,936	–
LIABILITIES								
Banknotes and coins in circulation	–	–	–	–	–	35,046,160	35,046,160	–
Due to banks and other financial institutions	2,061,243	–	–	–	–	67,745,978	69,807,221	–
Repo agreements	9,219,130	–	–	–	–	176	9,219,306	–0.69
Due to the State and State institutions	2,022,914	–	–	–	–	875,086	2,898,000	0.00
Due to the International Monetary Fund	2,742,648	–	–	–	–	6,488,326	9,230,974	1.10
Other liabilities	–	–	–	–	–	461,838	461,838	–
TOTAL LIABILITIES	16,045,935	–	–	–	–	110,617,564	126,663,499	–
NET POSITION	97,896,925	10,158,091	–	2,015,500	679,444	(96,278,523)	14,471,437	–

Note: Line items of the Statement of financial position are shown at net carrying amount (minus expected credit losses), as presented in the Statement of financial position. Accrued interest and expected credit losses are shown in column Non-interest bearing.

Fixed interest rate is charged on presented interest bearing amounts, except on the part of the position Cash and current accounts with other banks, amounting to HRK 4,387,522 thousands (31 December 2018: HRK 6,568,757 thousands), and the part of the position Financial assets at fair value through profit or loss (floaters) in the amount of HRK 320,221 thousands (31 December 2018: HRK 715,290 thousands), as well as on the part of the position Due to the State and State institutions, amounting to HRK 4,897,969 thousands (31 December 2018: HRK 2,022,914 thousands), on which variable floating rate is charged.

Note 37.3.3 – Other price risks

The Croatian National Bank is exposed to other price risks on funds entrusted to the management of international financial institutions and precious metals since price risks affect the change in value of these financial instruments.

37.3.3.1 Sensitivity analysis – impact of changes in prices of financial instruments on the Income Statement

2019 Sensitivity analysis – funds entrusted to the management of international financial institutions

(All amounts are expressed in thousands of kuna)

2019

Financial assets price exposed to price risk increase/decrease	±1%
Effect of change in the level of price on the Income Statement	13,317/(13,317)

The table shows the sensitivity of the Croatian National Bank Income Statement result in the case of a rise or fall of prices of financial instruments by ±1%.

A positive number implies an increase in the Income Statement if there is an increase in the prices of financial instruments by the selected percentage, while a negative number implies a reduction in the Income Statement if prices of financial instruments fall.

In the case of increase in prices of a financial instrument by 1% compared to the prices recorded on 31 December 2019, the result of Croatian National Bank in the Income Statement would be higher by approximately HRK 13,317 thousands, while the fall in prices by 1% would result in the Income Statement being lower by approximately HRK 13,317 thousands.

2019 Sensitivity analysis – precious metals

(All amounts are expressed in thousands of kuna)

2019

Financial assets price exposed to price risk increase/decrease	±5%
Effect of change in the level of price on the Income Statement	376/(376)

The table shows the sensitivity of the Croatian National Bank Income Statement result in the case of a rise or fall of prices of precious metals by $\pm 5\%$.

A positive number implies an increase in the Income Statement if there is an increase in the prices of financial instruments by the selected percentage, while a negative number implies a reduction in the Income Statement if prices of financial instruments fall.

In the case of increase in prices of precious metals by 5% compared to the prices recorded on 31 December 2019, the result of Croatian National Bank in the Income Statement would be higher by approximately HRK 376 thousands, while the fall in prices by 5% would result in the Income Statement being lower by approximately HRK 376 thousands.

Calculation methodology

Investments in financial assets exposed to price risks as at 31 December 2019 in the balance sheet has been increased or reduced by the selected percentage change in the price of financial instruments.

2018 Sensitivity analysis – funds entrusted to the management of international financial institutions

(All amounts are expressed in thousands of kuna)

2018

Financial assets price exposed to price risk increase/decrease	$\pm 1\%$
Effect of change in the level of price on the Income Statement	12,962/(12,962)

2018 Sensitivity analysis – precious metals

(All amounts are expressed in thousands of kuna)

2018

Financial assets price exposed to price risk increase/decrease	$\pm 5\%$
Effect of change in the level of price on the Income Statement	312/(312)

Note 38 – Related parties

While performing regular activities, the Croatian National Bank enters into transactions with related parties. In accordance with IAS 24 Related Party Disclosures, related parties are the State and state bodies of the Republic of Croatia, the Croatian Monetary Institute and key management of the Croatian

National Bank. For the purpose of disclosure in this note, companies and other legal entities owned by the Republic of Croatia (including credit institutions) are not considered to be related parties. Transactions with related parties took place at normal market conditions.

a) Relations with the State and State bodies of the Republic of Croatia

The Croatian National Bank is in the exclusive ownership of the Republic of Croatia, but in achieving its objective and in carrying out its tasks the Croatian National Bank is independent and autonomous.

In relations with the State bodies of the Republic of Croatia, the Croatian National Bank acts as a depository institution, that is, keeps the accounts of the Republic of Croatia and executes payment transactions across these accounts. Under market conditions, the Croatian National Bank can perform fiscal agency services for the Republic of Croatia related to:

- issuance of debt securities of the Republic of Croatia, as a registrar or as a transfer agent of the entire issuance,
- payment of the amount of principal, interest and other charges related to securities,
- other issues associated with these operations, if they are consistent with the objective of the Croatian National Bank.

Relations with the Croatian State and Croatian State bodies are presented in the following table:

(All amounts are expressed in thousands of kuna)	2019		2018	
	STATE	STATE ENTITIES	STATE	STATE ENTITIES
ASSETS				
Other assets	1,690	424	1,788	246
TOTAL	1,690	424	1,788	246
LIABILITIES				
Deposits	5,089,638	1,621,585	2,174,061	723,938
Accrued interest and other liabilities	118,780	–	–	–
TOTAL	5,208,418	1,621,585	2,174,061	723,938
REVENUES				
Other interest income	732	–	2,497	–
TOTAL	732	–	2,497	–
EXPENDITURE				
Interest expenses	59,776	–	1,520	–
TOTAL	59,776	–	1,520	–

State bodies that are considered related parties are the State Agency for Deposit Insurance and Bank Resolution and the Croatian Health Insurance Fund.

b) Associated entities

The investment of the Croatian National Bank in the Croatian Monetary Institute represents the investment in an associate in accordance with IAS 28. The share of ownership of the Croatian National Bank in the Croatian Monetary Institute capital is 42.6%. Detailed disclosures on the investment in an associate are presented in Note 22.

Relations with the Croatian Monetary Institute are presented in the following table:

(All amounts are expressed in thousands of kuna)	2019	2018
ASSETS		
Investments accounted for using the equity method	25,736	23,617
Other assets	52,447	14,846
TOTAL	78,183	38,463
LIABILITIES		
Other liabilities	–	167
TOTAL	–	167
REVENUES		
Gains in the alignment of investments in the Croatian Monetary Institute	2,479	3,407
Other revenues	11	76
TOTAL	2,490	3,483
EXPENDITURE		
Losses from the alignment of investments in the Croatian Monetary Institute	360	–
Minting of Kuna and Lipa coins*	79,211	76,386
Other	541	124
TOTAL	80,112	76,510

* Total coins production cost invoiced by the Croatian Monetary Institute in the reporting period. The presented costs differ from costs recognised in profit or loss in the reporting period, since the cost of minting coins are recognised in the Income Statement in accordance with the cost deferral policy (refer to Note 10).

c) Key management of the Croatian National Bank

The Council of the Croatian National Bank is responsible for the achievement of the objective and performance of tasks of the Croatian National Bank. The Council of the Croatian National Bank establishes policies related to the activities of the Croatian National Bank. In line with the aforementioned, key management of the Croatian National Bank is composed of members of the Council of the Croatian National Bank.

The Council of the Croatian National Bank comprises Governor, Deputy Governor and six Vicegovernors.

Short-term compensations to the key management of the Croatian National Bank for 2019 amounted to HRK 9,201 thousands, of which HRK 1,311 thousands refers to pension insurance contributions (2018: HRK 8,731 thousands, of which HRK 1,235 thousands refers to pension insurance contributions).

Provisions for employee benefits of the key management of the Croatian National Bank amount to HRK 475 thousands (2018: HRK 415 thousands).

Note 39 – Events after the reporting period

As a result of the departure of the United Kingdom from the European Union on 31 January 2020 and the consequent withdrawal of the Bank of England from the European System of Central Banks, the weightings assigned to the remaining NCBs in the key for subscription to the ECB's capital were adjusted with effect from 1 February 2020 as follows:

Table 1: The adjustment of the key for subscription to the capital of the ECB as of 1 February 2020

NCB	KEY FOR SUBSCRIPTION TO THE ECB'S CAPITAL	
	UNTIL 31 JANUARY 2020 (%)	FROM 1 FEBRUARY 2020 (%)
Nationale Bank van België/ Banque Nationale de Belgique	2.5280	2.9630
Deutsche Bundesbank	18.3670	21.4394
Eesti Pank	0.1968	0.2291
Central Bank of Ireland	1.1754	1.3772
Bank of Greece	1.7292	2.0117
Banco de España	8.3391	9.6981
Banque de France	14.2061	16.6108

NCB	KEY FOR SUBSCRIPTION TO THE ECB'S CAPITAL	
	UNTIL 31 JANUARY 2020 (%)	FROM 1 FEBRUARY 2020 (%)
Banca d'Italia	11.8023	13.8165
Central Bank of Cyprus	0.1503	0.1750
Latvijas Banka	0.2731	0.3169
Lietuvos bankas	0.4059	0.4707
Banque centrale du Luxembourg	0.2270	0.2679
Central Bank of Malta	0.0732	0.0853
De Nederlandsche Bank	4.0677	4.7662
Oesterreichische Nationalbank	2.0325	2.3804
Banco de Portugal	1.6367	1.9035
Banka Slovenije	0.3361	0.3916
Národná banka Slovenska	0.8004	0.9314
Suomen Pankki – Finlands Bank	1.2708	1.4939
SUBTOTAL FOR EURO AREA NCBS	69.6176	81.3286
Българска народна банка (Bulgarian National Bank)	0.8511	0.9832
Česká národní banka	1.6172	1.8794
Danmarks Nationalbank	1.4986	1.7591
Hrvatska narodna banka	0.5673	0.6595
Magyar Nemzeti Bank	1.3348	1.5488
Narodowy Bank Polski	5.2068	6.0335
Banca Națională a României	2.4470	2.8289
Sveriges Riksbank	2.5222	2.9790
Bank of England	14.3374	–
SUBTOTAL FOR NON-EURO AREA NCBS	30.3824	18.6714
TOTAL	100.00	100.00

The European Central Bank kept its subscribed capital unchanged at EUR 10,825 million after the Bank of England's withdrawal from the European System of Central Banks. The share of the Bank of England in the ECB's subscribed capital, which stood at 14.3%, was reallocated among both euro area and remaining non-euro area NCBs. Accordingly, the share of the Croatian National Bank in the ECB's subscribed capital increased from 0.5673% to 0.6595%. As a result, the Croatian National Bank paid up its increased subscription to the ECB's capital of EUR 374,274.62 in 2020.

After 31 December 2019 there were no other significant events that would have an impact on the financial statements of the Croatian National Bank.

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Abbreviations and symbols

Abbreviations

AIS	account information service
AnaCredit	analytical credit database
API	application programming interface
AQR	asset quality review
BIS	Bank for International Settlements
bn	billion
CBDC	central bank digital currency
CBS	Croatian Bureau of Statistics
CDCC	Central Depository and Clearing Company
CHF	Swiss franc
CIR	cost-to-income ratio
CLVPS	Croatian Large Value Payment System
CNB	Croatian National Bank
CompNet	Competitiveness Research Network
CPII	Croatian Pension Insurance Institute
CSDB	Centralised Securities Database
DLT	distributed ledger technology
DWH	Data Warehouse
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EEA	European Economic Area
EFC	Economic and Financial Committee
EFTPOS	electronic funds transfer at point of sale
ESCB	European System of Central Banks

ESM	European Stability Mechanism
ESRB	European Systemic Risk Board
EU	European Union
EUR	euro
EuroNCS	Euro National Clearing System
Fed	Federal Reserve System
FINA	Financial Agency
FinTech	financial technology
GDP	gross domestic product
GVA	gross value added
HANFA	Croatian Financial Services Supervisory Agency
HFCN	Household Finance and Consumption Network
HP	Croatian Post
HRK	Croatian kuna
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IMFC	International Monetary and Financial Committee
IReF	Integrated Reporting Framework
IT	information technology
LCR	liquidity coverage ratio
m	million
MoF	Ministry of Finance
ML/TF	money laundering/terrorist financing
MREL	minimum requirement for own funds and eligible liabilities
NCS	National Clearing System
NPE	non-performing exposures
NPL	non-performing loans
NPLR	non-performing loans ratio
O-SIIs	other systemically important institutions
PIS	payment initiation service
PSD2	Second Payment Services Directive
RC	Republic of Croatia
RIAD	Register of Institutions and Affiliates Data
RIAD TS	RIAD transaction system
ROAA	return on average assets
ROAE	return on average equity
SCT	SEPA Credit Transfer
SCTInst	SEPA Credit Transfer Instant

SDR	special drawing rights
SEPA	Single Euro Payment Area
SGRE	Sub-Group on Resolution Execution
SGRPP	Sub-Group on Resolution Planning Preparedness
SHSDB	Securities Holdings Statistics Database
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
TARGET2	Trans-European Automated Real-time Gross settlement Express Transfer system
TARGET2-HR	national component of the TARGET2 system
TIPS	TARGET Instant Payment Settlement
USA	United States of America
USD	US dollar

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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