



ANNUAL REPORT 2016

CROATIAN NATIONAL BANK

ZAGREB, JUNE 2017

PUBLISHER

Croatian National Bank
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Trg hrvatskih velikana 3, 10000 Zagreb
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www.hnb.hr

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

Any additional corrections that might be required will be made in the website version.

ISSN 1334-0107 (online)



HNB

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The seat of the Croatian National Bank is situated on Trg hrvatskih velikana. The building is the work of the renowned Croatian architect Viktor Kovačić (1874-1924).

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CNB Council Meeting Hall at the seat of the
Croatian National Bank

Foreword



Boris Vujčić

Governor

Lectures for high school students hosted by the Croatian National Bank almost always begin with the question: What comes to your mind when someone says “Croatian National Bank”? Students' responses include: money, kuna, lipa, bank, Governor, savings, loans, euro.... Only rarely mentioned are concepts such as inflation, financial stability, supervision, risk, or banking crisis. I am inclined to believe that this is because the students are young people growing up at a time of economic stability, a period unaware of high inflation or severe banking crises and their effects on individuals, and their income and savings. They take financial stability for granted and do not associate it with the CNB. However, financial system stability is not, unfortunately, a given, as can be learned from our and others' immediate and distant past. The objective of the CNB is to attain that stability, i.e. the stability of prices, the exchange rate and the banking system, while its maintenance is a very complex task that requires a competent, committed, resolute and independent central bank. The Croatian National Bank has been successfully accomplishing that task for a number of years. In 2016, CNB actions continued to ensure the stability of prices, the exchange rate and the banking system – the main preconditions for achieving the economic and other strategic goals of our country.

The Croatian economy recorded sound growth in 2016, GDP growth picked up to 2.9% and was accompanied with an improvement in labour market indicators, a lending recovery, a sustained surplus in the current account and a return of inflation to a positive territory. The economic recovery was reinforced by the gradually stronger effects of EU accession, evident in the large contribution of exports to economic growth and more

abundant inflows from EU funds, as well as by developments in the domestic market, reflected in growing consumer and business confidence accompanied by intensified consumption and investment.

The CNB has supported the economic recovery by an increasingly expansionary monetary policy stance. It introduced structural repo operations that provided banks with long-term kuna funds on favourable conditions, while the policy of preventing the kuna from strengthening by foreign exchange purchases generated large amounts of additional kuna liquidity. Monetary policy thereby contributed to more favourable financing conditions for the economy, consumers and the government and to the maintenance of exchange rate stability. Historically low interest rates and the growing demand provided a boost to the recovery in lending, particularly in the corporate segment, as well as the segment of kuna loans to both enterprises and households. The Croatian National Bank ensured financial stability, i.e. the stability of prices, the exchange rate and the banking system, so that Croatian citizens and enterprises could feel secure about the value of their income, deposits and financial liabilities, which is a key prerequisite for designing the future of each individual and entrepreneur. These will remain the main objectives of the central bank in the future.

Consumer protection is another area in which the CNB put more efforts in 2016. It participated in the drafting of the legislative proposals aimed at strengthening the position of consumers and raising their awareness. The CNB promptly processed numerous consumer complaints, using the information obtained systematically to improve bank practices in dealing with consumers. However, even a perfectly designed system of consumer protection will not work in practice if consumers themselves fail to make informed decisions. An internationally comparable survey of financial literacy, in which the CNB also took part, shows that there is considerable room for improvement, particularly among the young. Apart from working on financial literacy together with partner institutions, the Croatian National Bank took a number of actions on its own – including numerous lectures and workshops for students, regular publications

and specific materials for consumers, and regular public statements by CNB officials that enhanced risk awareness. In 2016, almost 2,000 schoolchildren and undergraduate students visited the CNB in order to get acquainted with the central bank's operations and learn more about personal finance management. The Croatian National Bank intends to further step up its efforts regarding financial literacy as it is a piece of the mosaic that is necessary to create a clear horizon for the Croatian economic future.

Boris Vujčić





HNB

The Croatian National Bank in 2016

The Croatian National Bank is the central bank of the Republic of Croatia. The primary objective of the CNB is the maintenance of price stability and the stability of the financial system as a whole.

The expansionary monetary policy stance was in early 2016 further strengthened by the introduction of structural repo operations that provided banks with long-term kuna liquidity. The CNB placed kuna funds to banks for a four-year period at favourable interest rates, in order to stimulate a decrease in long-term interest rates and lending in kuna. At four auctions held in 2016, the CNB sold to banks an approximate HRK 1bn. The interest rate was 1.8% at the first two and 1.4% at the other two auctions. The CNB also continued to place short-term kuna funds to banks for seven-day periods through regular weekly reverse repo operations. A net foreign currency purchase of EUR 866.5m created HRK 6.5bn. The CNB's expansionary monetary policy is primarily reflected in the large kuna liquidity surplus, averaging HRK 7.6bn in 2016, which is an increase of almost HRK 1bn from 2015 and seven times the amount recorded in 2008, the year preceding the crisis.



View from the CNB building onto Trg hrvatskih velikana

The total international reserves of the CNB stood at EUR 13.5bn at the end of 2016. Net international reserves, which exclude the foreign currency component of reserve requirements, special drawing rights with the IMF, the funds of the

The Croatian National Bank executes monetary policy, manages international reserves of the Republic of Croatia, issues banknotes and coins, issues and revokes authorisations for the work of credit institutions, credit unions, payment institutions and electronic money institutions, and supervises their operations. The Croatian National Bank also issues authorisations of authorised currency exchange offices and carries out a range of activities on behalf of credit institutions: it keeps the accounts of credit institutions and executes payment transactions across these accounts, grants loans to credit institutions and receives deposits of credit institutions.

European Commission, the funds of the Ministry of Finance and investments in repo operations, increased by EUR 1,011.76m (9.1%) in 2016, totalling EUR 12.2bn at year-end. The CNB again obtained a positive result in 2016, having generated an income of EUR 80.83m on net international reserves investment.

As at 31 December 2016, currency in circulation amounted to HRK 22.5bn. In 2016, the CNB vault issued 4.6bn worth of kuna banknotes (45.1 million pieces) and 77.3m worth of coins (99.3 million pieces).

On 8 October 2016, the CNB issued a 25 kuna commemorative circulation coin celebrating the 25th anniversary of the independence of the Republic of Croatia, 8 October 1991 – 8 October 2016.

In 2016, 435 counterfeit kuna banknotes, worth a total of HRK 99,930.00 were registered, 2.2 counterfeits being detected per 1 million kuna circulation notes.

At the end of 2016, there were 31 credit institutions operating in Croatia. Bank assets decreased by 1.7% in 2016, trending slightly downward for the fifth year in a row. The share of non-performing loans fell for the second consecutive year, down from 16.7% at the end of 2015 to 13.8% at the end of 2016. Supervision of credit institutions consists of several coordinated activities aimed at verifying the compliance of credit institutions (banks, savings banks and housing savings banks) with laws, subordinate legislation, internal bylaws of credit institutions, and professional standards and rules. In 2016, the CNB issued 25 reports containing risk assessments of credit institutions. During 2016, pursuant to the ongoing monitoring of credit institutions, the CNB issued 46 decisions ordering

the elimination of established illegalities and irregularities in their operation or improvement of the situation in the banks.

At the end of 2016, there were 23 credit unions operating in Croatia.



Façade details of the CNB building

In 2016, the CNB issued a total of 117 decisions on authorisations and approvals to banks, housing savings banks, savings banks and credit unions, as well as one decision to revoke the authorisation to provide financial services.

2016 marked the start of production operations of the payments infrastructure for the execution of national and cross-border payment transactions in euro. The Draft Act on the Comparability of Fees Related to Payment Accounts, Payment Account Switching and Access to Payment Accounts with Basic Features

has been prepared, and will, among other things, enable consumers to have a transparent access to fees for maintaining the accounts and the provision of payment services, as well as simplify the procedure of switching accounts from one bank to another.

The TARGET2-HR national component started production operations on 1 February 2016 in accordance with the National SEPA Migration Plan. The EuroNCS is a payment system that processes payment SEPA credit transfer transactions in euro. The EuroNCS became operational on 6 June 2016 in accordance with the National SEPA Migration Plan.

Individuals (consumers) and business entities held a total of 6,844,255 transaction accounts with banks and there were in all 8,456,688 registered payment cards in circulation.

Financial stability is one of the key preconditions of sustainable economic growth and it is reflected in a smooth functioning of all the components of the financial system in the process of resource allocation, risk assessment and management,

execution of payments and in system resilience to sudden shocks. The banking system in Croatia is considered stable and highly capitalised.

In 2016, the minimum prescribed total capital ratio (TCR) in Croatia was again 8%, while the additional capital requirement is made of different capital buffers. In July 2016, the CNB increased the risk weight for exposures secured by mortgages on commercial immovable property from 50% to 100%.

Within activities related to consumer protection, the CNB primarily focused on the supervision of the implementation of provisions of the Act on Amendments to the Consumer Credit Act regulating the conversion of loans denominated in the Swiss franc. In 2016, the CNB received a total of 1,370 complaints of consumers – users of banking and financial services.

The CNB invests considerable efforts into raising the level of financial literacy of young people. In 2016, the CNB played host to almost 2,000 schoolchildren and university level students, who were able to get acquainted with the central bank's operations and learn more about personal finance management.

Public relations

The Croatian National Bank assigns a great importance to informing the public of its goals, tasks, monetary policy measures and their effects as well as other activities falling within its field of competence. The CNB considers openness and publicness significant preconditions for the credibility and transparency of its actions as well as for the support of the general public necessary for the realisation of the central bank's role suited to a market economy and attuned to modern international standards.

The CNB uses various methods to communicate with domestic and international public. The CNB website – www.hnb.hr – plays a very important role in ensuring the publicness of Croatia's central bank. In 2016, the CNB replaced its old website by a new one with improved technical performance and enriched content.

The CNB website features press releases on CNB Council decisions, foreign exchange interventions and other CNB activities related to its areas of operation. In addition to press releases, more than fifty of which were published in 2016, the CNB exchange rate list and related content, the website presents

The CNB replaced its old website by a new one with improved technical performance and enriched content.

a comprehensive overview of legal and other regulations, including decisions, instructions and other legal acts



Governor replies to media questions.



Payment Transactions and Accounts

Payment Statistics

2015

Year I - December 2016

BULLETIN



226

Vol. 80 • July 2016

17

Vol. 9
VI 2016

FINANCIAL STABILITY

CROATIAN NATIONAL BANK

Series 5/16

Features of the Labour Market and Wage Setting in Croatia: Firms Survey Results

Marija Kukulina and Anđelko Poljak

October, October 2016

Cover sheets of several CNB publications published in 2016

concerning the operation of the CNB and the Croatian banking system. The website also features draft laws and subordinate legislation in order to allow the public to comment on them.

The CNB website provides professionals and the general public with access to CNB publications: the monthly and quarterly Bulletin, the Semi-annual Information on CNB operations, the List of credit institutions, the Banks Bulletin as well as working papers and surveys, with most of the content published in Croatian and English. In 2016 the CNB introduced a newsletter that is sent to over 500 subscribers.

Professionals and the general public were comprehensively informed of the central bank's activities and the challenges it faced in fulfilling its objectives as well as of the methods and instruments used to maintain price stability and financial stability in the country, through seven presentations, workshops and briefings for journalists and through a large number of interviews and public statements given by the highest CNB officials to domestic and foreign media. The same aim was served by the participation of CNB officials in a wide range of domestic and international conferences.

The CNB Communications Area responded in writing (mostly by e-mail) to over 200 inquiries by domestic and foreign journalists and provided a lot of information by telephone. Responses were also provided to more than 1,700 inquiries made by citizens, banks, enterprises and various domestic and foreign institutions.

These requests for information were related to all CNB areas of operation and maximum efforts were made to reply immediately or in the shortest possible period.

To make them acquainted with the central bank's operations, the CNB organised lectures for numerous groups of visitors (undergraduates, teachers and postgraduate students) interested in learning in more detail about the central bank's role and operation.

The CNB Communications Area responded in writing to over 200 inquiries made by domestic and foreign journalists as well as to more than 1,700 inquiries posted by citizens, banks, enterprises and various domestic and foreign institutions.



Introductory address by CNB Vicegovernor Bojan Fras on the occasion of the debate on student loans

Around 800 schoolchildren and 300 undergraduate students interested in learning more about personal finance management participated in activities aimed at strengthening youth financial literacy. In March, during the Global Money Week, the CNB organised the largest number of lectures, with a schoolchildren debate featuring as the main event.

In 2016, CNB experts held lectures on subjects related to the central bank's operation for more than 2,000 citizens, mainly schoolchildren and undergraduate students, in the CNB or other institutions.

The CNB building itself, a cultural monument, attracted numerous citizens interested in the architectural approach to the former Zagreb Stock and Commodity Exchange.

The central bank also organised several conferences in 2016. In cooperation with the Croatian Financial Services Supervisory Agency, the CNB organised a public presentation of the results of a survey on financial literacy in the Republic of Croatia. In cooperation with the

Faculty of Economics and Business of the University of Zagreb and the RIFIN, the CNB hosted a conference dedicated to the memory of Professor Emeritus Pero Jurković, PhD, the second CNB Governor, on the potential for monetary and fiscal policy action in a small and open economy. The conference was organised in cooperation with the European Commission and was devoted to the banking union, the current state of play and the challenges ahead for the stakeholders; participating among others was Valdis Dombrovskis, the Vice-President of the European Commission for the Euro and Social Dialogue. In 2016, the CNB also hosted the traditional Ante Čičin-Šain Lecture, dedicated to the first CNB Governor.

The lectures given in 2016 at the CNB by the governors of two central banks of euro area countries were another confirmation of its successful international cooperation. The Governor of the central bank

of Greece, Yannis Stournaras, gave a talk entitled “Financial Stability and Policy Intervention by Central Banks in Europe: Where Do We Stand and What Challenges Lie Ahead?”. The President of the central bank of the Netherlands, Klaas Knot, gave a speech entitled “Policy Challenges in the European (Monetary) Union: A Central Banker's Perspective”.

Conferences organised by the CNB contribute to public discussion on issues related to central bank activities.

The internationally-renowned Dubrovnik Economic Conference, organised for the 22nd time by the CNB in 2016, also contributes to the affirmation of its activity. The Conference gathers acclaimed scientists and financial policy makers from Croatia, many other countries and international financial institutions.



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

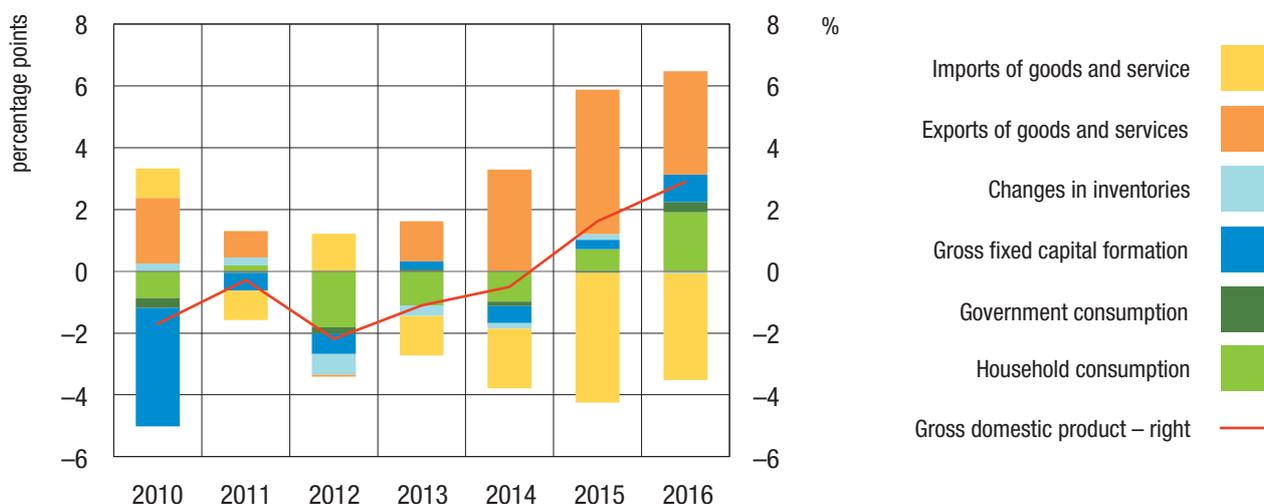
Monetary policy and economic developments

Economic recovery and favourable trends in the labour market considerably more dynamic in 2016

The real GDP annual growth rate accelerated to 2.9% in 2016 from 1.6% in 2015, with a more dynamic economic activity reflecting a marked increase in all domestic demand components.

Figure 1 GDP rate of change

contributions by components



SOURCE: CBS.

Household consumption grew as much as 3.3% in 2016 and was, in addition to exports of goods and services, the largest contributor to economic activity growth. The recovery in personal consumption was driven by favourable labour market developments, including increases in wages and employment. According to CPIA data, employment rose by almost 2% in 2016, compared with an increase of 0.7% in 2015. Employment grew in all activities, recording

the highest growth rate in private sector service activities. The number of unemployed persons continued to decline, with the result that the ILO unemployment rate dropped to 13.1% in 2016. These trends largely resulted

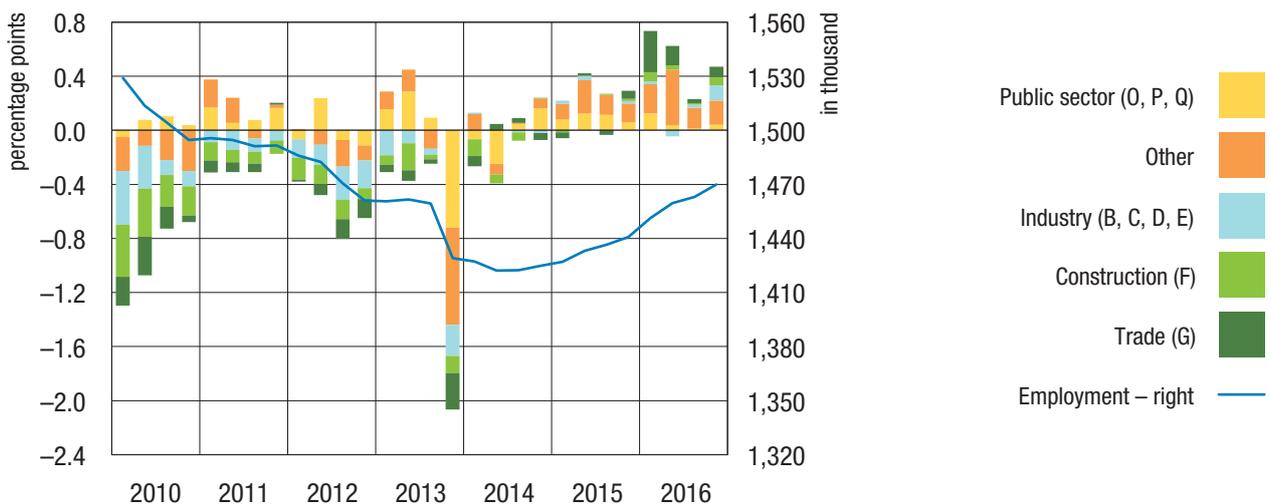
The real GDP annual growth rate accelerated to 2.9% in 2016 from 1.6% in 2015. Household consumption grew as much as 3.3% in 2016 and was, in addition to exports of goods and services, the largest contributor to economic activity growth.

from a decrease in the economically active population caused in turn by emigration of working age population. The purchasing power growth was also due to wage trends. Nominal net wages were up at an annual rate of 1.2% in 2016, while real wages rose over 2% due to a decrease in the general price level. Household consumption was also boosted by a growing propensity to consume, indicated by high consumer confidence

and an increase in non-housing loans to households (transaction-based), which was especially pronounced in the first half of 2016. Compensation to residents working abroad also rose due to an increasingly high number of Croatian residents working abroad, although it should be noted that this compensation accounts for a relatively small part of personal consumption in Croatia.

Figure 2 Employment by NCA activities

seasonally adjusted data, contributions to the quarterly rate of change



SOURCE: CPIA (SEASONALLY ADJUSTED BY THE CNB).

Capital investments also recovered at a markedly accelerated pace, up at an annual rate of 4.6%. General government investments increased at a somewhat higher rate; however, as private investments (including public enterprises outside the general government sector) account for over four fifths of total investments in the economy, they were the key determinant of the recovery of this aggregate demand component. This is corroborated by detailed data on developments in construction and the production and imports of capital goods. Specifically, the recovery of the construction sector accelerated in 2016, primarily due to works on buildings and only to a small extent due to government-financed infrastructure works. In addition, the production and imports of capital goods continued to grow at high rates, another indication of an uptick in the private sector's investment cycle. Increased use of EU funds significantly boosted total investments. Capital transfers from the EU budget reached HRK 3.5bn (1% of GDP) in 2016, which is an increase of almost 60% from the previous year. As in 2015, approximately three quarters of the funds were allocated to general government units.

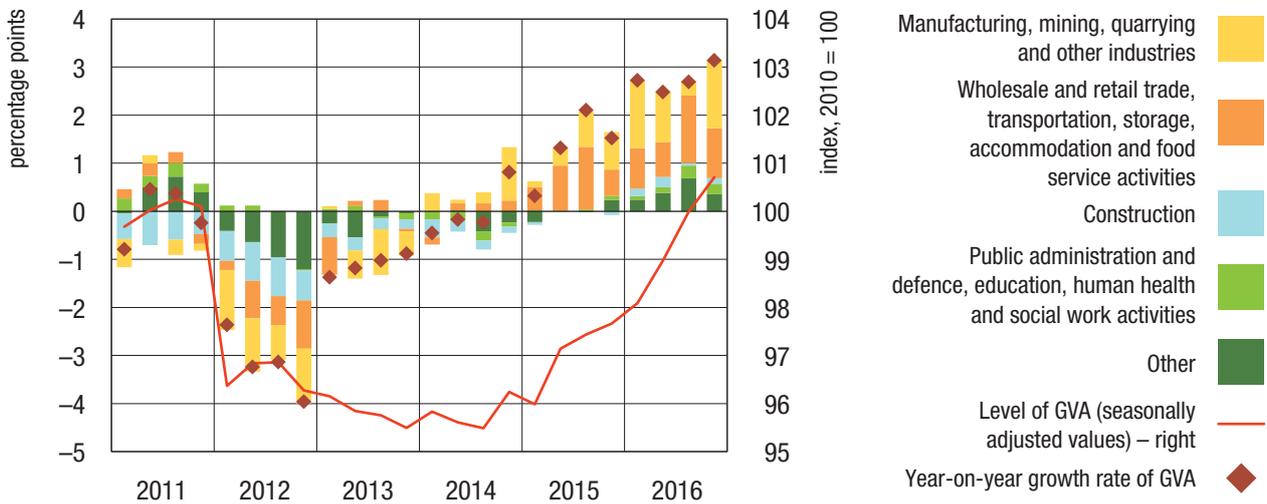
As regards foreign trade, exports of goods and services continued to grow in 2016, although at a somewhat slower rate (6.7%) than in 2015 (10.0%). These trends resulted from continuing relatively positive developments in the international environment, that is, the acceleration of economic growth in most Croatian trading partners and an increase in the share of Croatian exports in the world market. In 2016, rising tourist service exports strongly contributed to total export growth again, partly due to the improved quality and increased volume of these services and partly to foreign factors, such as instabilities in some competitive markets. The strong recovery of domestic demand and continued sharp increase in exports led to the further, relatively strong, growth in imports of goods and services. As a result, net exports of goods and services had a slightly negative impact on overall economic activity.

Broken down by activities, trade, transportation and tourism services made the largest contributions to the aggregate growth of gross domestic product.

Broken down by activities, trade, transportation and tourism services made the largest contributions to the aggregate growth of gross domestic product. The increase in these activities can be attributed to an increase in personal

Figure 3 GVA rate of change

contributions by components



SOURCE: CBS.

consumption recovery, a rise in international trade in goods as well as to increases in foreign tourists' overnight stays, arrivals and average consumption. Industrial production data suggest that all main industrial groupings recorded relatively strong growth, with the largest contribution to overall growth coming from the manufacture of intermediate goods and consumer goods.

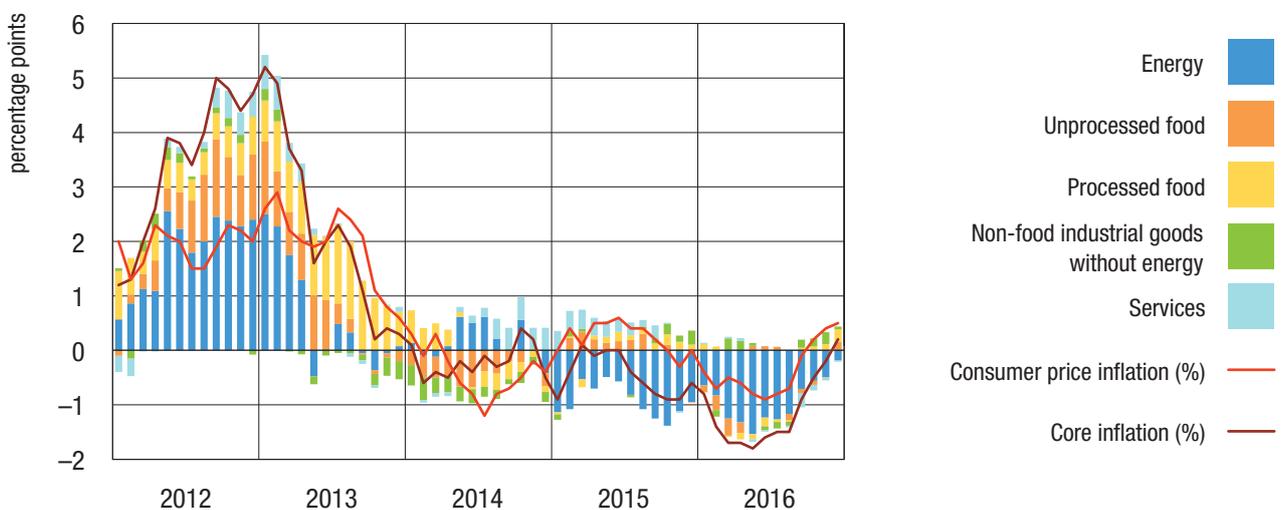
Consumer price inflation returned to positive territory late in the year

Consumer price inflation averaged -1.1% in 2016, decreasing from -0.5% in 2015. The downward pressures on prices observed in the first half of the year were primarily caused by direct and indirect impacts of the fall in the prices of crude oil and other raw materials in the world market on domestic prices (e.g. energy, industrial products and processed food products). Reduced administrative prices of natural gas in the domestic market had the same effect. Core inflation, which excludes agricultural product prices, energy prices and administered prices, moved in the same direction as total consumer price inflation. The decrease in core inflation was due to subdued cost pressures and the highly competitive environment in which enterprises set prices. Labour cost pressures were subdued amid declining unit labour costs. Some impact was also made by the indirect effects of declining world raw material prices

on the prices of inputs for the manufacture of some industrial products. Processed food product prices also decreased significantly, especially milk and dairy product prices, which started decreasing as early as in mid-2015, due to the lifting of milk production quotas in the EU.

Consumer price inflation averaged -1.1% in 2016, decreasing from -0.5% in 2015.

Figure 4 Year-on-year inflation rate and contributions of components to consumer price inflation



Note: Core inflation excludes agricultural product prices, energy prices and administered prices. Processed food products include tobacco and alcohol.

SOURCES: CBS AND CNB CALCULATIONS.

Due to upward pressures on consumer prices in the second half of the year, the annual inflation rate returned to positive territory, reaching 0.2% in December. The core inflation rate stood at 0.5%. This was primarily due to stronger imported inflationary pressures, that is, an increase in the prices of raw materials on the global market, and to a lesser extent to the recovery of inflation in the euro area. The kuna weakened against the US dollar as a result of the strengthening of the dollar against the euro on the global foreign exchange market. Energy prices made the largest contribution to the increase in overall inflation in the second half of the year. Refined petroleum product prices rose sharply amid the growth of crude oil prices and due to the base period effect related to a sharp decrease in these prices in the second half of 2015. Food prices also

rose, as well as tobacco prices, the latter due to a rise in excises late in the year. Industrial products prices also edged up, partly due to the indirect effect of an increase in world raw material prices on the prices of inputs for the manufacture of some industrial consumer products (e.g. pharmaceutical products).

Service price inflation was quite stable in 2016, fluctuating around an average of -0.1% , considerably below its average value in the last ten years. As services are usually provided within a country, their prices are generally influenced by domestic factors, such as domestic demand and labour costs. Repressed inflation of service prices can therefore be partly attributed to subdued price pressures stemming from relatively low wage growth. Input expenses are in large measure wage-related, especially in the more labour-intensive service sector. The lack of strong pressures on service prices is partly due to indirect effects, materialising with a time lag, from a previous sharp decrease in the prices of oil and other raw materials.

International economic relations: continued current account surplus and decrease in debt

The current and capital account surplus amounted to 3.7% of GDP in the previous year, which is almost the same as in 2015 if the effects of the conversion of Swiss franc loans are excluded.¹ The balance of trade in goods and services, positive for five successive years, was in 2016 further boosted by a good performance by tourism, largely due to improved volume indicators, involving increases of 8.9% and 9.6% respectively in foreign tourists' arrivals and overnight stays in commercial accommodation facilities, of which a large share was accounted for by tourists from Germany, Poland, Austria, the United Kingdom and Slovenia. Available data suggest that average consumption per traveller increased. Net exports of other services increased considerably, with exports of telecommunication, computer and information services up at the highest rate.

In contrast with trade in services, foreign trade in goods ran a higher deficit, which was partly due to the strengthening of domestic demand and partly to the

1 The surplus of 5.5% of GDP in 2015 includes a one-off increase of about 2% of GDP in the primary income account balance, resulting from the conversion of Swiss franc loans borne by banks.

import dependence of Croatian exports. According to CBS data,² the foreign trade deficit widened primarily because of a decrease in net exports of other transport equipment (mostly ships) and an increase in net imports of road vehicles and capital goods, with the balance of machinery specialised for particular industries and general industrial machinery deteriorating the most. These developments were offset, among other things, by the narrowing of the deficit in the trade in refined petroleum products resulting from a decrease in prices. Total goods exports grew by 6.9% in 2016, decelerating significantly from the previous year, primarily due to a decrease in the exports of ships, oil and refined petroleum products, but also as a result of a slight slowdown in the exports of other goods. Total goods imports also increased further in 2016, although the 6.5% growth rate was slightly lower than in the previous year due to declining imports of ships and oil and, even more importantly, to a slowdown in the imports of other goods.

The current and capital account surplus amounted to 3.7% of GDP in 2016.

The primary income account balance deteriorated markedly from the previous year, mostly because of the waning effect of the conversion of Swiss franc loans, but also due to improved business results of foreign-owned enterprises in financial intermediation, the production of refined petroleum products, the production of pharmaceuticals, trade and construction. The surplus in the secondary income and capital accounts, on the other hand, grew, due largely to an increased use of EU funds, with a half of the total amount accounted for by capital funds.

As regards international financial flows in 2016, net outflows resulted from a sharp decrease in domestic sectors' net debt liabilities, while equity liabilities increased. Total net foreign liabilities decreased by EUR 1.1bn (as recorded in the financial account, excluding changes in reserves and CNB liabilities), which was approximately half of the decrease in the previous year due to a higher inflow of net equity investments. Equity investments were influenced by very high reinvested earnings on the liabilities side (especially in financial activities), which

2 The CNB's balance of payments data on the trade in goods of residents and non-residents show weaker dynamics than data released by the CBS. The annual growth rates of imports and exports were 3.3% and 4.0% respectively, while the deficit increased by 5.0% (compared with 5.9% according to CBS data).

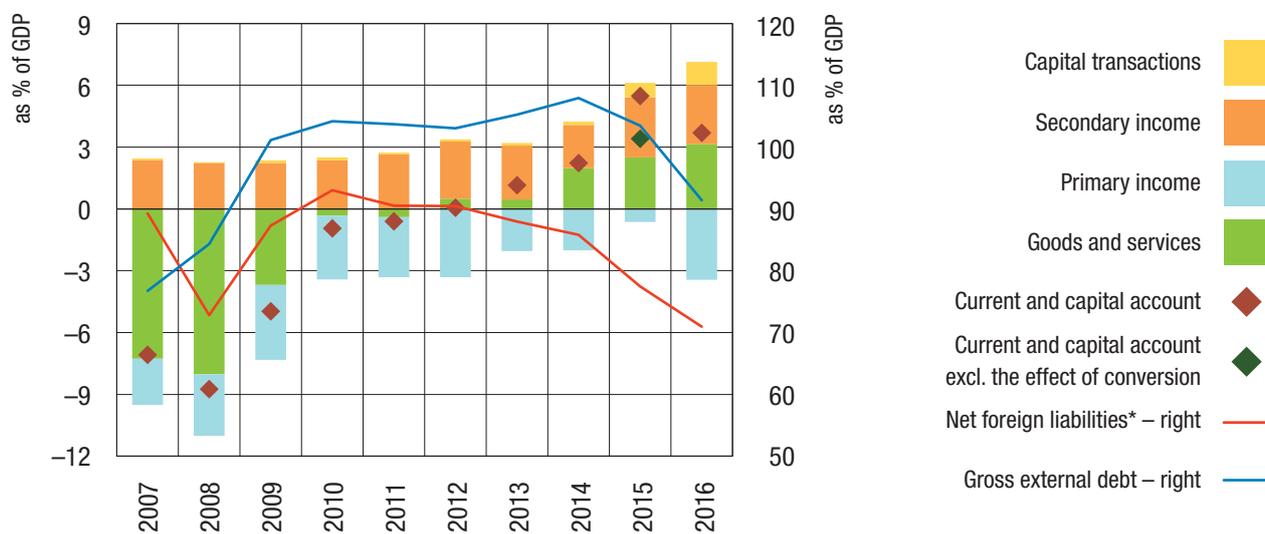
considerably exceeded historical values. However, new equity investments in Croatia, mostly made in real estate, trade, financial activities, accommodation and information service activities, were modest.

The continued deleveraging of all domestic sectors in 2016 resulted in a marked improvement in relative external debt indicators.

The continued deleveraging of all domestic sectors in 2016 resulted in a marked improvement in relative external debt indicators. Gross external debt stood at EUR 41.7bn (about 91.4% of GDP) at the end of the year, down by 12.0 percentage points from the end of 2015.

The net external debt to GDP ratio also declined, down to 41.4% of GDP from 52.1% at the end of 2015. Total external imbalances continued to improve, a trend continuing over several years, with the net international investment position amounting to -71.0% of GDP at the end of 2016, compared with -77.4% of GDP in 2015.

Figure 5 Current and capital account and the balance of foreign liabilities



* Net foreign liabilities are defined as the difference between total foreign liabilities and total foreign assets (based on debt instruments, financial derivatives, equity investments and similar), which is equal to the negative value of the net international investment position (-71% of GDP at the end of 2016).

SOURCE: CNB.

Expansionary and countercyclical monetary policy continued to support economic recovery

The CNB continued to pursue a strongly expansionary and countercyclical monetary policy in 2016, thus supporting the recovery of the economic activity. The expansionary monetary policy stance was in early 2016 further strengthened by the introduction of structural repo operations that provide banks with long-term kuna liquidity. The CNB placed kuna funds to banks for a four-year period at favourable interest rates in order to stimulate a decrease in long-term interest rates and lending in kuna. At four auctions held in 2016, the CNB sold to banks an approximate HRK 1bn. The interest rate was 1.8% at the first two auctions and 1.4% at the other two auctions. The CNB also continued to place short-term kuna funds to banks for seven-day periods through regular weekly reverse repo operations. The repo rate was also reduced from the initial 0.5% to 0.3% in 2016.

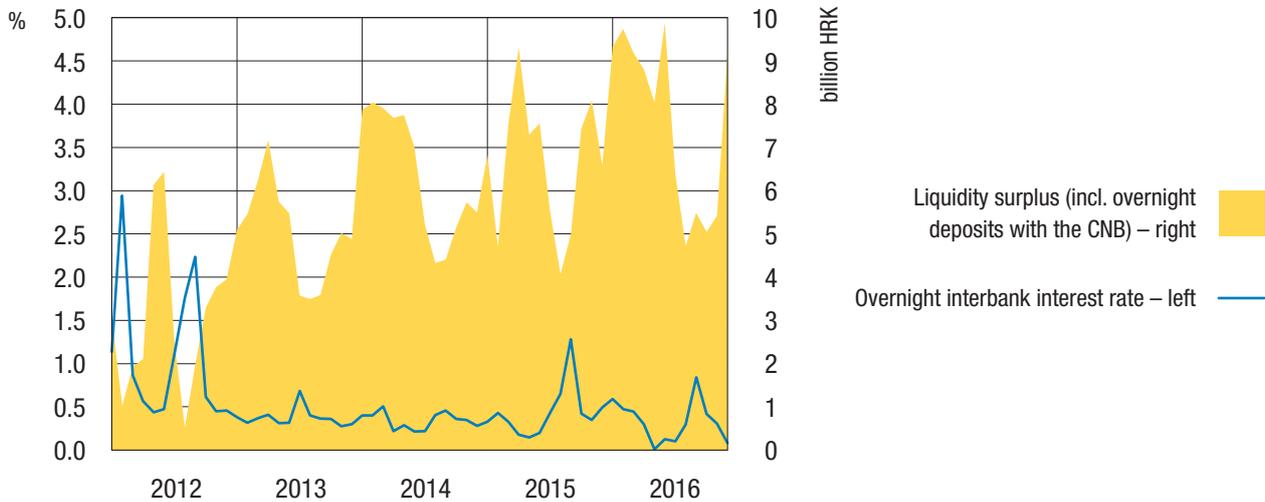
The CNB's expansionary monetary policy is primarily reflected in the large kuna liquidity surplus, averaging HRK 7.6bn in 2016, which is an increase of almost HRK 1bn from 2015 and seven times the amount recorded in 2008, the year preceding the crisis. Due to very favourable liquidity conditions, interest rates in the domestic market decreased. Specifically, the interest rate on overnight interbank loans remained below 1% throughout 2016, at times dropping close to zero.

The Croatian National Bank continued to mitigate the fluctuations of the nominal kuna/euro exchange rate in 2016 in view of the high foreign currency denominated debt of all domestic sectors and the large share of the euro in banks' assets and

The CNB continued to pursue a strongly expansionary and countercyclical monetary policy in 2016, thus supporting the recovery of economic activity. The expansionary monetary policy stance was further strengthened in early 2016 by the introduction of structural repo operations.

The CNB's expansionary monetary policy is primarily reflected in the large kuna liquidity surplus, averaging HRK 7.6bn in 2016, which is an increase of almost HRK 1bn from 2015.

Figure 6 Bank liquidity surplus and overnight interbank interest rate



SOURCE: CNB.

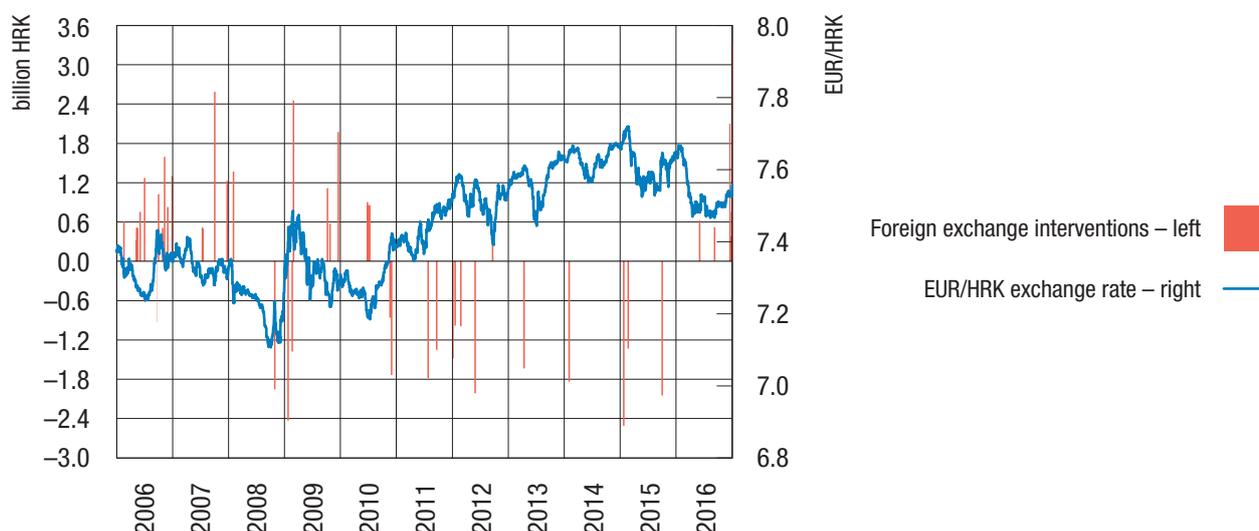
The Croatian National Bank continued to mitigate the fluctuations of the nominal kuna/euro exchange rate in 2016 in view of the high foreign currency denominated debt of all domestic sectors and the large share of the euro in banks' assets and liabilities.

liabilities. In 2016, the kuna strengthened only slightly from 2015, with the end-2016 exchange rate of the kuna versus the euro standing at EUR/HRK 7.53, a decrease of 1.0% from the end of 2015, whereas the average exchange rate was 1.1% lower in 2016 than in 2015.

In contrast with the previous years, which saw downward pressures on the kuna, 2016 saw mounting upward pressures, which necessitated CNB foreign exchange purchases aimed at the stabilisation of the exchange rate. The CNB purchased a net EUR 0.9bn, creating HRK 6.5bn, through foreign exchange transactions with banks, the Ministry of Finance and the European Commission. The amount of purchases from banks, mostly carried out late in the year, slightly exceeded EUR 1bn.

Due to very high liquidity levels, interest rates on government borrowing and borrowing by other sectors continued to decrease in 2016. Interest rates on one-year MoF T-bills reached historical lows, standing at 0.65% for kuna T-bills

Figure 7 EUR/HRK exchange rate and CNB foreign exchange interventions



SOURCE: CNB.

and at only 0.05% for euro T-bills at the end of the year. The price of long-term government borrowing also decreased, with the yield on a five-year kuna bond without a currency clause decreasing by 1.8 percentage points at the end of 2016 from the end of 2015.

Bank interest rates also continued the downward trend of several years. The interest rate on new kuna housing loans was 4.5% at the end of 2016, compared with an average of 5.7% in 2012. Interest rates on new euro-indexed housing loans fell to 4.0% by the end of 2016, having averaged 5.4% five years ago. Interest rates on corporate loans fell to historic lows (4.2%) at the end of 2016 and were two to three percentage points lower than in the same period five years previously. In addition to reduced interest rates, other bank lending conditions were also relaxed in 2016, for both corporate and housing loans. As concerns demand, positive expectations of future economic developments against a background of a fall in interest rates contributed to an increase in loan demand. Enterprises' demand for investment-financing loans increased significantly, while households increased their demand both for housing loans and for consumer loans.

Under improved conditions of lending supply and demand, domestic bank lending recovered in 2016. Having contracted for two years, total bank

placements to domestic sectors (excluding the government) increased by 1%³, primarily due to a 3% rise in placements to enterprises. Almost all economic activities recorded enterprise lending growth (with the exception of construction). Household loans also rose in 2016 (by 0.5%), for the first time after a several-year period of household deleveraging.

Under improved conditions of lending supply and demand, domestic bank lending recovered in 2016.

The rise in housing loans was primarily driven by general-purpose cash loans, while housing loans continued to decrease, although at a considerably slower pace than in the previous years.

Figure 8 Placements

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



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

SOURCE: CNB.

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

Bank lending in kuna increased significantly. This trend, continuing for several years, intensified in 2016, with kuna lending up by as much as 16.7%. The greater interest of households, and in a smaller degree of enterprises, in kuna loans was due to reduced interest rates on such loans, but also to the negative experience related to Swiss franc-indexed loans. In addition, banks offered more kuna loans because of a sharp increase in the kuna sources of funds in their liabilities (especially in transaction accounts' funds) and because of increased interbank competition. Finally, kuna lending was also supported by expansionary monetary policy measures and regulatory changes introduced by the CNB to stimulate banks to lend in kuna and improve consumer information on exchange rate risk. The most important among these changes is the requirement imposed on banks to offer clients foreign currency loans together with kuna loans under the same terms or to inform them about the list of banks offering kuna loans, published on the CNB's website.

Bank lending in kuna increased significantly. This trend, continuing for several years, intensified in 2016, with kuna lending up by as much as 16.7%.

The recovery of bank lending was in 2016 coupled with increases in the write-offs and sales of placements. As a result, total placements in banks' balance sheets were 3.7% lower in nominal terms at the end of 2016 than at the end of 2015, although bank lending activity strengthened in this period. The write-offs, mostly related to the conversion of Swiss franc-indexed loans, amounted to HRK 6bn (HRK 5bn was written off in 2016 and the remaining amount in November and December 2015). The total amount of Swiss franc-indexed loans granted to households fell to a low of HRK 1.6bn at the end of 2016, compared with HRK 21.7bn before the conversion, as 94% of debtors with Swiss franc loans agreed to convert their loans to euro loans.

Kuna lending was supported by expansionary monetary policy measures and regulatory changes introduced by the CNB to encourage banks to lend in kuna and improve consumer information on the exchange rate risk.

Banks sold a total of HRK 6bn of placements in 2016, the bulk of which was irrecoverable. The upturn in the sale of placements was caused by several factors. First, banks' provisions for non-performing loans had risen markedly in

the previous few years, after the CNB had tightened regulations on provisions for non-performing loans. Second, the business strategies of domestic banks' parent banks had been focused on balance sheet cleaning by selling bad loans while the entrance of companies specialised in the purchase of such loans to the domestic market resulted in an increased demand for such transactions.

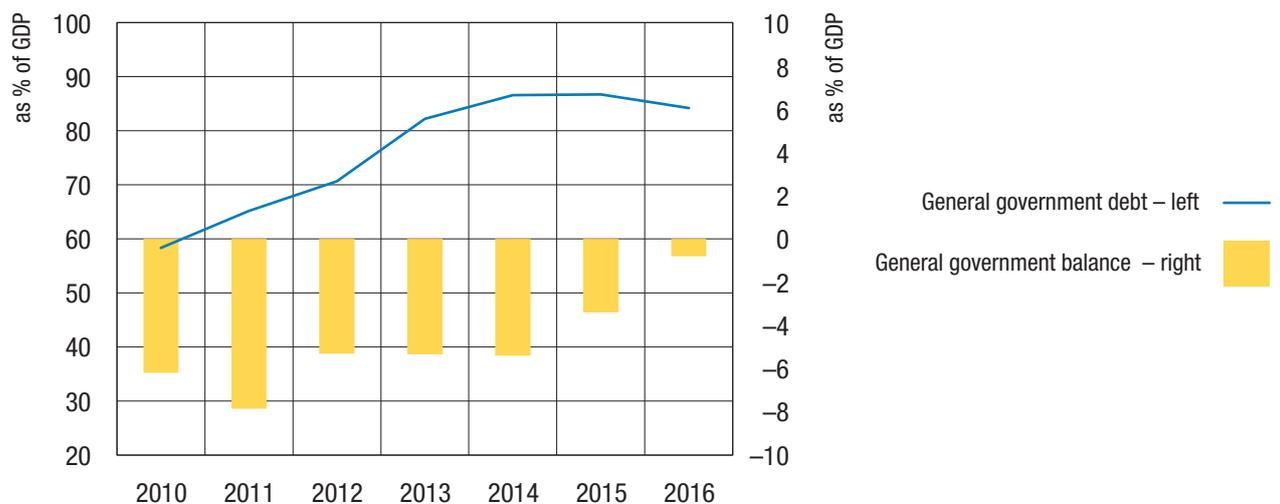
Fiscal consolidation continued and general government debt started to decline

Due to increased write-offs and sales of placements, total placements in banks' balance sheets were 3.7% lower in nominal terms at the end of 2016 than at the end of 2015.

Due to favourable cyclical developments that had a positive effect on revenues and to the control of the expenditure side of the budget, strong fiscal adjustment continued in 2016. The general government deficit fell to 0.8% of GDP, narrowing by as much as 2.6 percentage points from 2015 (the cumulative decrease over 2015 and 2016 was as much as 4.6 percentage points of GDP). As regards the revenue side, almost all tax revenues increased, as well as other revenues, partly related to the withdrawal of EU funds. In contrast, most expenditure

over 2015 and 2016 was as much as 4.6 percentage points of GDP). As regards the revenue side, almost all tax revenues increased, as well as other revenues, partly related to the withdrawal of EU funds. In contrast, most expenditure

Figure 9 Key fiscal indicators



SOURCES: CBS AND CNB.

categories recorded subdued growth, to some extent due to political instabilities in 2016. Government debt decreased annually as a result of favourable trends in the general government deficit, continued economic recovery, the partial financing of the deficit by deposit funds and the appreciation of the kuna exchange rate versus the euro. Standing at 84.2% of GDP at the end of 2016, general government debt dropped by 2.5 percentage points from the end of 2015, which was its first decrease since 2007. Given the described trends in the general government deficit and debt, it is to be expected that Croatia will leave the excessive deficit procedure in the first half of 2017.

Strong fiscal adjustment continued in 2016: the general government deficit dropped to 0.8% of GDP, which is a decrease of as much as 2.6 percentage points compared with 2015.



Entrance Hall (raised ground floor) in the front of the Round Hall in the CNB building

Financial stability

Financial stability, which relies on banking system stability as its key precondition, is one of the key objectives of the Croatian National Bank. The CNB maintains this stability by formulating and implementing macroprudential policy which, through measures and activities taken in relation to credit institutions, reduces the risks to system stability. The available indicators show that the financial system remained stable in 2016, thus confirming the adequacy of the macroprudential policy pursued by the central bank.

Financial stability is one of the key preconditions of sustainable economic growth and it is reflected in a smooth functioning of all the components of the financial system in the process of resource allocation, risk assessment and management,

execution of payments and system resilience to sudden shocks. This requires a regular assessment and analysis of financial stability indicators, which help avoid and reduce systemic risks, i.e. risks of disturbances in the financial system which might have serious negative consequences for the financial system and real economy.

Macroprudential policy comprises the measures, instruments and activities needed for preserving the stability of the financial system as a whole by strengthening its resilience. Financial stability is also directly and indirectly

influenced by other policies, such as microprudential, monetary, fiscal or market competition policies. Each of them affects financial and real developments and the financial system as a whole and as a result their mutual relationship determines the selection of the instruments of macroprudential policy.

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Macroprudential policy comprises the measures, instruments and activities needed for preserving the stability of the financial system as a whole by strengthening its resilience.

Overall assessment of the main risks and challenges to financial stability policy

The acceleration in the economy in 2016 and the expectations regarding further economic growth, reduced the risks to the Croatian economy. The stabilisation of growth in general government debt and a considerable reduction in budget deficit contributed to the easing of the country's internal vulnerabilities. However, a relatively high level of general government debt still poses a significant structural risk. In parallel, external vulnerabilities, although stabilised to some extent, have remained elevated, largely due to the high share of external debt in GDP. Namely, despite a fall in the external debt to GDP ratio in 2016, its high level continues to make the country very vulnerable to possible changes in financing conditions. By contrast, international economic relations continued to see favourable developments and the surplus in the current account of the balance of payments and the expectations that the positive balance will hold steady in the forthcoming years acted towards reducing external imbalances.

In 2016, structural vulnerabilities within the financial sector remained largely unchanged from the year before, and were mostly associated with a high share of loans indexed to the euro, i.e. the credit risk their debtors might see

The acceleration in the economy in 2016 and the expectations regarding further economic growth, reduced the risks to the Croatian economy. However, a relatively high level of external debt and general government debt still poses a significant structural risk.

materialising as a result of a change in the exchange rate of the kuna against the euro. Similarly, interest rate growth, which might undermine loan collectability, is also a potential source of risks. Concentration risk is also a significant source of risks to the financial system. This is the risk of bank exposure to groups of connected persons in the government sector and the non-financial corporations sector and a risk of a traditionally high banking system concentration which increases risks to

the system as a whole. The said risks were somewhat subdued by a relatively good system capitalisation supported by slightly more favourable bank operating performance. By contrast, the announced merger of credit institutions could fuel an increase in the concentration risk in the forthcoming period.

The developments in the financial markets were characterised by the easing

of financial conditions. A further reduction of interest rates on the money market and of the lending interest rates of banks as well as the stability of the exchange rate of the kuna against the euro, contributed to an improvement in the domestic component of the financial stress indicator, while stabilisation of the foreign component was influenced by reduced volatility on the international markets mostly spurred by uncertainties regarding Brexit and, to a lesser extent, the presidential elections in the US and the referendum in Italy.

The banking system is considered stable and highly capitalised.

In general, the vulnerabilities of the non-financial corporations sector and households mostly diminished in 2016, and in accordance with the CNB projection, the positive trends are expected to continue in both sectors. However, it should be stressed that a possible growth in interest on loans in the future increases the risks for these two sectors which are mainly financed at variable interest rates.

The banking system is considered stable and highly capitalised and the growth in the domestic sources of financing on banks' balance sheets was supported by deleveraging in relation to parent banks, which reduced systemic risks associated with cross-border financing.

Macroprudential activities of the CNB in 2016

a) Capital buffers

In 2016, the minimum prescribed total capital ratio (TCR) in Croatia was again 8%, while the additional capital requirement is made of different capital buffers. The additional capital requirements may consist of the capital conservation buffer, the countercyclical capital buffer, the structural systemic risk buffer, capital buffers for global systemically important institutions and capital buffers for other systemically important institutions. Capital buffers are maintained in the form of common equity tier 1 capital.

In 2016, the capital buffer for the structural systemic risk stood at 1.5% or 3.0% of the total amount of risk exposure, depending on whether the share

of a credit institution in total assets of all credit institutions in the Republic of Croatia equals or is above 5%. Pursuant to the Credit Institutions Act and the Decision on the application of the structural systemic risk buffer, the Croatian National Bank reviewed in early 2016 the obligation of maintaining the structural systemic risk buffer for credit institutions having their head office in the Republic of Croatia. For the purpose of the review, an analysis of the structural

In 2016, the minimum prescribed total capital ratio (TCR) in Croatia was again 8%, while the additional capital requirement is made up of different capital buffers.

elements of financial stability and a comprehensive assessment of the risks present in the economy were made. The relevant indicators of the systemic risk suggested the conclusion that the degree of structural macroeconomic imbalances has not changed much in the past year, despite a revival in economic growth and an improvement in external imbalances.

In addition, amid a heavy burden of existing credit liabilities on the households, activities and prices on the real estate market have fallen additionally. At the same time, the high financial system concentration has risen additionally, exceeding by a large margin the European average. Accordingly, the Croatian National Bank announced in April 2016 that it would not amend the Decision on the application of the structural systemic risk buffer and that it would continue to monitor regularly the evolution of systemic risks of structural nature.

In 2016, the capital buffer for other systemically important credit institutions (O-SIIs) stood at 0.2% or 2.0% of the total amount of risk exposure, depending on the estimated systemic importance. Since such institutions are obligated, under the provisions of the Credit Institutions Act, to maintain whichever is the higher of the structural systemic risk buffer and the capital buffer for O-SII, only the structural systemic risk buffer continued to be applied in 2016, since this rate was higher. In line with European and domestic regulations, the CNB introduced in early 2016 the obligation for credit institutions to allocate a capital buffer for O-SIIs. This capital buffer serves to protect the financial system and the economy as a whole from systemic risks that may arise from the malfunction or failure of individual institutions. The initial identification of O-SIIs in early 2016 resulted in an identification of nine O-SIIs. These institutions are obligated to allocate capital buffers for O-SIIs in the form of common equity tier 1 of 0.2%, or 2% of the total amount of risk exposure. In December 2016, the CNB issued the results of the annual review of the identification of O-SIIs which resulted in the

identification of nine O-SIIs that had been identified under the initial procedure and the suggested levels of capital buffer for O-SIIs were not changed since no significant deviations were found in the results compared to the initial procedure.

In 2016, the countercyclical capital buffer again stood at 0% of the total amount of risk exposure. In accordance with the Credit Institutions Act, the Croatian National Bank reviewed in 2016 for each quarter the indicators of evolution of systemic risks of cyclical nature for the purposes of assessment of the countercyclical capital buffer rate. The countercyclical capital buffer has been applied since 1 January 2015 according to the Decision on the countercyclical buffer rate (OG 9/2015). This is a variable capital requirement which depends on the cyclical component of the relevant gap in private sector debt (the ratio of loans granted to households and corporations and aggregate income). A quarterly analytical assessment of the indicators of systemic risks of a cyclical nature has shown that, despite acceleration in economic activity, poor credit activity was still present, and there were no changes in the amount of the countercyclical capital buffer.

In 2016, the capital conservation buffer again stood at 2.5% of the total amount of risk exposure. This buffer was introduced on 1 January 2014 for the purpose of preserving the capital accumulated during economic growth to enable it to absorb losses during the periods of financial and economic stress and to enable credit institutions to continue operating regularly, without jeopardising minimum capital adequacy.

b) Other measures

In July 2016, the CNB adopted a Decision on higher risk weights for exposures secured by mortgages on commercial immovable property. The risk weight now stands at 100%, having been

increased from 50% under the 2014 CNB recommendation. The Decision was adopted in accordance with the Recommendation ESRB/2013/1 with the aim of reducing and preventing excessive maturity mismatch and reducing the risks arising from real estate market illiquidity.

In July 2016, the CNB raised the risk weight for exposures secured by mortgages on commercial immovable property from 50% to 100%.

Cooperation in the field of macroprudential policy

The CNB participates in the work of the European Systemic Risk Board (ESRB) which was established in 2010 with the aim of improving macroprudential supervision of the EU financial system and preventing and mitigating systemic risks. CNB employees participate in the work of several committees and working groups of the ESRB, and the CNB Governor was appointed a member of the ESRB Steering Committee on 22 September 2016.

The CNB representatives also participate in the work of the Financial Stability Council which is chaired by the CNB Governor. The Financial Stability Council is the inter-institutional body that designs the macroprudential policy through cooperation and exchange of information between the authorities competent for the supervision of financial systems in the Republic of Croatia. In addition to the CNB representatives, the Council consists of the representatives of the Croatian Financial Services Supervisory Agency, the Ministry of Finance of the Republic of Croatia and the State Agency for Deposit Insurance and Bank Resolution (DAB).

International reserves management

International reserves in 2016

On 31 December 2016, the total international reserves of the CNB stood at EUR 13,513.76m, having declined by EUR 192.59m, or 1.4%, from the EUR 13,706.35m of the end of 2015.

At the end of 2016, the total international reserves of the CNB stood at EUR 13.5bn.

Net international reserves, which exclude the foreign currency component of reserve requirements, special drawing rights with the IMF, the funds of the European Commission, the funds of the Ministry of Finance and investments in repo operations, increased by EUR 1,011.76m or 9.1% in 2016, from EUR 11,152.45m to EUR 12,164.21m in 2016.

In 2016, net international reserves rose by 9.1% or by slightly over one billion euro.

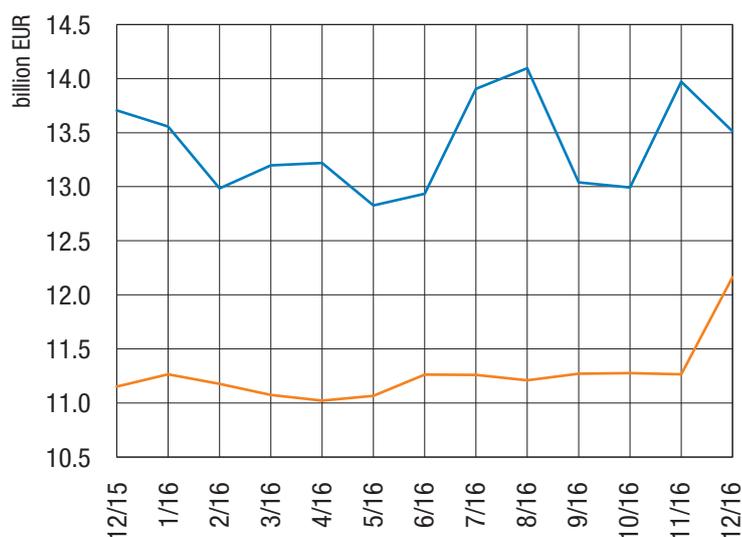


Figure 10 Monthly changes in total and net CNB international reserves

end of period, million EUR

Total reserves —
Net reserves —

SOURCE: CNB.

A net foreign currency purchase of EUR 866.5m created HRK 6.5bn.

In 2016, the Croatian National Bank purchased foreign currency on the domestic foreign exchange market from the banks and the Ministry of Finance and sold it to the European Commission and

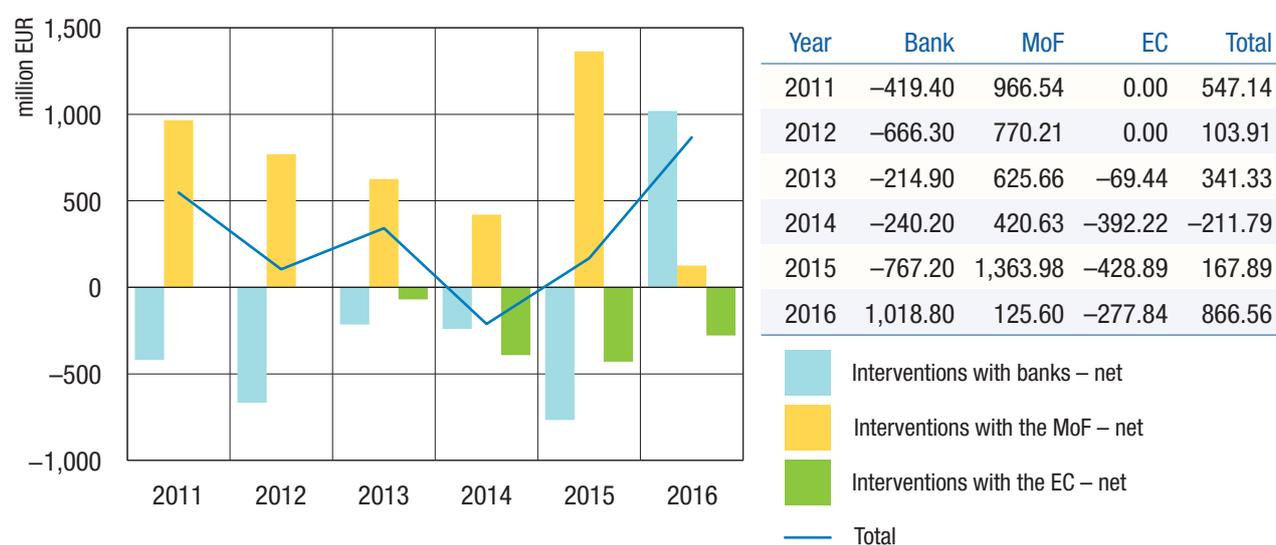
the MoF. In 2016, the CNB purchased a total of EUR 1,144.41m and sold EUR 277.85m, which resulted in a net purchase of EUR 866.56m and creation of HRK 6,535.69m.

EUR 1,018.80m was purchased from the banks in the RC while there were no foreign currency sales to the banks. The amount sold to the European Commission was EUR 277.84m.

In 2016, the CNB purchased from the Ministry of Finance EUR 125.61m and sold EUR 0.01m to the Ministry of Finance.

Figure 11 Foreign exchange interventions of the CNB with the banks, the EC and the MoF

in net amounts, from 2011 to 2016, in million EUR



SOURCE: CNB.

International reserves investment

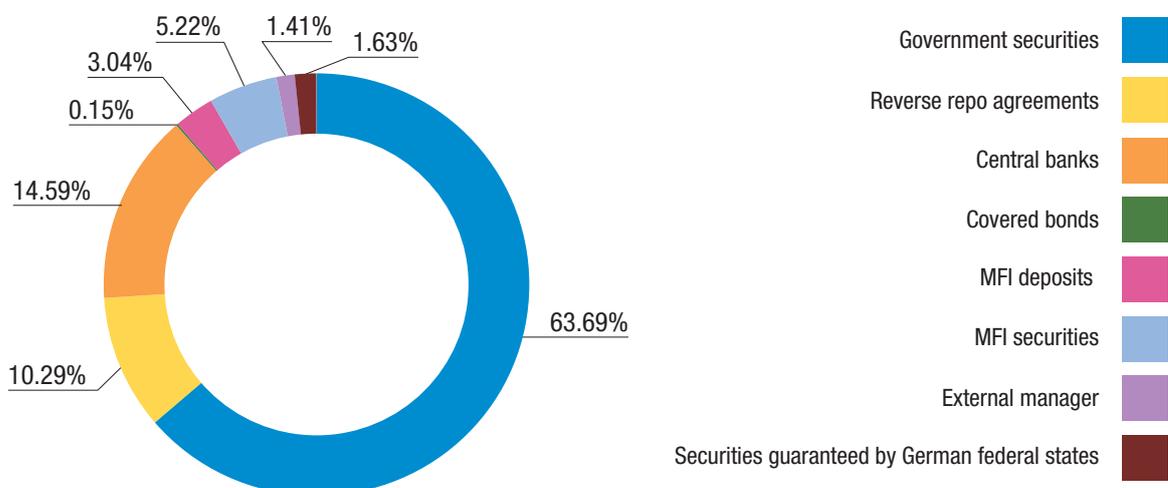
The lion's share of CNB foreign currency portfolios is invested in government securities of selected countries, collateralised deposits and instruments issued by international financial institutions and central banks.

The share of investments in government bonds, deposits with central banks and securities of international financial institutions rose from the end of December 2015. At the same time, the share of investments in reverse repo agreements collateralised by government bonds and securities of international financial institutions and the share of investments in deposits with international financial institutions fell.

On the last day of 2016, approximately 58% of the total international reserves of the CNB were invested in countries, banks and institutions within the two highest credit rating categories or invested in the BIS and the IMF or in foreign cash in the CNB vault.

Guided in international reserves management primarily by the principle of security of the investment, the CNB invests the bulk of its foreign currency portfolios in government securities of selected countries, collateralised deposits and instruments issued by international financial institutions and central banks.

Figure 12 Structure of total international reserves investment as at 31 December 2016 in percentage



SOURCE: CNB.

Currency structure of international reserves

As at 31 December 2016, the euro accounted for 78.00% of the total international reserves, having risen from 73.06% at the end of 2015. The share of the American dollar in total international reserves, 24.11% at the end of

2015, had fallen to 19.10% by the end of December 2016. The larger share of the euro was due to the change in the currency structure of net international reserves and a greater share of the euro in repo transactions.

In terms of currency structure, the euro accounted for the largest share (78%) of international reserves.

The share of SDRs rose from 2.83% to 2.90% of the total international reserves, primarily due to the rise in the value of SDRs against the euro.

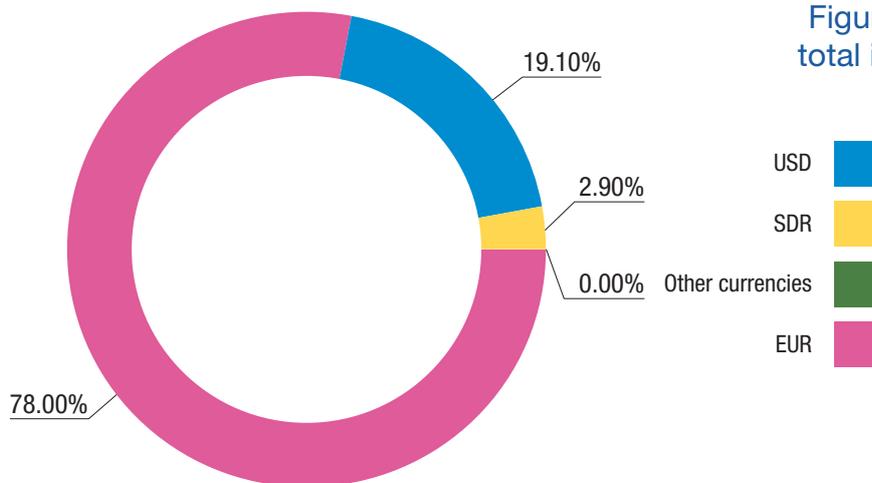


Figure 13 Currency structure of total international reserves as at 31 December 2016

SOURCE: CNB.

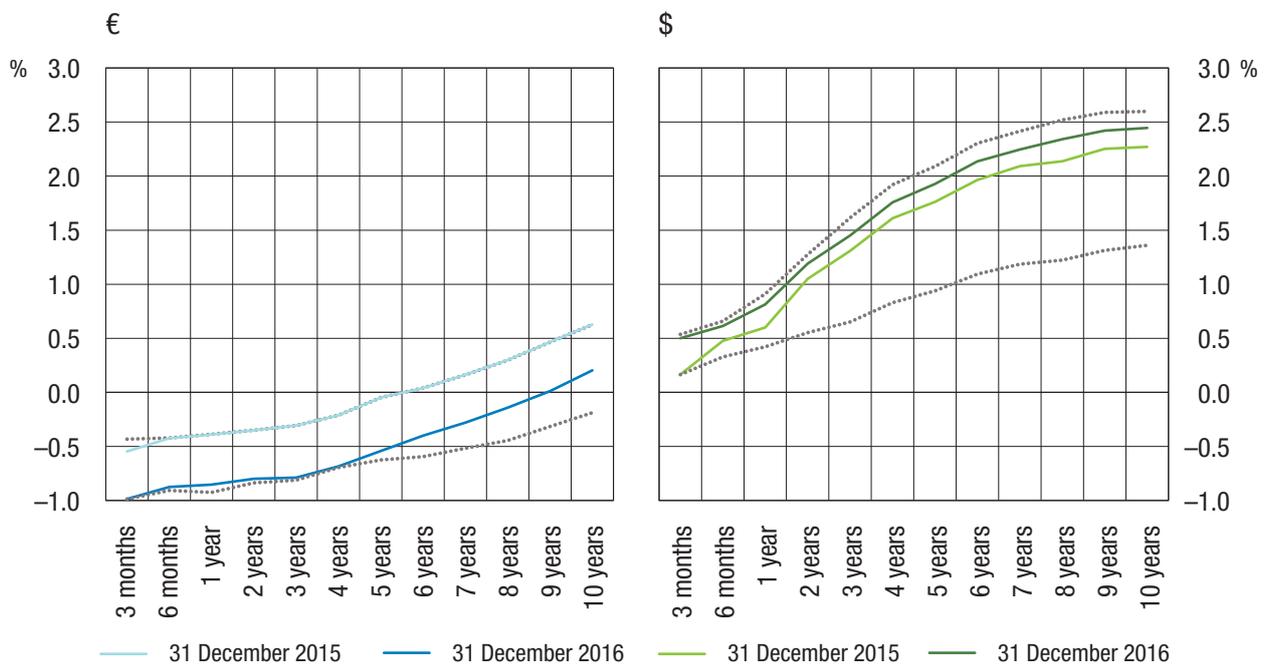
Results and analysis of CNB foreign currency portfolio management in 2016

In 2016, the global financial system was marked by diverging monetary policies of the Fed and the central banks of other developed countries, increased political uncertainty (vote for exit of the UK from the EU, presidential elections in the US) and increased market volatility. The European Central Bank eased its

monetary policy on two occasions in 2016, in an effort to maintain the favourable financial terms necessary for a sustainable inflation rate convergence “below but close to 2%” over a medium term. The Fed decided to raise the range of the benchmark interest rate by 25 basis points to 0.50% – 0.75% in December, after acceleration in economic growth and stronger inflationary pressures, and full employment being approached on the labour market. The announcement of a more expansionary fiscal policy by the new American president provided an additional incentive to the further process of normalisation of the Fed's monetary policy.

The German government bond yield curve fell by 45 basis points on average in 2016 from the end of 2015 and on the last day of 2016 was in negative territory for all maturities up to eight years. The average yield on securities with maturities up to five years stood at -0.79%.

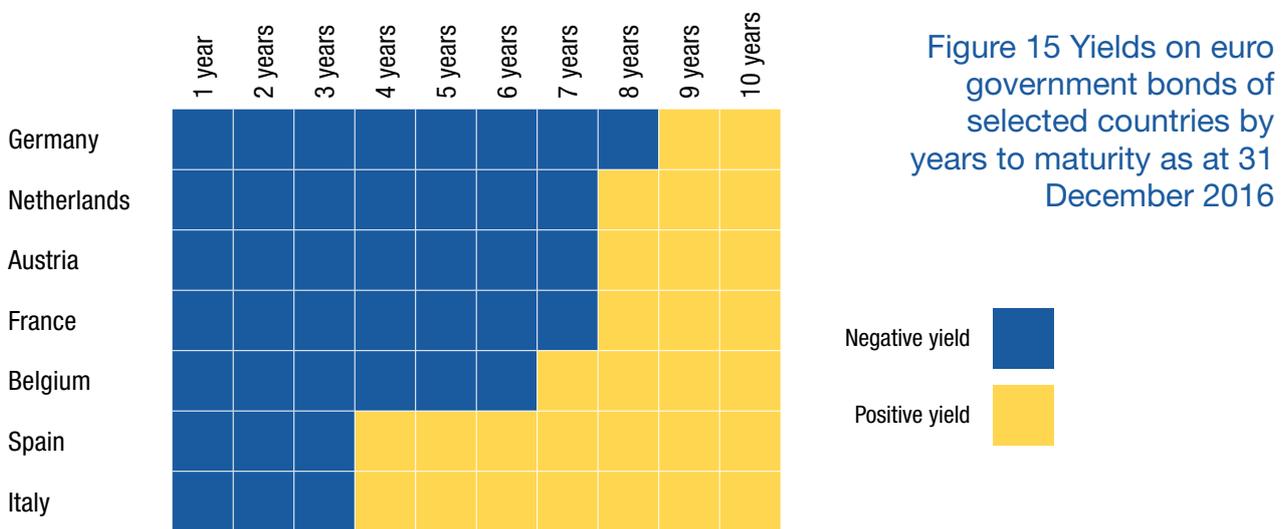
Figure 14 German and American yield curves as at 31 December 2015 and 31 December 2016 and their spread in 2016



SOURCE: BLOOMBERG.

The yields on American government securities with maturities up to ten years fell in the first half of 2016 by 57 basis points on average and rose sharply by 75 basis points in the second half of 2016. The yield curve of American government bonds with maturities up to ten years rose by 17 basis points on average by the end of 2016 from the end of 2015.

Given the negative yields on a large share of euro government bonds from the spectrum of CNB investments, the conditions for making a profit were extremely difficult (Figure 15).



SOURCE: BLOOMBERG.

Observing the key precepts in international reserves management – safety and liquidity, the guidelines of international reserves management were adjusted to the environment of a prolonged period of negative euro yields and growing political insecurities.

Net international reserves of the CNB comprise the euro- and dollar-denominated held-for-trading portfolios, the euro- and dollar-denominated investment portfolios, the funds entrusted to an external manager and foreign cash in the vault.

In order to enable purchase of securities with longer maturity and higher yield and to maintain liquidity the available-for-sale euro and dollar portfolios were set up in the framework of the investment portfolio in 2016.

The entire euro component of net reserves generated a total rate of return of +0.59% in 2016. The total rate of return on the entire dollar component stood at 1.26%.

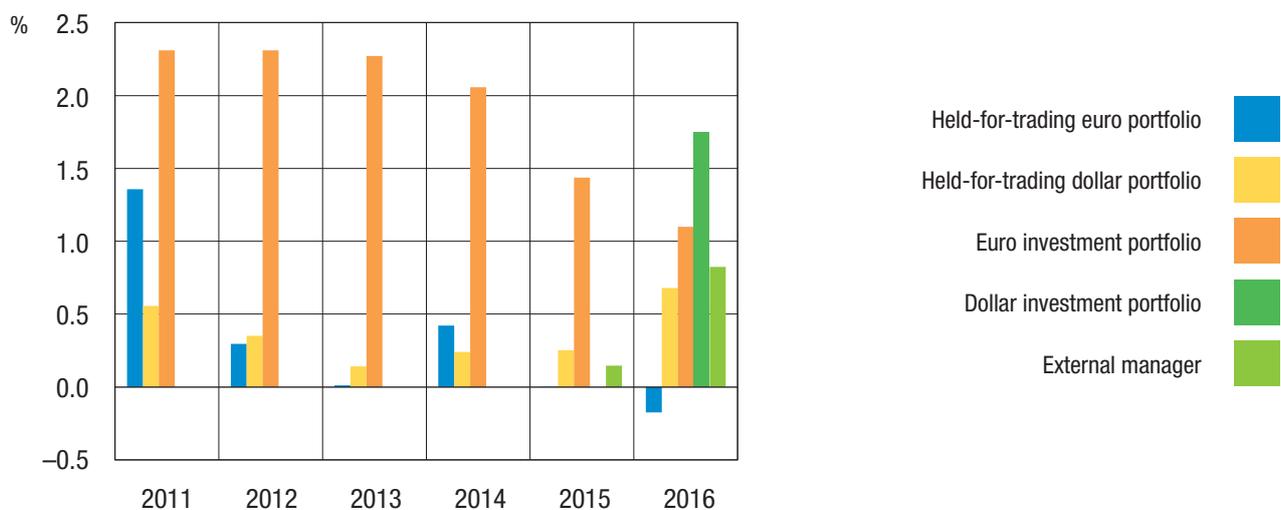
In 2016, the euro held-for-trading portfolio generated a rate of return of –0.17%, while the dollar held-for-trading portfolio generated a rate of return of 0.68%. The held-for-trading portfolios, which account for approximately 45% of net reserves, are valued at fair market prices, have short average maturities and are used as a source of liquidity.

In 2016, the euro-denominated investment portfolio yielded a return of 1.10%, while the dollar-denominated investment portfolio yielded 1.75%. Investment portfolios which account for approximately 55% of net reserves have a longer average maturity and serve as a source of more stable long-term income.

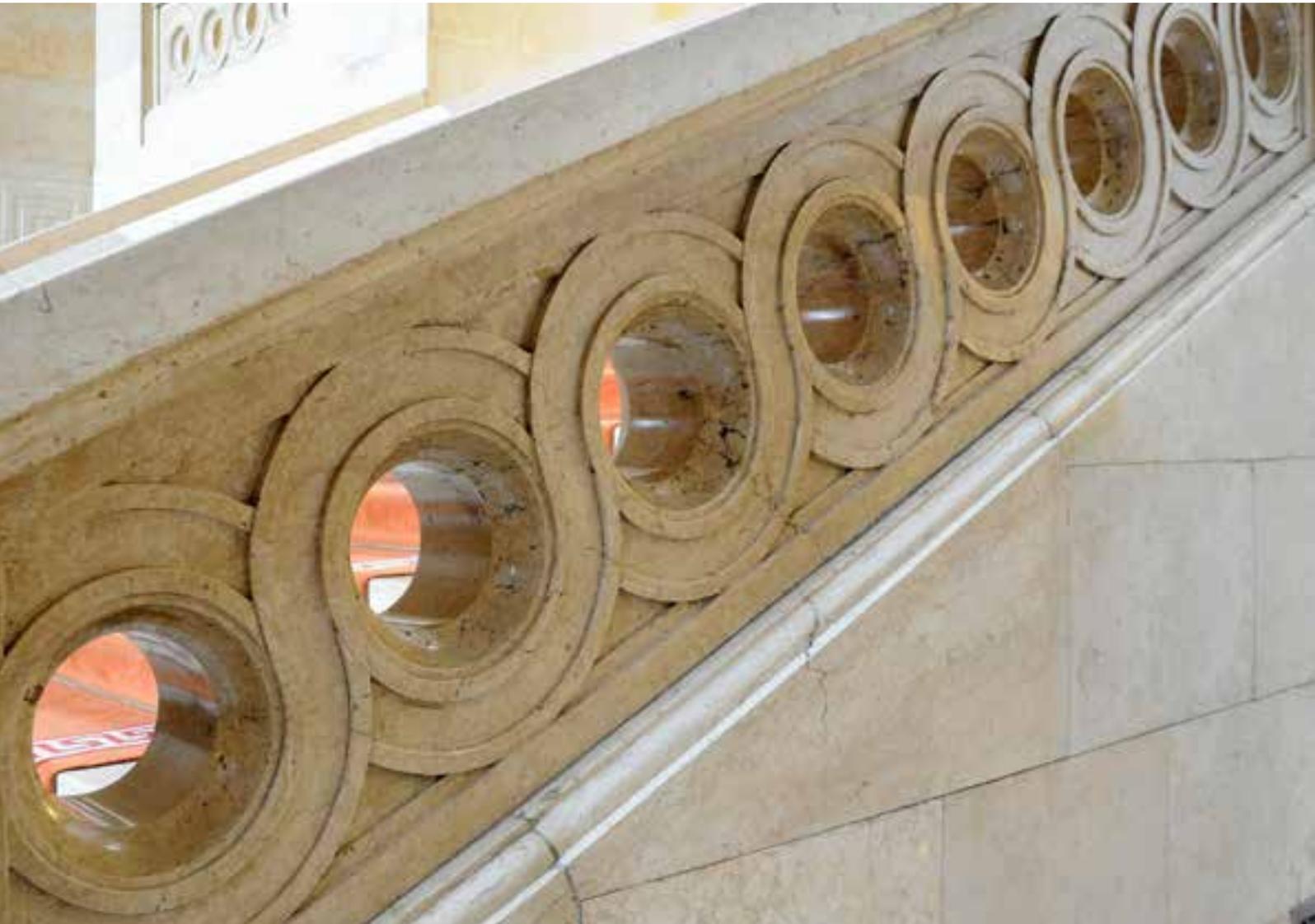
The dollar funds entrusted for management to an international financial institution yielded a rate of return of 0.82% in 2016. The funds entrusted for management to an external manager enabled additional diversification and exchange of knowledge in the area of financial investment management.

Investments of net international reserves generated a total income of EUR 80.83m in 2016.

Figure 16 Annual rates of return on the CNB foreign exchange portfolios from 2011 to 2016



SOURCE: CNB.



Details of the staircase railing in the vestibule of the CNB building

Supervision

Business operations of credit institutions⁴

The number of credit institutions decreased by two in 2016. There were 31 credit institutions at the end of the year, 26 banks (including one savings bank) and 5 housing savings banks. In addition, there was one branch of an EU credit institution, while more than a hundred credit institutions from the EU (and the EEA) used the benefits provided by the application of the single passport, notifying the CNB of the direct provision of mutually recognised services in the territory of the Republic of Croatia.

At the end of 2016, there were 31 credit institutions operating in the Republic of Croatia.

Banks

Bank assets decreased by 1.7% in 2016, trending slightly downward for the fifth year in a row. This decrease was strongly impacted by the conversion of loans in Swiss francs into loans in euros, by exchange rate developments, by the sale of irrecoverable claims and the exit of two banks from the system. Developments that started in 2015 continued, as reflected in the poor lending and sustained bank deleveraging.

Bank assets decreased by 1.7% in 2016, trending slightly downward for the fifth year in a row.

Loans granted decreased by 1.1% (based on transactions⁵). In addition to

4 Data on the business operations of credit institutions for 2016 are preliminary unaudited data.

5 Rates of change calculated on the basis of transaction data exclude the impact of exchange rate adjustments and write-offs on loan movements, whereby write-offs include partial write-off of the principal in the process of conversion from loans in the Swiss franc to loans in euros. The effect of the sale of claims is excluded in the amount of value adjustments.

Lending to households increased slightly in 2016.

greater lending to financial institutions, especially foreign parents, a slight increase in lending was observed in the household sector, primarily in the form of non-purpose loans (cash loans and overdraft facilities), thus interrupting a years-long downward trend in lending to this sector. Loans to other sectors decreased. New lending was primarily realised in kuna, with loans granted at fixed interest rates growing in importance. Kuna lending strongly increased in the segment of housing loans, partly attributable to the refinancing of converted loans.

The share of non-performing loans decreased for the second year in a row, from 16.7% at the end of 2015 to 13.8% at the end of 2016.

The share of partly recoverable and fully irrecoverable loans (the share of B and C risk category loans) decreased for the second year in a row, from 16.7% at the end of 2015 to 13.8% at the end of 2016. This is a result of improvements in the economic environment, as reflected in better claims collection and improved creditworthiness of clients, as well as in the increase in the resolution of non-performing loans, especially through the sale of claims⁶. The CNB's progressive rules on the allocation of additional value adjustments provided a strong impetus to sale. In the household sector, improvements in credit quality were also affected by the conversion of loans in Swiss francs into loans in euros, and the change in credit risk assessment rules at one bank.⁷ As for housing loans to households, the share of B and C risk category loans decreased from 9.8% at the end of 2015 to 8.2% at the end of 2016.

The ageing of the portfolio, stressed by the mentioned regulatory rules on the gradual increase in value adjustments for long-term delinquent placements,

6 A total of HRK 6.0bn of balance sheet claims in risk categories B and C (gross amount) were sold in 2016, together with an additional HRK 1.5bn of associated off-balance sheet claims. Claims on non-financial corporations were sold the most, accounting for almost three quarters of total sales. Sales were realised at prices higher than the net carrying amount of claims, by which banks generated income of HRK 338.6m. This moderated previous losses – the value adjustments of the claims sold totalled HRK 4.5bn.

7 The bank remained in compliance with the regulatory framework after changing its internal rules.

led to a noticeable growth in the coverage of B and C risk category loans by value adjustments, from 56.9% at the end of 2015 to 63.6% at the end of 2016. The indicator went up the most in the non-financial corporations sector, which registered a noticeable growth in fully irrecoverable loans (of risk category C, for which a 100% value adjustment has been carried out), particularly in construction. This remained the riskiest activity, with the share of loans of risk categories B and C totalling as much as 65.7%. Although reducing noticeably from the end of 2015, the share of loans of risk categories B and C in the non-financial corporations sector remained relatively high (28.3%).

Bank deleveraging, especially to majority foreign owners, continued.

Bank deleveraging, especially with respect to majority foreign owners, continued. A large portion

of foreign sources was replaced by domestic sources of finance. The growth of the share of deposits on transaction accounts, which went up by almost a third, as well as kuna deposits continued. Deposits of all domestic sectors increased, the deposits of non-financial corporations in particular. On the other hand, the growth of household deposits was relatively modest. This was surely aided by low interest rates on savings deposits, as well as the tax on interest rates on savings deposits that caused households to turn to other forms of investments. Sources from foreign parents decreased by a half, which, together with the strong growth of their lending (reverse repo loans), contributed to a decline in net sources from majority foreign owners⁸, to only 0.5% of assets. Borrowing with the CNB increased, reflecting the need (of predominantly smaller banks) for additional kuna sources, ensured through regular and structural repo auctions. However, the overall liquidity position was quite good. Bank liquidity indicators showed that banks had significant surpluses for the coverage of liquidity needs during a 30-day stress period.

The overall bank liquidity was quite high.

After the losses of 2015, caused by conversion expenses, bank profitability improved in 2016, and the return on average assets (ROAA) and the return on average equity (ROAE) reached their highest levels since 2008, totalling 1.6% and 9.6% respectively. Banks

⁸ The difference between liabilities to and claims on majority foreign owners.

generated HRK 6.4bn in profit from continuing operations (before tax), while in 2015 they recorded losses of HRK 5.0bn. All components but interest income contributed to these improved results. The key influence came from lower expenses on value adjustments and provisions and expenses on conversion, as well as expenses on loan portfolio losses (partly affected by conversions). A great impact on the result also came from one-off revenues from the sale of equity holdings (especially the sale of shares of Visa Europe Ltd.⁹ to its US parent company), irrecoverable claims, and dividends received. The slow but stable multiyear trend of improvement in the cost to income ratio continued. Better management of expenses and the income from the sale of shares of Visa Europe Ltd. are the main reasons for similar values of ROAA in 2008 and 2016. The main source of income, including net interest income was slightly lower, while the cost of value adjustments and provisions, although significantly lowered in 2016, continued to be slightly elevated in contrast to the period before the financial crisis.

Bank profitability improved, while system level capitalisation reached its all-time high.

The sale of claims and conversion of loans limited the exposure to credit and currency risks which had the greatest influence on the rise in the total capital ratio. It increased from 20.9% at the end of 2015 to its historical high of 22.5% at the

end of 2016, which indicates high banking sector capitalisation, given that the regulatory requirement stands at a minimum of 13.5% for institutions of relatively larger scope and complexity of operations, i.e. 12% for all other institutions¹⁰. A portion of the reduction in exposure to credit risk arose from the improvement in the creditworthiness of individual clients, which resulted in the reduction of the riskiness of claims and consequently a lower capital requirement.

⁹ Banks' receipts in 2016 arising from this transaction were estimated at some HRK 650m.

¹⁰ The minimum total capital ratio was set at 8%. It is complemented by the capital conservation buffer, which amounts to 2.5% of risk exposures, and the structural systemic risk buffer, which amounts to 3% for institutions of relatively larger scope and complexity of operations, i.e. 1.5% for all other institutions.

Housing savings banks

The assets of housing savings banks continued to increase – in 2016 they increased by 0.5%, so their small share in the assets of all credit institutions increased slightly, to 2.0%. Almost the entire growth in the balance sheet of housing savings banks was based on the growth of the kuna component, with the key influence of two items: deposits of housing savings bank savers and housing loans. Housing loans increased slightly, by 1.5%, however their quality deteriorated, the share of risk categories B and C increasing from 1.6% at the end of 2015 to 1.8% at the end of 2016. In 2016, housing savings banks reported profit from continuing operations (before tax) of HRK 56.0m, i.e. 5.4% less than in 2015. ROAA and ROAE decreased slightly as a result of lower net interest income and a rise in expenses on value adjustments and provisions, totalling 0.7% and 5.8% respectively. The total capital ratio of housing savings banks remained unchanged at 25.8%.

Report on prudential regulation and supervision

The CNB's tasks regulated by the Act on the Croatian National Bank¹¹ include the issuance and withdrawal of authorisations and approvals, and supervision and oversight in accordance with acts governing the operation of credit institutions and credit unions. The main objectives of the supervision exercised by the CNB are to maintain confidence in the Croatian banking system, and to promote and safeguard its safety and stability. The exercise of supervision and oversight of credit institutions and credit unions is governed by the Credit Institutions Act¹² and Credit Unions Act¹³.

The rules and requirements pertaining to the operation of credit institutions are governed by Croatian regulations (the Credit Institutions Act and corresponding subordinate legislation), as well as EU regulations. This is primarily Regulation (EU) No 575/2013¹⁴ of the European Parliament and of the Council with corresponding technical standards, which counts among the regulations that are directly applied in EU member states.

11 OG 75/2008 and 54/2013.

12 OG 159/2013, 19/2015 and 102/2015.

13 OG 141/2006, 25/2009 and 90/2011.

Supervision of credit institutions consists of several coordinated activities aimed at verifying compliance of credit institutions (banks, savings banks and housing savings banks) with:

Supervision of credit institutions consists of several coordinated activities aimed at verifying compliance of credit institutions (banks, savings banks and housing savings banks) with laws, subordinate legislation, internal bylaws of credit institutions, and professional standards and rules.

- risk management rules;
- provisions of the Credit Institutions Act and Regulation (EU) No 575/2013 and regulations adopted under that Act and Regulation;
- other laws governing the provision of banking and financial services provided by credit institutions and regulations adopted under these laws; and
- internal bylaws and professional standards and rules.

In addition to supervision, the CNB exercises oversight of the implementation of the Act on the Croatian National Bank, regulations adopted under that act, and the implementation of other laws and regulations for which it is competent.

The CNB exercises supervision of credit institutions by:

- collecting and analysing reports and information, ongoing monitoring of credit institutions' operations;
- carrying out on-site examinations of credit institutions by imposing supervisory measures aimed at taking actions at an early stage to improve the safety and stability of credit institutions' operations and to eliminate any illegalities established;

14 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176), the so-called Capital Requirements Regulation (CRR).

- issuing opinions, authorisations and approvals and by assessing credit institutions.

The CNB exercises supervision of credit unions in a similar manner.

Supervision of credit institutions

As already stressed in the introductory chapter, the CNB exercises its supervision of credit institutions' operations in two segments: firstly, by collecting and analysing reports and information and ongoing monitoring of credit institutions' operations; secondly, by carrying out on-site examinations and cooperating in colleges of supervisors. In addition, the Area participated in the oversight exercised by the CNB's Consumer Protection Monitoring Office. A summary of activities is given in Table 1.

Table 1 Supervisory activities in 2016

Activities	Number of activities	Number of credit institutions included
Reports based on ongoing supervision (regular risk assessment)	25	24
Reports based on ongoing supervision due to established irregularities	24	17
On-site examinations	18	12
Decisions issued for the purpose of rectifying irregularities or improving the situation at a credit institution	46	26
Technical decisions issued (authorisations and approvals), implementing Regulation (EU) No 575/2013	16	14
Trusteeship and special administration	3	3
Joint decisions adopted	19	12

SOURCE: CNB.

A total of 32 credit institutions, accounting for 99.92% of total system assets, according to unaudited preliminary data as at 31 December 2016¹⁵, were covered by at least one of the supervisory activities.

15 Only one housing savings bank owned by a bank was not covered individually, but the CNB exercises supervision over that institution by overseeing the group of credit institutions. Accordingly, supervisory activities cover the entire system of credit institutions.

Ongoing monitoring of operations

The CNB carries out this form of oversight by collecting and analysing reports and information and by analysing additional information submitted by credit institutions at the request of the CNB. The purpose of the oversight is to establish the risk profile of a credit institution¹⁶, initiate an on-site examination and adopt and monitor supervisory measures to ensure and maintain the stability of each credit institution and the system as a whole.

In 2016, the CNB carried out the supervisory cycle of assessing credit institutions, which includes assessing the risk profile of credit institutions in relation to all the risks to which credit institutions are or might be exposed in their operations.

As a precondition for further supervisory activities, the CNB verifies whether credit institutions submit all the necessary data in the manner prescribed and within prescribed deadlines, continuing to lay particular stress in 2016 on the verification of these data.

The supervisory resources were in 2016 largely focused on the continuous monitoring of credit institutions' operations through regular communication or the analysis of specific operating areas deemed to carry an increased degree of risk.

In 2016, the CNB carried out the supervisory cycle of assessing credit institutions. This includes assessing the risk profile of credit institutions in relation to all the risks to which credit institutions are exposed or might be exposed in their operations, assessing the adequacy of procedures in place for assessing and maintaining internal capital of credit institutions¹⁷ and continuous cooperation based on a dialogue between the supervisors and the credit institution. In addition, supervision includes imposing supervisory measures

16 The risk profile is a measurement or assessment of all risks to which a credit institution is or might be exposed in its operation.

17 Based on their risk profile credit institutions are obliged to identify significant risks to which they are or might be exposed in their operation and quantify their exposure to these risks (calculate internal capital requirements). In order to meet these requirements, credit institutions may use only the internally defined measure of available capital (internal capital), taking into account the risk profile, risk management system and risk mitigation techniques. The adequacy of this procedure in credit institutions is assessed during oversight.

aimed at taking actions at an early stage to improve the stability of credit institutions' operations, improve the safety of operations and eliminate any illegalities or irregularities in credit institutions' operations, as well as monitoring the execution of these measures.

The supervisory cycle of the assessment of credit institutions in 2016 also included the analyses of credit institutions' internal capital adequacy assessment reports. The analysis of the submitted internal reports and self-assessments by credit institutions makes it possible for the supervisor to assess the adequacy of procedures prescribed and implemented by a credit institution with a view to timely identification, measurement, control and management of the risks and adequacy of the required internal capital. Combined, all these factors, together with the risk profile assessment, provide a basis for determining minimum capital requirements and the planning of the next supervisory cycle for an individual credit institution.

The CNB compiles reports containing risk assessments of credit institutions. In 2016, the CNB issued 25 such reports, of which 11 had to do with credit institutions for which cross-

In 2016, the CNB issued 25 reports containing risk assessments of credit institutions.

border colleges of supervisors¹⁸ were established and for which joint decisions are reached on institution-specific prudential requirements. In relation to these institutions, analyses are mainly based on consolidated data. Pursuant to these reports the CNB adopted measures stipulating the minimum requirement for own funds until the next supervisory review, and, in cases where indicated by the risk profile analysis, additional measures to improve the operations of a credit institution.

18 Where there are several credit institutions or investment firms in a group, operating in several EU member states, a college of supervisors is established in order to facilitate supervision. A college of supervisors is a forum consisting of competent authorities responsible for the supervision of individual group members. At the college of supervisors, the individual competent authorities, among other things, exchange information, lay down supervision plans and the division of tasks, and reach joint decisions on the application of prudential requirements to all group members.

The CNB assesses IT risks of credit institutions on an ongoing basis.

In accordance with the supervisory cycle, the CNB carries out an assessment of IT risks of credit institutions on an ongoing basis. The assessment is based on the analysis of reports by external auditors

on the audit of the information systems of a credit institution, self-assessment results and direct information collected from organisational units of a credit institution competent for the functioning, safety and internal audit of the information system.

In 2016 the CNB actively communicated with credit institutions and analysed and monitored the situation regarding various IT incidents: potential information leaks, disruption of internet banking service or attempted cyber attacks. In this regard, the CNB required all credit institutions to take additional measures and assess and improve security in SWIFT environment in order to ensure adequate, timely and coordinated response to possible cyber incidents and contain the possible damage.

Based on the ongoing monitoring of credit institutions, the CNB issued 46 decisions ordering the elimination of established illegalities and irregularities in their operation or improvement of the situation in 2016.

Based on the ongoing monitoring of credit institutions, in 2016 the CNB issued 46 decisions ordering the elimination of established illegalities and irregularities in their operation or improvement of the situation and 16 technical decisions, allowing credit institutions to use different options provided for by Regulation (EU) No 575/2013.

The greatest novelty in comparison with the previous year is the development of a comprehensive methodology to devise a study on supervisory stress testing of other systemically important credit institutions in the Republic of Croatia. The study is designed for the purpose of providing information on the supervisory review and assessment process and will be carried out in 2017.

On-site examination

The CNB carries out on-site examinations in accordance with the adopted methodology for supervision, based on an on-site examination plan adopted

at the end of each year for the following year. The on-site examination plan for 2016 was based on the established cycle of regular on-site examinations of credit institutions, while extraordinary activities included the operations of a trustee.

A total of 18 on-site examinations were carried out in 2016, adding up to 1,134 supervisory days.

Examinations were carried out in 12 credit institutions the assets of which accounted for 76.32% of banking system assets, according to unaudited data as at 31 December 2016 (Table 2). Seven on-site examinations of risk management were carried out in seven credit institutions, while three on-site examinations belonged to the segment of supervising advanced approaches to measuring risks and risk management and to the segment of supervising IT systems. In 2016, on-site examinations of the implementation of legal provisions in the segment of money laundering and terrorist financing were carried out in

The CNB employed 1,595 supervisory days for on-site examinations. The priorities of the on-site examinations, in addition to asset quality and credit risk management analysis and capital adequacy assessment, were on-site examinations of credit institutions categorised as large credit institutions by the size of their assets.

Table 2 On-site examinations in 2016

in thousand HRK and %

	Examined areas											Assets covered by on-site examinations as at 31 December 2016 ^{a)}	The share of assets covered by on-site examinations in total assets of the group ^{b)}
	Full scope on-site examination	Capital	Loans	Assets	Management	Liquidity	Earnings	Market risk	IT systems supervision	Prevention of money laundering and terrorist financing	Risk modelling		
Banks	2	4	5	3	1	2		3	5	4	3	301,174,649	76.32%
Housing savings banks													
Credit institutions (total)	0	2	4	5	3	2	0	3	5	4	3	301,174,649	76.32%

^{a)} Preliminary unaudited data.

^{b)} The percentage refers to the total amount of credit institution assets covered by on-site examinations and examined by using a representative sample that was selected in line with the best global supervisory practices.

SOURCE: CNB.

five credit institutions. In addition, considerable CNB resources were dedicated to the operations of trustees in three credit institutions, adding up to 372 supervisory days. They were used for detailed assessment and monitoring of the credit institutions' financial positions and operating conditions. In addition, due to the submission of a request to open bankruptcy proceedings against a credit institution a special administration of that credit institution was appointed for the duration of 89 supervisory days. The CNB employed a total of 1,595 supervisory days for on-site examinations.

The priorities of the on-site examinations in 2016, in addition to asset quality and credit risk management analysis and capital adequacy assessment, were on-site examinations of credit institutions categorised as large credit institutions by the size of their assets.

Following the on-site examinations, and with regard to the illegalities, irregularities and weaknesses that were established in the reports, the CNB issued recommendations for the improvement of business processes and IT systems and imposed measures for the elimination of established illegalities and irregularities and improvement of the situation.

In addition, the following activities were undertaken in relation to the supervision of advanced approaches to measuring risks and risk management:

- In the first half of 2016 two on-site examinations were carried out at one bank. An examination was carried out of a substantial change and a regular examination of the implementation of an Internal Ratings Based Approach in some segments of the portfolio. As a follow-up to the on-site examination of the significant change to the model, a joint decision was reached with the consolidating supervisor, approving the change.
- In the second half of 2016, two on-site examinations were carried out in two banks. An examination of the implementation of a significant change in the calculation of risk-weighted exposure amount applying the Internal Ratings Based Approach was carried out in one bank, while an examination of the capital requirement calculation in the second pillar applying internal models was carried out in the other bank.

Cooperation with foreign supervisors

In 2016, the CNB continued to cooperate with foreign supervisors, particularly as regards joint assessments of the risk of business operations of banking groups and the adequacy of allocated amounts of capital for members of individual groups, as well as in the segment of IT systems supervision.

Table 3 Banks with cross-border colleges of supervisors

1 Addiko Bank d.d.	7 Société Générale-Splitska banka d.d.
2 Erste&Steiermärkische Bank d.d.	8 VABA d.d. banka Varaždin (as of 2 January 2017 operating under the name J&T banka d.d.)
3 OTP banka d.d.	9 Veneto banka d.d.
4 Privredna banka Zagreb d.d.	10 Wüstenrot stambena štedionica d.d.
5 Raiffeisenbank Austria d.d.	11 Zagrebačka banka d.d.
6 Sberbank d.d.	

SOURCE: CNB.

Based on the memoranda of understanding in effect, in 2016 the CNB representatives participated in numerous colleges of supervisors relating to the supervision of banking groups that include domestic credit institutions (12 credit institutions¹⁹).

As part of its cooperation with foreign supervisors, the CNB is responsible for drawing up the Supervisory Risk Report, i.e. an annual assessment of the risk profile of a domestic credit institution, serving as the element for adopting the final Joint Risk Assessment Decision and decision on the required amount of capital of a banking group. Twelve

Twelve supervisory risk reports for 2015 were compiled by the CNB in 2016 within the framework of cooperation with foreign supervisors. A joint decision on capital adequacy of a banking group was adopted for eleven institutions, while one was adopted in the first quarter of 2017.

19 In 2016, one credit institution was merged with its parent credit institution and became a branch, reducing to 11 the number of credit institutions for which colleges of supervisors were established.

supervisory risk reports for 2015 were compiled in 2016. A joint decision on capital adequacy of a banking group was adopted for eleven institutions, while one was adopted in the first quarter of 2017.

As of 2015, the CNB participates in the joint decision on the verification and assessment of recovery plans for groups of credit institutions. Seven joint decisions were adopted in 2016.

The CNB continued to cooperate and provide technical assistance to supervisory authorities in the region as regards the application of prudential regulations (CRD IV and CRR) and technical aspects of supervision.

At the end of 2016, at the request of the European Central Bank, the Croatian National Bank gave its opinion on the content of the Memorandum of Understanding between the ECB and the competent authorities of non-participating member states (non-euro area member states) relating to supervisory tasks.

Supervision of credit unions

There were 23 credit unions operating in the Republic of Croatia at the end of 2016, whose assets, according to the reports submitted to the CNB, totalled HRK 661.4m. Compared to end-2015, the number of credit unions decreased by two, against which voluntary winding-up proceedings were initiated, while their assets declined by HRK 40.2m. As at 31 December 2016, nine credit unions were in the process of winding up, while two credit unions were undergoing bankruptcy proceedings.

There were 23 credit unions operating in the Republic of Croatia at the end of 2016, and their assets, according to the reports submitted to the CNB, totalled HRK 661.4m.

In 2016, the CNB continued regular analyses of the quarterly financial and supervisory reports and monthly liquidity reports submitted by credit unions within the prescribed deadlines. The CNB also analysed additional data submitted by credit unions following requests by the CNB.

Efforts continued to be made in 2016 in handling complaints by consumers using the services of credit unions, and the practice of holding meetings with members

of management and supervisory boards of credit unions continued.

Issuance of authorisations and approvals to credit institutions and credit unions

Pursuant to its statutory powers arising from the Act on the Croatian National Bank, and in accordance with the provisions of the Credit Institutions Act, the Act on Housing Savings and State Incentives for Housing Savings, and the Credit Unions Act, the CNB, within its supervisory powers, is also responsible for issuing authorisations and approvals necessary for the establishment and operation of credit institutions and credit unions.

Through the system of authorisations and approvals the CNB can control some of the decisions and legal transactions of a credit institution prior to their adoption, execution or realisation, and thus, as a supervisory tool, licensing can have two functions:

- to detect in advance and prevent decisions and transactions that might have an adverse effect on the future operations of a credit institution;
- make the credit institution implement the imposed supervisory measures.

In accordance with the Credit Institutions Act, the Act on Housing Savings and State Incentives for Housing Savings and the Credit Unions Act, the CNB issued a total of 117 decisions on authorisations and approvals to banks, housing savings banks, savings banks and credit unions in 2016 and one decision to revoke the authorisation to provide financial services.

In 2016, the CNB issued a total of 117 decisions on authorisations and approvals to banks, housing savings banks, savings banks and credit unions and one decision to revoke the authorisation to provide financial services.

The largest number of these decisions involved approvals to perform the function of a member of a credit institution's supervisory board (49 approvals). The next to follow in terms of their number were decisions on applications for granting prior approval for the appointment of the chairperson or a member of

the management board of a credit institution (35 decisions, of which 32 were approvals and 3 were refusals of applications for granting prior approval). In addition, two authorisations for the provision of financial services were issued, and the following decisions were made: one to revoke authorisation to provide financial services, two on the approval of and three on refusing applications for issuing prior approval for the acquisition of a qualifying holding in the capital of a credit institution, one on the authorisation for the merger by acquisition of one credit institution with another, two decisions on approvals to credit institutions for the acquisition of a majority holding in another legal person, 12 decisions on approvals of the changes in general operating conditions of housing savings banks and 10 decisions on prior approval for the appointment of management board members of credit unions.

Other activities

In 2016, the CNB continued to cooperate with the Croatian Financial Services Supervisory Agency (HANFA) by participating in the work of the joint Working Committee. At the Committee meetings, the institutions exchange information on current topics in the banking sector and the sector supervised by the Agency, resolve open issues on the exchange of data and arrange the coordination of supervisory activities.

Regular meetings of the Working Committee for cooperation with DAB were held in 2016, where institutions exchanged data and information on the subjects of supervision and oversight within their scope of activity and competence.

The CNB participated in the activities of working groups of the European Banking Authority and the European Central Bank in 2016.

The CNB directed significant resources to participation in working groups of the European Banking Authority and the European Central Bank, in relation to the following segments:

- prudential regulations (credit risk, market risks, operational risk, liquidity risk, own funds, governance arrangements, advanced approaches to measuring risks and crisis management);
- reporting, accounting, auditing and public disclosure;
- improvement of the supervisory process;

- security of electronic payments;
- supervision of IT systems.

In 2016, the CNB participated in the work of the National Cyber Security Council and in the implementation of the Action Plan for the Implementation of the National Cyber Strategy. In addition, the CNB participated in the activities of the working group of the Ministry of Finance charged with implementing the requirements of the Critical Infrastructure Act in the finance sector.

New regulations on business operations and supervision of credit institutions

After the entry into force of the Credit Institutions Act at the beginning of 2014 and the direct implementation of Regulation (EU) No 575/2013, as well as of the amendments of 2015, the normative harmonisation continued through the publication of implementing regulations and decisions of the Commission, Commission regulations amending regulations, through the CNB's adoption of new decisions and amendments to existing ones.

Applied as of 1 January 2017, the Decision on liquidity risk management²⁰ was adopted in the liquidity segment laying down only qualitative requirements. At the same time, the Decision implementing Regulation (EU) No 575/2013 and Commission Delegated Regulation (EU) No 2015/61 entered into force, in the part regulating liquidity reporting²¹.

The decision on amendments to the Decision on risk management²² laid down rules on risks arising from exposure to shadow banking entities. This transposed the Guidelines on limits on exposures to shadow banking entities which carry out banking activities outside a regulated framework under Article 395(2) of Regulation (EU) No 575/2013²³ and laid down uniform weighting in exposure calculations.

20 OG 105/2016.

21 OG 105/2016.

22 OG 94/2016.

23 EBA/GL/2015/20.

For the purpose of defining the term of central government in the Republic of Croatia and the coverage of public sector entities, which are, for the purpose of exposure calculation, treated in the same way as the central government, the Decision implementing the part of Regulation (EU) No 575/2013 pertaining to the valuation of assets and off-balance sheet items and the calculation of own funds and capital requirements²⁴ was amended. The Decision on the management of interest rate risk in the non-trading book²⁵ continued the supervisory monitoring of this risk, including the Guidelines for the implementation of Guidelines on the management of interest rate risk arising from transactions in the non-trading book²⁶. An integral part of this Decision is instructions for its uniform implementation, containing the relevant reporting forms.

Also adopted was the Decision specifying the conditions for group financial support²⁷ which lays down early intervention procedures for credit institutions, and the Decision on the documentation to be enclosed with the notification of intention to apply an intragroup exemption from the clearing obligation referred to in Article 4(2) of Regulation (EU) No 648/2012²⁸ pertaining to the area of market risk management.

In the segment related to the reporting framework the Decision on statistical and prudential reporting²⁹ and the Decision on the implementation of Commission Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013³⁰ were amended two times.

In relation to the transposition into the legal framework of the Republic of Croatia of Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and on amending Directives 2008/48/EC and 2013/36/EU

24 OG 113/2016.

25 OG 120/2016.

26 EBA/GL/2015/08.

27 OG 67/2016.

28 OG 64/2016.

29 OG 54/2016 and 121/2016.

30 OG 34/2016 and 94/2016.

and Regulation (EU) No 1093/2010³¹, and given that entities subject to the planned law will, for the most part, be credit institutions, CNB representatives participated in the working group drawing up the proposal of the act which aims to govern consumer home loans.

For the purpose of continued harmonisation with EU legislation and additional regulation of certain segments, activities related to the amendments to the Credit Institutions Act were commenced in 2016. As for alignment with EU regulations, amendments are related to special requirements pertaining to the statutory audit of public-interest entities, in the part relating to the governing of provision of services in the territory of the European Union, in connection with the exercise of the right of establishment and the freedom to provide services and the amendments of provisions on holders of qualifying holdings in credit institutions. In addition to harmonisation with the *acquis communautaire*, these amendments will additionally regulate the protection of depositors and clients of credit institutions in the process of merger by acquisition or merger by formation of a new credit institution. Certain amendments will also do away with misinterpretations of provisions relating to branches of credit institutions having their head offices in member states and possible disturbances in the process of resolution of credit institutions. Consumer protection will also be regulated in more detail, as well as measures that may be ordered by the CNB in order to stop illegal practices and eliminate illegalities or irregularities in credit institutions' operations. In addition, proposals will be made to lower the lower threshold for fines to credit institutions in the RC that are not systemically important in order to ensure proportionality for systemically important credit institutions vis-à-vis those that are not.

Consultations with credit institutions and other interested stakeholders were held prior to the adoption of individual regulations. The CNB, as the competent body which issues opinions within its competence, continued the practice of issuing opinions and answering queries of credit institutions, and also continued to post its responses to queries on the CNB's website in order to provide for greater transparency and uniformity of credit institutions' procedures. In 2016, the CNB received a total of 82 queries including 192 questions of credit institutions.

31 OJ L 60/2014.

Data exchange and analysis

At the same time as working on regulations governing reporting, the CNB continued to develop the software for data receipt and processing.

In addition, in 2016 the CNB continued to meet its obligations of communicating data to the EBA and the ECB and also exchanged data with HANFA (for the purpose of monitoring entities subject to its oversight) and DAB (for the purpose of calculating contributions to the resolution fund and deposit insurance premiums).

In the framework of its regular activities, the CNB publishes annual, semi-annual and quarterly reports to provide market participants and the general public with data of the state and trends in the banking system and the basic indicators of the operations of individual credit institutions. In addition, data are also prepared for meetings with credit rating agencies and different domestic and foreign institutions, questionnaires are completed and replies to queries of different interested parties, particularly the press, are prepared.

Of the regular publications, No. 29 of Banks Bulletin for 2015 was issued in 2016, while reports on the banking system and targeted analyses were regularly compiled for in-house purposes. In addition, the CNB compiled its contribution for the BSCEE Review³², including quantitative data and information regarding the situation in Croatia's banking system and supervisory activities.

32 The publication is issued by Banking Supervisors from Central and Eastern Europe (BSCEE).

Resolvability assessment

As for its resolution powers, in 2016 the activities of the CNB were primarily directed at drawing up resolution plans, i.e. planning the resolution or bankruptcy of credit institutions in case they find themselves in financial difficulties. In addition, the CNB monitored and actively participated in the creation of regulation that was intensively adopted throughout the year by the European Commission and EBA. The CNB also submitted a request to open bankruptcy proceedings against a credit institution.

The activities of the CNB were primarily directed at creating resolution plans, monitoring and participating in the drawing up of regulations by the European Commission and EBA.

Regulatory framework

The Act on the Resolution of Credit Institutions and Investment Firms (OG 19/2015, hereinafter referred to as 'the Act') entered into force on 28 February 2015, transposing into the legislation of the Republic of Croatia Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012 of the European Parliament and of the Council (hereinafter referred to as 'Directive 2014/59/EU'). In addition to this Act, the establishing of the framework for the recovery and resolution of credit institutions is regulated by EU legislation, by a series of delegated and implementing regulations and guidelines.

As for credit institutions, the Act entrusted resolution powers to the CNB and DAB. These resolution authorities are, each within its scope of activity and competence, obligated to cooperate closely in the preparation, planning and application of decisions in accordance with the Act.

The CNB's resolution powers are, among other things, the assessment of the

resolvability and justification of resolution, the drawing up of resolution plans, identification and removal of substantive impediments to the implementation of resolution or bankruptcy proceedings, determination of the minimum requirement for own funds and eligible liabilities and cooperation and coordination of resolution authorities of the Republic of Croatia with the relevant authorities of other member states. Accordingly, the CNB's role as a resolution authority comes particularly to the fore in the procedure of planning the resolution or bankruptcy of a credit institution if they are in potential financial difficulties, while the DAB's powers are primarily directed at the application of resolution tools after an institution becomes subject to the decision to open resolution proceedings.

DAB may adopt a decision to open resolution proceedings subject to the request of the CNB to open resolution proceedings. The Act introduces the concept of resolution in such a way that the procedure is envisaged only for an institution determined to be failing or likely to fail, for which all other measures within the competence of supervisors or measures of the private sector are not sufficient for the institution to financially recover and the resolution of which has been deemed to be in the public interest. It is precisely the condition of public interest that differentiates resolution proceedings from bankruptcy proceedings. The resolution of an institution is thus carried out only if this is in the public interest. Resolution is deemed to be in the public interest if it achieves the following:

- ensures the continuity of critical functions, i.e. of functions the discontinuance of which is likely to lead to the disruption of services that are essential to the real economy or to disruption of financial stability;
- avoids greater adverse effects on financial stability, especially by preventing the contagion of adverse effects to the financial system, including contagion of market infrastructures and the maintenance of market discipline;
- protects public funds by minimising reliance on extraordinary public financial support;
- protects depositors covered by deposit insurance and investors covered by investor-compensation schemes; and

- protects client funds and client assets.

When carrying out the resolution process the resolution authorities are obliged to adhere to the general principles of resolution. They lay it down that losses are first to be absorbed by the shareholders and then by the creditors of a credit institution under resolution in accordance with the order of priority of their claims in the bankruptcy proceedings, provided that no creditor may incur greater losses than would have been incurred if bankruptcy proceedings had been opened against the institution. Pursuant to the decision to open resolution proceedings, one or more resolution tools may be applied to an institution under resolution, in particular: the sale of business tool, the bridge institution tool, the asset separation tool and the bail-in tool. During the resolution proceedings, the duties of the management board of the institution are taken over by the new, resolution administration appointed by DAB, while the role of the supervisory board and the general meeting of the institution is taken by DAB.

In addition, one of the more important novelties introduced by the Act is the minimum requirement for own funds and eligible liabilities (hereinafter referred to as 'the minimum requirement') that credit institutions, after it is determined by the resolution authority, are obligated to meet on an ongoing basis. The minimum requirement is the minimum level of own funds and eligible liabilities that ensures the ability of a credit institution to absorb the respective amount of loss and, depending on the resolution strategy, to be recapitalised by the amount sufficient for the implementation of the preferred resolution strategy in a way that meets the resolution objectives. In 2016, no minimum requirements were set for credit institutions, because of the initial wait for the entry into force of the Delegated Regulation of the European Commission supplementing Directive 2014/59/EU in the part in which the minimum requirement is set. The said Delegated Regulation entered into force in September 2016. However, in November 2016 the European Commission submitted to EU member states its Proposal for a Directive amending Directive 2014/59/EU, with amendments having to do predominantly with the determination of the minimum requirement. A discussion in the Council of the European Union is under way.

Organisation of resolution activities in the Croatian National Bank

For the purpose of organising resolution activities pursuant to the Act, a new organisational unit, the Credit Institutions Resolvability Assessment Department

(hereinafter referred to as 'the Department') within the International Relations and Resolvability Assessment Area of the CNB, started its work on 1 January 2015. The new organisation ensured the operative and functional independence of the Department by avoiding a conflict of interest between the CNB's resolution powers pursuant to the Act and the supervisory and oversight functions it performs pursuant to Regulation (EU) No 575/2013 and regulations governing the operation of credit institutions and other functions it performs pursuant to other regulations.

The activities of the Department were primarily directed at drawing up resolution plans, for both individual credit institutions and for credit institutions that are a part of a group. In addition, great efforts were directed at monitoring, and active participation in, the drawing up of regulations that were vigorously adopted during the entire year by the European Commission and the EBA, as well as preparing materials for the participation of the CNB's Vicegovernors in the work of the EBA Resolution Committee.

Apart from the listed resolution activities, the Department is responsible for tasks related to CNB decisions to initiate compulsory winding-up, i.e. decisions related to the submission of the request to open bankruptcy proceedings against a credit institution. In session on 24 May 2016, the Council of the Croatian National Bank adopted a Decision on the submission of a request to open bankruptcy proceedings to the Commercial Court in Split against Banka splitsko-dalmatinska d.d., Split, 114. brigade 9.

Consumer protection

In 2016, within activities related to consumer protection, the CNB focused, to a large extent, on the supervision of the implementation of provisions of the Act on Amendments to the Consumer Credit Act (hereinafter referred to as 'AACCA')³³, which regulates the conversion of loans denominated in the Swiss franc. As a result, intensive communication with consumers and banks involved in the process of conversion was conducted in the first half of the year, while the other half of the year was marked by frequent communication on the above topic with other public authorities. At the same time, many other activities were continued, focusing on improving the quality of consumer protection and the development of good practices in banking and financial service providers and on raising the level of the financial literacy of consumers.

Complaints of consumers – natural persons, clients of credit institutions

The Credit Institutions Act prescribes the possibility of filing a notification of complaint to the central bank, i.e. in a case in which a consumer is not satisfied with the response received from a credit institution with regard to the complaint the consumer had previously filed. Although the Croatian National Bank does not handle individual consumer complaints, the received complaints are taken into consideration during regular supervisory activities of credit institutions in the course of which, among other things, the legality of the credit institutions' operation is examined with regard to the implementation of regulations governing consumer protection. In addition, depending on the subject of the complaint itself, the CNB responded to the consumer directly, or else the credit institutions to which the individual complaint

The Credit Institutions Act prescribes the possibility of filing a notification of complaint to the central bank, i.e. in the case when a consumer is not satisfied with the response received from a credit institution with regard to the complaint the consumer had previously filed.

33 OG 102/2015.



Ana Pisačić (CNB) explains key determinants of personal finance to the participants of the schoolchildren's debate on student loans.

In 2016, the CNB received a total of 1,370 complaints of consumers – users of banking and financial services.

referred were requested to respond to their clients' forwarded complaints, with the obligation to send the copies of such responses to the CNB. As a rule, the credit institution's response was requested in the case of the complaints that were directly related to bilateral contractual relationships between consumers and the credit institution.

In the period from 1 January to 31 December 2016, the CNB received a total of 1,370 complaints of consumers – users of banking and financial services. The largest number of complaints received, 732 of them, referred to the process of conversion of loans denominated in the Swiss franc³⁴. Of the remaining number of complaints received, to a significant extent, the complaints referred to the fees

for the early repayment of loans, forced collection or blocking of accounts and, to a smaller extent, to operation with accounts and payment cards, the level of interest rates, the sale of receivables, conditions for contracting a moratorium, refusal to grant loans, a credit institution's failure to respond to a complaint and, in general, credit institutions' internal procedures.

In addition, in 2016, the CNB continued with the half-yearly collection of statistical data on the types and the number of complaints that consumers filed with credit institutions. These data are analysed relative to the data from the previous period, as well as to the number and the type of complaints against an individual credit institution, which were directly received at the CNB.

Supervision of the implementation of laws in the field of consumer protection within the competence of the CNB

As part of its regular supervisory activities, with regard to the implementation of regulations in the field of consumer protection, which aim at ensuring the legality of operation of institutions within its competence, and as a result of identified illegalities in seven credit institutions, the CNB issued ten reports in 2016, based on which one decision was adopted and minor offence proceedings were instituted.

Issuing opinions on applicable regulations and preparation of new regulations in the field of consumer protection

In 2016, the CNB continued its practice of giving opinions and responding to queries regarding the individual provisions of applicable regulations governing consumer protection, the implementation of which it supervises.

As CNB representatives take part in the work of EU institutions and bodies in the course of preparation of regulations and decisions within the scope of activity of central banks, thus, among other things, they participate in the work of the European Banking Authority (EBA), which in 2016 published the Guidelines on product oversight and governance arrangements for retail banking products³⁵.

34 With regard to the conversion of loans denominated in Swiss francs, the CNB received, in all, 2,548 complaints, of which 1,816 in 2015 and 732 complaints in 2016.

35 <http://www.hnb.hr/en/-/smjernica-o-sustavima-nadzora-i-upravljanja-proizvodima-namijenjenih-potrosacima>

In addition to contributing to their preparation, the CNB also undertook specific activities with regard to the subjects of its supervision, which aim at introducing the practices and procedures of credit institutions for an adequate implementation of the Guidelines in the Republic of Croatia.

In 2016, the CNB took part in preparing the Draft Act on the Comparability of Fees Related to Payment Accounts, Payment Account Switching and Access to Payment Accounts with Basic Features.

Also, in 2016, for the purpose of the alignment of the national with EU legislation, the CNB took part in the preparation of the Draft Consumer Home Loan Act³⁶ and the Draft Act on the Comparability of Fees Related to Payment Accounts, Payment Account Switching and Access to Payment Accounts with Basic Features³⁷. The adoption of the above acts is anticipated in

the course of 2017, and they are expected significantly to enhance transparency and consumer rights, both in the segment of consumer home loans, and in the segment of payment account transactions. The Draft Consumer Home Loan Act, among other things, proposes the broadening of the scope of information and the rights of consumers related to consumer home loans, introduces additional requirements in the assessment of consumer creditworthiness and regulates credit intermediation services and advice services and supervision of creditors and credit intermediaries in more detail. The Draft Act on the Comparability of Fees Related to Payment Accounts, Payment Account Switching and Access to Payment Accounts with Basic Features prescribes in more detail the requirements with regard to transparency and comparability of fees charged to consumers, defines payment account switching rules, prescribes the rules to facilitate cross-border payment account-opening and the possibility of opening payment accounts with basic features.

36 Transposing Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010 (OJ L 60, 28 February 2014).

37 Transposing Directive 2014/92/EU of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features.

Inter-institutional cooperation

In addition to participation in the work of EU institutions and working bodies, CNB representatives also participated in the South-Eastern European Regional Working Group for Youth Financial Education and Financial Inclusion. At the national level, they took part in the work of the National Consumer Protection Council set up at the Ministry of Economy, Entrepreneurship and Crafts and in the work of the Operating working group responsible for monitoring the implementation of measures and activities in the field of financial education, set up at the Ministry of Finance.

Financial education

In February 2016, the CNB and the Croatian Financial Supervisory Agency (HANFA) presented the results of the survey “Measuring Financial Literacy” in the Republic of Croatia. The survey was conducted using the methodology of the Organisation for Economic Co-operation and Development (OECD), simultaneously testing the financial knowledge of citizens in 29 countries in the world. In the Republic of Croatia, the survey was conducted based on the 2015 Action Plan for Improving Consumer Financial Literacy. Survey results have shown that the average financial literacy score of Croatian citizens was 11.7 points out of a maximum of 21, which leaves considerable room for improvement. In cooperation with the OECD, the final comparable survey results of the OECD/INFE International Survey of Adult Financial Literacy Competencies were released in October 2016.

In February 2016, the CNB and the Croatian Financial Supervisory Agency (HANFA) presented the results of the survey “Measuring Financial Literacy” in the Republic of Croatia. Survey results have shown that the average financial literacy score of Croatian citizens was 11.7 points, out of a maximum of 21, which leaves considerable room for improvement.

In 2016, the CNB continued organising educational lectures designed for schoolchildren and students, for whom informative and educational presentations on banking operations were held.

As the survey in the Republic of Croatia showed that the lowest scoring group was the group below 19 years of age, in 2016, the CNB continued organising educational lectures designed for this population. Informative and educational presentations on banking operations were prepared for them with special emphasis on the acquisition of good quality information before taking a decision to enter a contractual relationship with a credit institution.

In 2016, around 800 pupils from elementary and secondary schools and 300 students participated in these activities.

Other activities

For the purpose of providing better information to consumers, a table with information on the current offer of the kuna loans of all credit institutions is regularly published and updated on the CNB website under the title of “Information list containing the offer of loans in domestic currency for consumers”.

The “Information list containing the offer of loans in domestic currency for consumers” is published and regularly updated on the CNB website.

Payment operations

Regulations in the area of payment operations

SEPA³⁸ project in the Republic of Croatia

The execution of the planned activities defined by the national SEPA project marked the start of production operations of the payments infrastructure for the execution of national and cross-border payment transactions in euro (TARGET2-HR and EuroNCS). The establishment of the Croatian component of the TARGET2 system (TARGET2-HR) has enabled the settlement of national and cross-border euro payment transactions in the participants' accounts (all banks in the Republic of Croatia). The start of operation of the EuroNCS payment system, which obtained authorisation from the CNB, has created all infrastructural conditions for harmonisation with the requirements of Regulation (EU) No 260/2012 (SEPA Regulation), according to which all euro payment transactions are executed according to SEPA standards. In addition, within the national SEPA project, the NCS payment system for the clearing of payment transactions in kuna started with the clearing of kuna credit transfer transactions according to the accepted national scheme, which is harmonised with SEPA standards. The above-mentioned successfully implemented solutions have ensured the establishment of common standards for the execution of euro and kuna payment transactions. Within the framework of the establishment of the payment infrastructure and the acceptance of SEPA standards for the execution of euro and kuna payment transactions, the CNB has adopted the appropriate subordinate regulations,

Payment infrastructure for the execution of national and cross-border payment transactions in euro became operational.

38 SEPA is the Single Euro Payments Area enabling citizens, business entities and public authorities to make cashless euro payment transactions by means of uniform models and procedures applied equally throughout the SEPA area, which includes 28 member states of the European Union, Iceland, Liechtenstein, Norway, Switzerland, Monaco and San Marino.

defining the rules of operation of the payment systems and the manners of execution and settlement of payment transactions.

EU regulations in the area of payment operations

Regulation (EU) 2015/751 on interchange fees for card-based payment transactions (hereinafter referred to as 'MIF Regulation') stimulates competitiveness and enables the single market for card payments by prescribing, among other things, a maximum interchange fee amount charged between the acquirer and the issuer for card-based payment transactions. For this purpose, the MIF Regulation defines the maximum cap for interchange fees for national and cross-border card-based payment transactions. Since regulations within the scope of competence of the adoption of EU regulations are directly applied in all member states, the new Act on the Implementation of EU Regulations Governing Payment Systems (OG 50/2016) has defined penalties, as well as competent authorities for implementing and addressing complaints. The Republic of Croatia adopted the above Act within the prescribed period, by which the obligations from the MIF Regulation were transposed into the national legislation.

The Draft Act on the Comparability of Fees Related to Payment Accounts, Payment Account Switching and Access to Payment Accounts with Basic Features has been prepared, which will, among other things, enable consumers to have a transparent access to fees for maintaining the accounts and the provision of payment services, as well as simplify the procedure of account switching from one bank to another.

The Draft Act on the Comparability of Fees Related to Payment Accounts, Payment Account Switching and Access to Payment Accounts with Basic Features has been prepared, implementing the provisions of Directive 2014/92/EU into the national legislation. This Act will enable consumers to have open and transparent access to fees charged to consumers by banks for maintaining the accounts and the provision of payment services, simplify the procedure of account switching from one bank to another, and introduce the possibility of opening and using the account with basic features with a smaller administrative and financial burden.

National regulations in the area of foreign exchange operations

For the purpose of monitoring market developments and improving the operation of authorised currency exchange offices, the new Decision on the conditions of and the manner in which authorised currency exchange offices conduct currency exchange transactions was adopted (OG 22/2016), as well as the Instructions for the design of the protected programme for the conduct of currency exchange transactions of authorised currency exchange offices (OG 27/2016). The above regulations allow authorised currency exchange offices to use new technologies in currency exchange transactions (automated currency exchange machines for the purchase of foreign cash) and introduce the possibility of trading in foreign currencies not present on the exchange rate list of the contractual bank. According to new possibilities, specific certified programmes are included in the operations of authorised currency exchange offices and used by authorised currency exchange offices in their everyday operations. As at 31 December 2016, 1,311 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. In 2016, the authorised currency exchange offices' turnover in foreign cash purchase and sale transactions with natural persons in their kuna equivalent totalled HRK 29.06bn. Of that amount, purchase accounted for HRK 21.22bn. The bulk of total authorised currency exchange offices' transactions (85.8%) were in euro.

Payment systems in the Republic of Croatia

Payment operations in the Republic of Croatia in 2016 were carried out through four payment systems: the Croatian Large Value Payment System (CLVPS), the National Clearing System (NCS), TARGET2-HR and EuroNCS. In 2016, payment systems operated without any serious situations capable in any way of compromising the operational safety of payment systems, the basic infrastructure of domestic payment operations.

Below is an overview of the turnover according to the number and value of payment transactions in 2016 by the payment systems in the Republic of Croatia.

Table 4 Payment systems in the Republic of Croatia – overview of turnover in 2016

Payment system	Number of participants ¹	Payment transaction number		Average daily number of payment transactions		Payment transaction value		Average daily value of payment transactions		Average value of a payment transaction	
						(in million HRK)		(in million HRK)		(in HRK)	
Croatian Large Value Payment System	30	397,141		1,576		2,531,598		10,046		6,374,557	
National Clearing System	29	175,337,931		695,785		783,076		3,107		4,466	
						(in million EUR)		(in million EUR)		(in EUR)	
		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
TARGET2-HR	27	48,125	130,966	203	553	65,239	65,792	275	278	1,355,560	502,360
– National		8,470	2,665	36	37	14,873	14,146	63	60	1,756,002	1,632,534
– Cross-border		39,655	122,301	167	516	50,366	51,646	212	218	1,270,090	422,288
EuroNCS	26	326,103	951,946	2,189	6,389	4,594	3,867	31	26	14,088	4,062
– National		29,513	29,513	198	198	1,146	1,146	8	8	38,816	38,816
–Cross-border		296,590	922,433	1,991	6,191	3,448	2,721	23	18	11,627	2,950

¹ As at 31 December 2016.

Note: The average daily number and the average daily value of payment transactions are calculated based on the number of working days in 2016: 252 days in CLVPS and NCS, 237 days in TARGET2-HR and 149 days in EuroNCS.

SOURCE: CNB.

Croatian Large Value Payment System

The CLVPS is a payment system for the settlement of kuna payment transactions among its participants in which payment transactions are settled in real time on a gross basis, which became operative on 6 April 1999. The CNB is its owner and operational manager. In 2016, the total number and the total value of payment transactions settled through the CLVPS increased by 21.6% and 1.4% respectively from 2015.

National Clearing System

The NCS is a payment system for the clearing of funds transfer orders based on a multilateral net principle of a large number of payment transactions which are of relatively low value and which enable the clearing of payment transactions in kuna of all NCS participants, which became operative on 1 February 2001. As of 6 June 2016, in accordance with the National SEPA Migration Plan, the NCS started with the clearing of payment transactions in kuna according to

the national scheme, which is harmonised with SEPA standards. The Financial Agency (FINA) is the operating manager and owner 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 executed through the CLVPS. In 2016, the total number and the total value of payment transactions cleared through the NCS increased by 6.5% and 4.2% respectively from 2015.

TARGET2-HR

TARGET2³⁹ is a payment system for the settlement of payment transactions 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 its participants. The TARGET2-HR national component started production operations on 1 February 2016 in accordance with the National SEPA Migration Plan. The CNB is the TARGET2-HR operator.

EuroNCS

The EuroNCS is a payment system that processes payment SEPA credit transfer transactions in euro. The EuroNCS became operational on 6 June 2016 in accordance with the National SEPA Migration Plan. The Financial Agency is the operating manager and owner of the EuroNCS. The CNB has a special role of a bank – settlement agent in the EuroNCS, since the settlement of clearings from the EuroNCS is carried out in TARGET2-HR.

Payment statistics reports

Pursuant to the Decision on the obligation to submit data on the payment system and electronic money (OG 147/2013 and 16/2017) the CNB collects, processes and publishes data from the area of payment systems from reporting entities (banks, electronic money institutions and payment institutions). All data presented below are shown as at 31 December 2016.

Collected data show that reporting entities in the Republic of Croatia operated through 1,142 operating units.

39 Trans-European Automated Real-time Gross settlement Express Transfer System

There were 106,081 POS (EFTPOS) terminals and 4,551 ATMs active in the market.

Individuals (consumers) and business entities held a total of 6,844,255 transaction accounts with banks. Of the total number of opened accounts, 94.7% of transaction accounts, i.e. 6,482,321, were held by individuals (consumers), while the remaining 5.3%, i.e. 361,934 transaction accounts, were held by business entities.

Individuals (consumers) and business entities held a total of 6,844,255 transaction accounts with banks and there were in all 8,456,688 registered payment cards in circulation.

Also, there were in all 8,456,688 registered payment cards in circulation in the Republic of Croatia, 95.3% of which were payment cards issued to individuals (consumers) while 4.7% were issued to business entities. Debit cards accounted for the largest share in the total number of cards, 76.9%.

Two regular publications, Payment Cards and Card Transactions and Payment Transactions and Accounts, as well as the regular Report on cashless payment transactions in the Republic of Croatia, with a detailed overview and an analysis of data collected within the payment statistics for 2016, were published on the website of the Croatian National Bank.

Currency department operations

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 CNB supplies banks with cash based on the Decision on the supply of banks with cash (OG 157/2009, 36/2010, 24/2016 and 17/2017) and it is organised through eight cash supply centres (Zagreb, Dubrovnik, Osijek, Pula, Rijeka, Split, Varaždin, Zadar and Zagreb), which form part of Fina gotovinski servisi d.o.o., to which the CNB has contractually entrusted the above tasks. The supply of banks with cash is deemed to mean withdrawal of cash from the account of a bank in the CNB and the deposit of cash in the account of a bank in the CNB.

In all, 4.6bn worth of kuna banknotes (45.1 million pieces) and 77.3m worth of coins (99.3 million pieces) were issued from the CNB vault to cash centres (CCs) in 2016 to meet the needs of banks for cash based on their orders, and to maintain adequate logistic reserves in CCs. The total value of banknotes issued to CCs increased by HRK 1.3bn (39.1%) from 2015, and their number increased by 10.3 million pieces (29.7%). The total value of coins issued to CCs grew by 14.4% and their number decreased by 3.2%.

In all, 4.6bn worth of kuna banknotes (45.1 million pieces) and 77.3m worth of coins (99.3 million pieces) were issued from the CNB vault in 2016.

Currency outside banks

As at 31 December 2016, currency in circulation amounted to HRK 22.5bn, which is an increase of 11.5% from the end of 2015. Circulation means the volume of cash outside the CNB vault and CCs minus the volume of cash in banks' vaults.

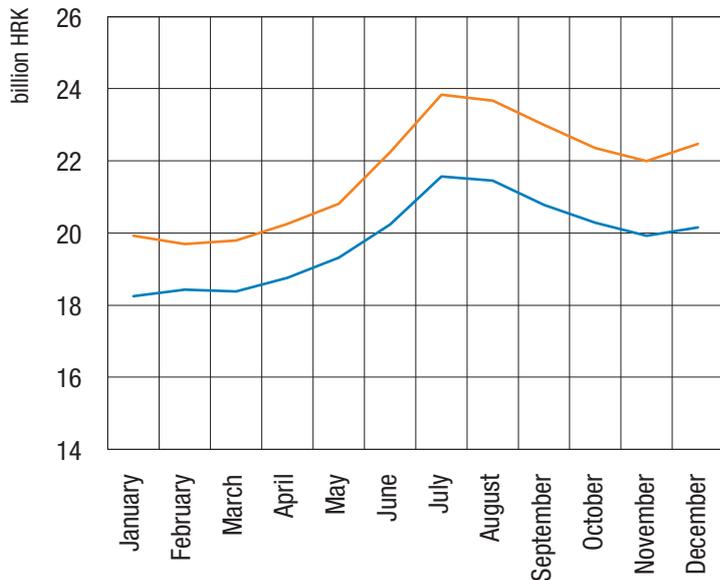


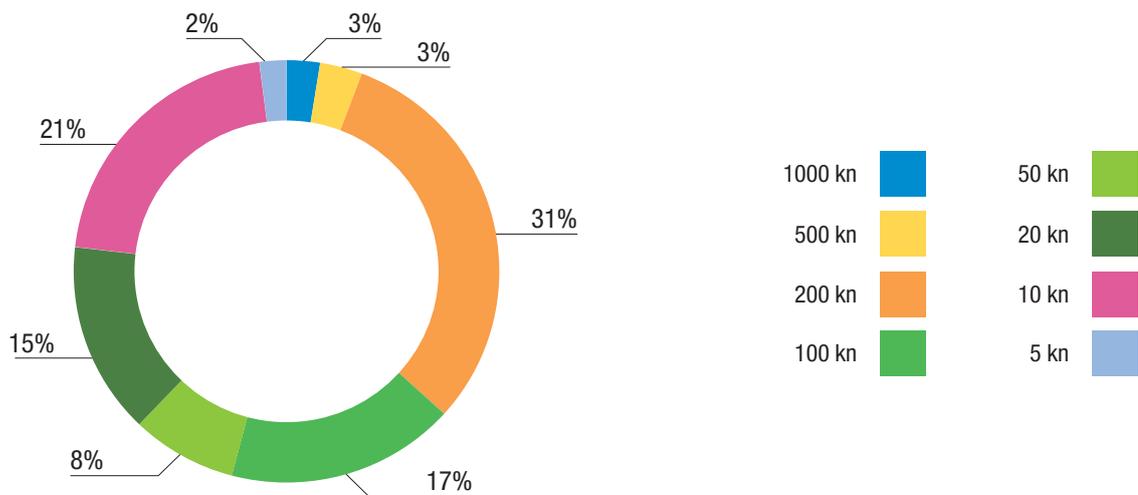
Figure 17 Currency in circulation
end of period

SOURCE: CNB.

On 31 December 2016, there were 204.7 million banknotes, worth HRK 26.6bn, outside the CNB vault and CCs. From the end of 2015, the number of banknotes outside the CNB vault and CCs rose by 9.3% in 2016, while their total value increased by 10.4%.

Figure 18 Structure of total volume of banknotes outside the CNB and CCs by denomination

end-2016



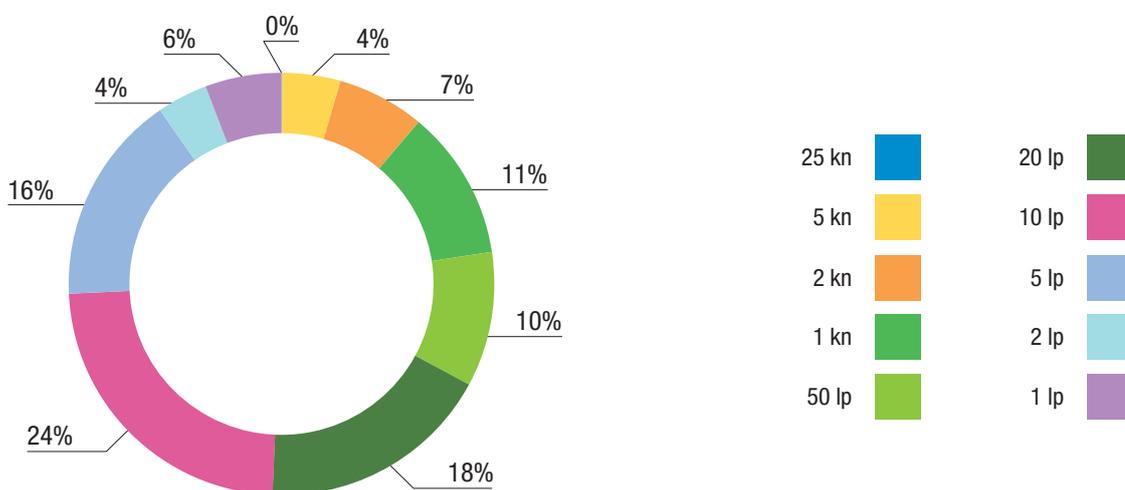
SOURCE: CNB.

Of banknotes outside the CNB vault and CCs, 200 kuna banknotes, with a share of 31.0%, and 10 kuna banknotes, with a share of 21.0%, were the most numerous in 2016 and accounted for HRK 13.1bn, or 49.3% of the total value of banknotes. The large share of 200 kuna banknotes in total banknotes outside the CNB vault and CCs is attributed to their widespread use in ATM withdrawals.

As at 31 December 2016, currency in circulation amounted to HRK 22.5bn, which is an increase of 11.5% from the end of 2015.

Of coins in circulation, the most numerous were 10 lipa coins (512.5 million pieces, or 23.6% 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 479.3m, or 36.6% of the total value of coins outside the CNB vault and CCs).

Figure 19 Structure of total volume of coins outside the CNB and CCs by denomination end-2016



SOURCE: CNB.

Issues of commemorative coins and numismatic coin sets

In 2016, the CNB issued a 25 kuna commemorative circulation coin celebrating the 25th anniversary of the independence of the Republic of Croatia, 8 October 1991 – 8 October 2016. The commemorative circulation coin was issued in 50,000 items, worth in all HRK 1,250,000.00.



Obverse and reverse of the 25 kuna commemorative circulation coin

The CNB also issued a numismatic set of the Croatian kuna and lipa circulation coins, with the year of issue 2016. Every year, the CNB issues numismatic sets of circulation coins in the denominations of 5, 2 and 1 kuna and 50, 20, 10, 5, 2 and 1 lipa. The coins in the set are identical in appearance to circulation coins in the given year.



Numismatic set of the Croatian kuna and lipa circulation coins, the year of issue "2016"

Withdrawal of banknotes and coins

The CNB withdraws banknotes and coins unfit for circulation and replaces them. A total of 32.9 million banknotes were processed in 2016, of which 82.0% or 27 million banknotes were destroyed as the banknotes failed to meet the quality standards set for circulation banknotes. In addition, 88,541 pieces or 0.3% of the processed banknotes were sorted as damaged, to be destroyed subsequently.

From 2015, the total number of unfit banknotes taken over from CCs decreased by 6.6 million pieces (22.5%), from 29.1 million to 22.5 million pieces, as a result of the application of less stringent parameters for the sorting of banknotes according to quality, in order to extend their use in circulation.

Counterfeit banknotes and coins and their prevention

In 2016, in all, 435 counterfeit kuna banknotes, worth a total of HRK 99,930.00 were registered. The number of registered counterfeit kuna banknotes decreased by 16.2% from 2015. Taking into account that the number of banknotes outside the CNB vault and CCs averaged 197,117,549 pieces, 2.2 counterfeits were detected per 1 million kuna circulation notes in 2016. In 2015, 2.8 counterfeit banknotes were detected per 1 million kuna circulation banknotes.

In 2016, eight counterfeit 5 kuna coins were registered. The number of kuna counterfeits increased by one piece or 14.3% from 2015.

With regard to foreign currencies, in all, 1,057 pieces of counterfeits were registered, of which the largest number, 897, was of counterfeit euro banknotes, followed by counterfeit US dollar banknotes (126), and the remaining 34

Table 5 Registered counterfeit kuna banknotes in 2016 by denomination

Denomination	1000	500	200	100	50	20	10	5	Total
Pieces	12	33	342	21	15	6	6	0	435
Share (in %)	2.8	7.6	78.6	4.8	3.4	1.4	1.4	0.0	100.0

SOURCE: CNB.

banknotes were counterfeits of the following currencies: the Australian dollar, Canadian dollar, pound sterling and zloty.

The number of registered counterfeit euro banknotes increased by 148 pieces or 19.8%.



Petra Poldružač (CNB) shows security features of kuna banknotes to elementary school pupils.

In 2016, 204 counterfeit euro coins were registered (174 pieces were 2-euro coins, 27 pieces were 1-euro coins and three pieces were 0.50-euro coins). The number of registered counterfeit euro coins decreased by 84 pieces or 29.2% from 2015.

The CNB has continued implementing the National Training Programme on Banknote and Coin Authentication for Bank and Financial Institution Employees. In 2016, a total of 26 specialist courses for employees of banks, institutions specialised in cash operations and the trade sector were held. In all, 666 employees of the above categories received training.

In view of the promotion of international cooperation for the suppression of counterfeits in the region, the 2nd “Balkan Network for Euro Protection” conference was held in Split in March 2016. The CNB organised the conference in cooperation with and with the financial support of the European Commission. Among those attending were the representatives of the European Commission, the European Central Bank, the European Police Office (EUROPOL), the European Union's Judicial Cooperation Unit (EUROJUST), the representatives of central banks, law enforcement and judiciary of the countries in the region and the EU.

International relations

In 2016, CNB representatives participated in the work of committees and working groups of the European System of Central Banks and other EU institutions and bodies. The CNB Governor was appointed as member of the European Systemic Risk Board's Steering Committee and as chairman of the Vienna Initiative 2.0 Steering Committee.

The Republic of Croatia participated in the coordination of economic policies within the EU for the third time in 2016. Several events have been recorded, which will have an impact on the CNB's activity in the forthcoming period.

In 2016, CNB Governor Boris Vujčić was appointed a member of the European Systemic Risk Board's Steering Committee and chairman of the Vienna Initiative 2.0 Steering Committee.

In 2016, the quota of the Republic of Croatia in the IMF increased to SDR 717.4m. At the conclusion of the Article IV consultation with the Republic of Croatia in June 2016, the IMF Executive Board welcomed Croatia's economic recovery and the reduction of the fiscal deficit. The CNB continued its cooperation with the BIS and other international financial institutions.

Activities connected with EU membership

European System of Central Banks

The CNB is an integral part of the European System of Central Banks (ESCB), and the CNB Governor is a fully-fledged member of the General Council of the European Central Bank (ECB). In 2016, the CNB Governor participated in four regular meetings of the General Council, dealing with topics such as macroeconomic, monetary and financial developments in the EU, monetary policy measures and macroeconomic imbalances in the non-euro area member states, economic implications of the result of the UK referendum on the exit from the EU and the central banks' compliance with provisions on the monetary financing prohibition.

CNB representatives took part in the work of the 12 ESCB committees, numerous sub-committees and working groups, which provide expert assistance to the General Board and other ECB bodies competent for decision-making. Through written consultations, the CNB also took part in the forming of ECB opinions concerning draft legislative changes in individual member states and the proposals of specific Union acts.

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).

CNB experts actively participated in the work of management and working bodies of the European System of Central Banks, the European Systemic Risk Board and the European Banking Authority. They also took part in the activities of the working bodies of the EU Council and the European Commission, and the CNB was actively involved in the preparation of positions of the Republic of Croatia on topics concerning the field of competence of central banks.

Together with the Vicegovernor competent for banking supervision, the Governor participated in regular quarterly meetings of the General Board of the ESRB at which topics related to systemic risks for the EU financial system and EU macroprudential policy were discussed. The ESRB proposed a recommendation in 2016 requiring the monitoring of risks in various segments of the real estate market. In September 2016, the CNB Governor was appointed a member of the ESRB Steering Committee, the body that reviews analyses prepared for the General Board meetings and discusses the macroprudential agenda of the ESRB.

The CNB was also actively involved in the work of the European Banking Authority (EBA), with CNB employees, at the expert level, taking part in the meetings of the committees and working bodies, and competent Vicegovernors participated in the EBA Board of Supervisors and Resolution Committee meetings.

The EU Council and the European Commission

CNB experts participated in the work of preparatory bodies of the EU Council and the European Commission, most frequently with Ministry of Finance

representatives. In 2016, the Governor and Deputy Governor took part in informal meetings of finance ministers, and designated Vicegovernors participated in the work of the Economic and Financial Committee (EFC), which promotes the coordination of economic policies.

CNB experts took part in the activities of the working bodies of the EU Council and the European Commission and the CNB was actively involved in the preparation of positions of the Republic of Croatia on topics concerning the field of competence of central banks. With regard to activities aimed at completing the establishment of a banking union, negotiations continued at the Council on the establishment of a European Deposit Insurance Scheme. After the Single Resolution Mechanism entered into force in early 2016, negotiations on the establishment of a common backstop to the Single Resolution Fund began at the end of the year. In November 2016, the European Commission presented a proposal of a package of measures to reduce the risks within the banking system, which, among other things, aim at strengthening the resilience of credit institutions and improving the creditworthiness of banks as a support for the real economy.

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

In 2016, Croatia participated in the European Semester for the third time, on which occasion excessive imbalances were identified, and new special recommendations of the EU Council were received. The Country Report – Croatia, released in February 2016, states that limited progress has been made in the majority of the areas covered by recommendations, including the financial sector, the profitability of which is being affected by the conversion of CHF loans and assesses that the non-performing loans ratio is stabilising at a high level. Among the indicators of macroeconomic imbalances, the European Commission particularly referred to the high public and private debt, and the unemployment rate, which remains high.

In November 2016, at the beginning of the 2017 European Semester cycle, the European Commission decided to prepare in-depth reviews of national economies for 13 member states, including Croatia. Despite a certain progress with regard to the economy's external competitiveness and addressing the issues of non-performing loans, the main vulnerabilities are still connected

with the high levels of public, private and external debt, in particular taking into consideration their unfavourable currency structure. With regard to the trends in the banking system, the European Commission states that the financial sector is relatively well capitalised, and the share of non-performing in total loans has started to decrease, although it still remains high.

Other activities connected with the European Union

In July 2016, a decision on the defining of the calendar of EU Council presidencies until 2030 was adopted at the EU level, according to which Croatia will preside over the Council in the first half of 2020.

2016 was also marked by the outcome of the UK referendum to leave the EU and its related potential long-term effects on the EU economy. Negotiations on the UK exit start in 2017. The CNB will make its contribution at the national level in preparing the analysis of potential effects and outcomes of negotiations in the fields within its competence.

The CNB maintained other contacts with representatives of EU member state central banks and representatives of the ECB and other EU institutions and bodies. Noteworthy are several visits to the CNB by the representatives of the European Commission services and the eleventh annual dialogue between the CNB and the Austrian central bank.

International Monetary Fund (IMF)

The quota of the Republic of Croatia in the IMF increased to SDR 717.4m in 2016 from the previous SDR 365.1m. The above increase in the quota allowed the Republic of Croatia to maintain the previous share in the total IMF quota and voting power approximately at the same level.

The quota of the Republic of Croatia in the IMF increased to SDR 717.4m in 2016 from the previous SDR 365.1m. The above increase in the quota allowed the Republic of Croatia to maintain the previous share in the total IMF quota and voting power at approximately the same level: the decrease in the share in the total quota from 0.153% to 0.150% and the decrease in the voting power from 0.174%

to 0.171%. The quota of the Republic of Croatia increased within the Fourteenth General Review of Quotas, which resulted in the doubling of the total IMF quota to SDR 476.8bn and in the harmonisation of the members' quotas with their position in the world economy. At the same time, the Seventh Amendment to the Articles of Agreement of the IMF entered into force, introducing the rule of election for all Executive Directors. By the new Resolution of the IMF Board of Governors, the deadline for the completion of the Fifteenth General Review of Quotas was postponed to 2019.

The Republic of Croatia is a member of the constituency that is alternately headed by the Netherlands and Belgium. This constituency now comprises 15 countries (Armenia, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Georgia, Israel, Luxembourg, Macedonia, Moldova, Montenegro, the Netherlands, Romania and Ukraine). After the Dutch representative, in November 2016, the position of the Executive Director of the constituency was assumed by the representative of Belgium. The Republic of Croatia appoints its representative as advisor to the executive director for two years within each four-year period.

The most recent Article IV consultations with the Republic of Croatia were concluded in June 2016. On that occasion, the IMF Executive Directors welcomed Croatia's economic recovery and the reduction of the fiscal deficit in 2015. Nonetheless, important challenges remain, including high public and external debts and elevated unemployment. The directors encouraged the Croatian authorities to continue fiscal consolidation in a more growth-friendly manner. They suggested avoiding reliance on across-the-board expenditure cuts and focusing on durable and targeted measures. They welcomed the plan to simplify the tax system, but stressed that any tax reduction should be implemented after progress on fiscal consolidation has been made. Executive Directors agreed that monetary policy is appropriately accommodative within the limitations of the quasi-peg exchange regime, which remains an adequate monetary anchor at this juncture in the context of euroisation. They called for continued efforts to achieve gradual de-euroisation and to safeguard financial stability until the euro can be adopted. The directors underlined the importance of preserving the central bank's independence. They commended the CNB for maintaining banking system stability and stressed the need for continued supervisory vigilance. The directors urged the Croatian authorities to accelerate structural reforms to boost growth and employment creation and facilitate

income convergence with the EU. They underscored the need to reduce red tape and streamline overlapping layers of government and public agencies. On the occasion of the December visit, the IMF staff responsible for the Republic of Croatia commended the ongoing economic recovery and the reduction of the fiscal deficit and repeated most of their previous recommendations. Cooperation with IMF experts and exchange of opinions also took place in a number of other gatherings and fora in 2016. The visit by the Croatian delegation to Washington on the occasion of the spring IMFC meeting and the Annual Meeting of the IMF Board of Governors and the World Bank is worth mentioning.

Bank for International Settlements (BIS)

The CNB Governor takes part in the work of the regular meetings of central bank governors from BIS member countries, at which topical issues in the area of international banking and finance are discussed. The BIS Annual Report was adopted at its regular Annual General Meeting, held in June, and the Extraordinary General Meeting was held in November 2016. On that occasion, amendments to the BIS Statutes were adopted, increasing the flexibility of members of the Board of Directors of the Bank as a reflection of the current global character of this oldest international financial institution.

Vienna Initiative 2.0

In October 2016, the CNB Governor was appointed 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 (CESEE). The Initiative brings together the key international financial institutions, home and host country supervisory authorities and the principal cross-border banking groups, aimed at reducing the risk of abrupt withdrawal of interbank lending, establishing cooperation between supervisory authorities for a better identification of systemic risks and finding solutions for the high level of non-performing loans.

Human resources of the Croatian National Bank

Most employees with university or secondary school qualifications have had economic majors, while the number of employees whose majors were law, information technology and mathematics is on the increase, which provides for an interdisciplinary approach to the realisation of CNB goals.

As at 31 December 2016, the CNB had a staff of 649 employees. Of this number, 97% employees were in permanent employment and 3% in fixed-term employment.

28 employees left the CNB in 2016. The most common reasons for leaving were the suspension of rights and obligations arising from employment, retirement and termination of employment by mutual consent.

73% of CNB employees have university qualifications.

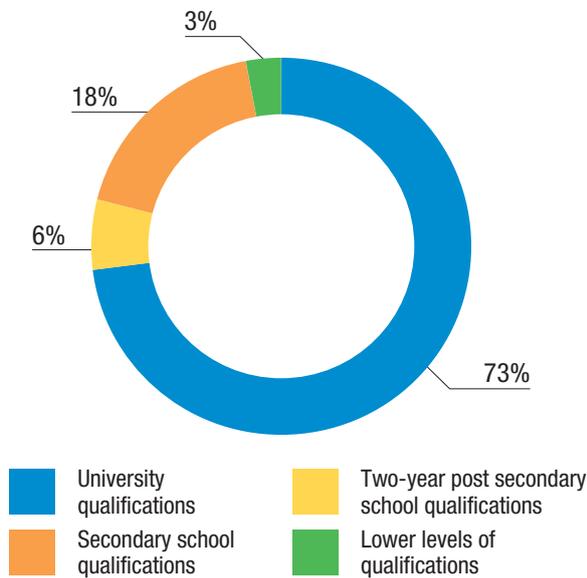
37 new employees were hired in 2016, mostly as substitutes for employees who had temporarily or permanently left the CNB. In nine cases, new employees were hired due to the assumption of new operations or the increase in the volume of the existing operations.

Employee structure

As regards the employee qualification structure, 73% of CNB employees have university qualifications, of which 53% have graduate and 20% postgraduate degrees (doctoral or specialist). 6% of employees have two-year post secondary school qualifications, 18% have secondary school qualifications and 3% have lower levels of

As at 31 December 2016, the CNB had a staff of 649 employees. Of this number, 97% employees were in permanent employment and 3% in fixed-term employment.

Figure 20 Employee qualifications



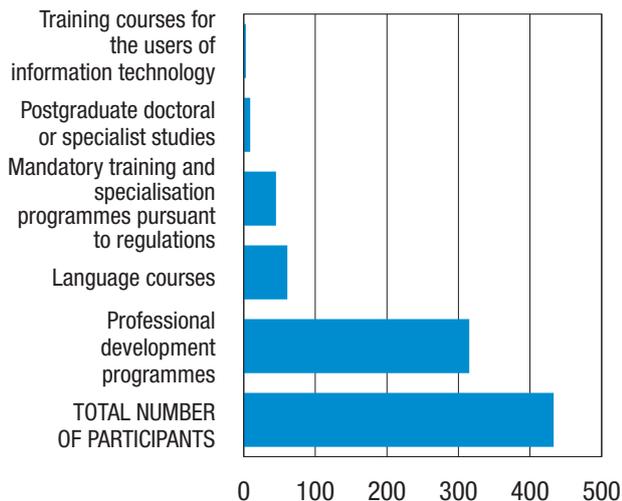
SOURCE: CNB.

qualifications.

Most employees with university or secondary school qualifications have majored in economics, while the number of employees majoring in law, information technology and mathematics is on the increase, which provides for an interdisciplinary approach to the realisation of CNB goals.

The average age of CNB employees is 45 years and they have an average work experience of 16 years. In view of the job specifications and specific knowledge and skills required, this is in line with the CNB professional structure.

Figure 21 Number of participants



SOURCE: CNB.

There were 65% female and 35% male employees in the CNB in 2016. The sex ratio corresponds with the sex ratio in the population graduating in the fields of specialisation that are the most common in the CNB.

Employee development

A total of 433 employees participated in various development activities in 2016. Most of them (315) participated in professional development programmes. 61 employees attended language courses. Forty-five employees participated in mandatory training and specialisation programmes pursuant to regulations, 3 employees attended training courses for the users of information technology and 9 employees attended postgraduate

doctoral or specialist studies, after having applied to in-house tenders.

433 CNB employees participated in professional development programmes.

In 2016, as in the previous years since the admission of the RC to the EU, CNB employees actively participated in the activities of committees and other working bodies of the ESCB, ESRB, EBA, Council of the EU, European Commission and Eurostat. CNB employees also had an opportunity to enrich their professional development and work experience working with colleagues at the ECB or other international financial institutions.

Organisational structure

The Regulation on the CNB organisational structure was amended twice in 2016. Changes were made to several organisational units in order to create conditions for a more efficient realisation of business goals and optimal use of employee potentials. The newly-established Communications Area considerably contributed to increasing the CNB's openness to the public and transparency of operation as well as to creating a better public insight in the operations of the central bank.



HNB

CROATIAN NATIONAL BANK

FINANCIAL STATEMENTS

For the year ended 31 December 2016



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

Report on the Audit of the Financial statements

Opinion

We have audited the financial statements of the Croatian National Bank, which comprise the statement of financial position as at 31 December 2016, the income statement, the statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Croatian National Bank as at 31 December 2016, 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 (IFRS as adopted by the EU).

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.

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 and fair presentation of the financial statements in accordance with IFRS as adopted by the EU, 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)

Report on the Audit of the Financial statements (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.



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

Report on the Audit of the Financial statements (continued)

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

- 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.

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.

Ivana Lučića 2a
10000 Zagreb
Croatia

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

Goran Horvat
Director, Croatian certified auditor

Zagreb, 31 March 2017

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

KPMG Hungaria Kft.

Váci út 31.
1134 Budapest
Hungary

For and on behalf of KPMG Hungaria Kft.:

István Henye
Partner

Budapest, 31 March 2017



INCOME STATEMENT

(All amounts are expressed in thousands of kuna)	NOTES	2016	2015
Interest and similar income	3	660,076	654,992
Interest and similar expense	4	(93,562)	(37,222)
NET INTEREST INCOME/(EXPENSE)		566,514	617,770
Fee and commission income	5	49,028	47,112
Fee and commission expenses		(18,356)	(13,275)
NET FEE AND COMMISSION INCOME/(EXPENSE)		30,672	33,837
Dividend income		4,968	5,241
Net investment result – equity method		836	1,285
Net result from financial assets at fair value through profit or loss	6	(23,624)	(71,637)
Net result from financial assets available for sale		67,734	–
Net exchange differences	7	(278,788)	1,588,178
Other income	8	23,196	129,599
OPERATING INCOME		391,508	2,304,273
Operating expenses	9	(326,560)	(318,781)
(Increase)/decrease in impairment losses and provisions	10	(22,835)	46,319
PROFIT OR LOSS	32	42,113	2,031,811
– Allocated to general reserves		(8,423)	(1,548,763)
– Allocated to the State Budget		(33,690)	(483,048)

The notes on pages 113 to 172 form an integral part of these financial statements.

STATEMENT OF COMPREHENSIVE INCOME

(All amounts are expressed in thousands of kuna)	NOTES	2016	2015
PROFIT OR LOSS		42,113	2,031,811
OTHER COMPREHENSIVE INCOME		(62,624)	–
OTHER COMPREHENSIVE INCOME ITEMS NOT TO BE RECLASSIFIED TO PROFIT OR LOSS IN SUBSEQUENT PERIODS		–	–
Changes in revaluation reserves (IAS 16)		–	–
OTHER COMPREHENSIVE INCOME ITEMS THAT ARE OR WILL BE RECLASSIFIED TO PROFIT OR LOSS IN SUBSEQUENT PERIODS		(62,624)	–
Gains/(losses) from remeasurement of financial assets available for sale (IAS 39)		5,110	–
(Gains)/losses from financial assets available for sale transferred to profit or loss (IAS 39)		(67,734)	–
TOTAL COMPREHENSIVE INCOME		(20,511)	2,031,811

The notes on pages 113 to 172 form an integral part of these financial statements.

STATEMENT OF FINANCIAL POSITION

(All amounts are expressed in thousands of kuna)	NOTES	31 DECEMBER 2016	31 DECEMBER 2015
ASSETS			
Cash and current accounts with other banks	11	12,496,923	3,505,509
Deposits with other banks	12	2,347,183	5,615,019
Financial assets at fair value through profit or loss	13	24,721,319	29,840,319
Loans	14	54	60
Reverse repo agreements	15	11,825,959	26,666,037
Held-to-maturity investments	16	21,456,529	36,239,360
Balances with the International Monetary Fund	17	9,924,148	6,496,690
Financial assets available for sale	18	27,507,831	60,218
Investments accounted for using the equity method	19	22,083	21,247
Accrued interest and other assets	20	4,099,969	433,580
Property, plant, equipment and intangible assets	21	590,670	581,509
TOTAL ASSETS		114,992,668	109,459,548
LIABILITIES			
Banknotes and coins in circulation	22	27,913,956	25,317,915
Due to banks and other financial institutions	23	49,240,755	42,353,938
Repo agreements	24	7,181,838	9,453,298
Due to the State and State institutions	25	3,370,118	8,076,829
Due to the International Monetary Fund	26	9,900,065	6,472,519
Accrued interest and other liabilities	27	760,181	1,105,093
TOTAL LIABILITIES		98,366,913	92,779,592
EQUITY			
Initial capital	28	2,500,000	2,500,000
Reserves		14,125,755	14,179,956
TOTAL EQUITY		16,625,755	16,679,956
TOTAL EQUITY AND LIABILITIES		114,992,668	109,459,548

The financial statements set out on pages 108 to 172 were approved on 31 March 2017 by:

Director of the Accounting Department:

Ivan Branimir Jurković



Governor:

Boris Vujčić



The notes on pages 113 to 172 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 RESERVE	REVALUATION RESERVES ON PROPERTY	TOTAL RESERVES	OPERATING SURPLUS/ (DEFICIT)	TOTAL EQUITY
BALANCE AT 1 JANUARY 2015	2,500,000	12,281,613	–	349,580	12,631,193	–	15,131,193
Net profit or loss	–	–	–	–	–	2,031,811	2,031,811
Other comprehensive income	–	–	–	–	–	–	–
Total comprehensive income	–	–	–	–	–	2,031,811	2,031,811
Depreciation of revalued property	–	5,234	–	(5,234)	–	–	–
Net profit transferred to general reserves	–	1,548,763	–	–	1,548,763	(1,548,763)	–
Net profit transferred to the State Budget	–	–	–	–	–	(483,048)	(483,048)
BALANCE AT 31 DECEMBER 2015/1 JANUARY 2016	2,500,000	13,835,610	–	344,346	14,179,956	–	16,679,956
Net profit or loss	–	–	–	–	–	42,113	42,113
Other comprehensive income	–	–	(62,624)	–	(62,624)	–	(62,624)
Total comprehensive income	–	–	(62,624)	–	(62,624)	42,113	(20,511)
Depreciation of revalued property	–	5,233	–	(5,233)	–	–	–
Net profit transferred to general reserves	–	8,423	–	–	8,423	(8,423)	–
Net profit transferred to the State Budget	–	–	–	–	–	(33,690)	(33,690)
BALANCE AT 31 DECEMBER 2016	2,500,000	13,849,266	(62,624)	339,113	14,125,755	–	16,625,755

The notes on pages 113 to 172 form an integral part of these financial statements.

STATEMENT OF CASH FLOWS

(All amounts are expressed in thousands of kuna)	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES		
Interest received	952,824	998,503
Interest paid	(103,282)	(46,150)
Fees and commissions received	41,964	46,454
Fees and commissions paid	(8,791)	(6,533)
Dividends received	4,968	5,241
Other receipts	96,492	136,044
Expenses paid	(291,712)	(301,011)
	692,463	832,548
CHANGES IN OPERATING ASSETS AND LIABILITIES		
Decrease/(increase) in deposits with other banks and foreign currency reverse repo agreements	19,183,937	(9,076,804)
Decrease/(increase) in loans and reverse repo kuna agreements	(945,394)	(157,994)
Decrease/(increase) in trading securities	5,043,429	7,950,747
Decrease/(increase) in assets under management with international financial institutions	10,143	(1,409,126)
Decrease/(increase) in held-to-maturity securities	13,970,897	(3,423,275)
Decrease/(increase) in securities available for sale	(27,141,361)	–
Decrease/(increase) in other assets	(55,507)	(35,167)
Decrease/(increase) in balances with the IMF	(853,341)	(58)
Increase/(decrease) in amounts due to the IMF	853,227	–
Increase/(decrease) of currency in circulation	2,596,040	2,161,938
Increase/(decrease) in repo agreements and amounts due to banks and other financial institutions	755,922	10,484,094
Increase/(decrease) in amounts due to the State	(4,630,861)	(3,467,993)
Increase/(decrease) in amounts due to European Commission	216,998	(253,327)
Increase/(decrease) in other liabilities	(153,967)	(160,032)
	8,850,162	2,613,003
NET CASH FROM OPERATING ACTIVITIES	9,542,625	3,445,551
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchases of property, equipment and intangible assets	(42,712)	(21,951)
NET CASH FROM INVESTING ACTIVITIES	(42,712)	(21,951)
CASH FLOWS FROM FINANCING ACTIVITIES		
New issuance of compulsory CNB treasury bills	–	1,437,197
Repurchase of compulsory CNB treasury bills	–	(4,614,636)
Payments of allocated profits to the State Budget	(483,048)	(516,348)
NET CASH FROM FINANCING ACTIVITIES	(483,048)	(3,693,787)
EFFECT OF CHANGES IN EXCHANGE RATES – POSITIVE/(NEGATIVE) EXCHANGE DIFFERENCES ON CASH AND CASH EQUIVALENTS	(21,480)	61,254
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	8,995,385	(208,933)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	6,459,790	6,668,723
CASH AND CASH EQUIVALENTS AT END OF YEAR (NOTE 31)	15,455,175	6,459,790

The notes on pages 113 to 172 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 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, 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 Vice Governors 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.

The members of the Council of the Croatian National Bank:

- Prof. D. Sc. Boris Vujčić, Governor
- Relja Martić, Deputy Governor
- M. Sc. Tomislav Presečan, Vice Governor
- M. Sc. Vedran Šošić, Vice Governor
- Damir Odak, Vice Governor
- D. Sc. Michael Faulend, Vice Governor
- Bojan Fras, Vice Governor
- Neven Barbaroša, Vice Governor.

1.2 Accounting standards

The 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

The financial statements for current reporting period are prepared according to the same accounting policies which were applied to the financial statements for the year ended

31 December 2015, with the application of standards and interpretations that must be applied in the EU from 1 January 2016. The introduction of these standards had no significant impact on the financial statements for the year 2016.

1.2.1.1 Standards and interpretations in force in the EU for reporting periods commencing from 1 January 2016, applied in the preparation of the financial statements for 2016

In 2015 and 2016, amendments to existing standards with mandatory application in the EU for reporting periods commencing from 1 January 2016 were published, as presented in the following table.

OFFICIAL JOURNAL OF THE EU STANDARD

OJ L 5/2015	IFRS annual improvements, cycle 2010 – 2012:
	IFRS 2 – Share-based Payment (amendments)
	IFRS 3 – Business Combinations (amendments)
	IFRS 8 – Operating Segments (amendments)
	IAS 16 – Property, Plant and Equipment (amendments)
	IAS 24 – Related Party Disclosures (amendments)
	IAS 38 – Intangible Assets (amendments)
OJ L 306/2015	IAS 19 – Employee Benefits (amendments)
	IAS 16 – Property, Plant and Equipment (amendments)
OJ L 307/2015	IAS 41 – Agriculture (amendments)
	IFRS 11 – Joint Arrangements (amendments)
OJ L 317/2015	IFRS 16 – Property, Plant and Equipment (amendments)
	IAS 38 – Intangible Assets (amendments)
OJ L 330/2015	IFRS annual improvements, cycle 2012 – 2014:
	IFRS 5 – Non-current Assets Held for Sale and Discontinued Operations (amendments)
	IFRS 7 – Financial Instruments: Disclosures (amendments)
	IAS 19 – Employee Benefits (amendments)
OJ L 333/2015	IAS 34 – Interim Financial Reporting (amendments)
	IAS 1 – Presentation of Financial Statements (amendments)
OJ L 336/2015	IAS 27 – Separate Financial Statements (amendments)
	IFRS 10 – Consolidated Financial Statements (amendments)
OJ L 257/2016	IFRS 12 – Disclosure of Interests in Other Entities (amendments)
	IAS 28 – Investments in Associates and Joint Ventures (amendments)

The application of these standards has no significant impact on the financial statements of the Croatian National Bank in the current period.

1.2.1.2 Standards and interpretations published in the EU which were not applied in the preparation of these financial statements

In the reporting period, new standards were published applicable as of 1 January 2018, as shown in the following table.

OFFICIAL JOURNAL OF THE EU	STANDARD
OJ L 295/2016	IFRS 15 – Revenue from Contracts with Customers (new)
OJ L 323/2016	IFRS 9 – Financial Instruments (new)

The application of IFRS 15 will not have a significant impact on the financial statements of the Croatian National Bank.

The application of IFRS 9 will affect the classification and measurement of financial instruments of the Croatian National Bank. The Croatian National Bank commenced with preparation for the initial application of IFRS 9 as of 1 January 2018. IFRS 9 introduces new criteria for the classification of financial assets: the business model for the management of financial assets and the contractual cash flow characteristic, as well as changes related to the impairment of financial assets. The CNB is currently analysing business models and cash flow characteristics of its instruments, which will be a basis for the classification of its financial instruments on the date of initial application of IFRS 9. The preparations for the software for the calculation of value impairments (expected credit losses) for various financial instruments are also under way.

The Croatian National Bank did not early adopt new standards, amendments to standards and their interpretations, adopted by the EU, whose adoption in 2016 is optional, given that the commencement of the financial year for the CNB is 1 January 2016.

1.2.1.3 Standards and interpretations which are not published 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.

1.2.2 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 and available for sale debt securities, buildings measured at revalued amortised cost 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 presentational currency of the Croatian National Bank is the kuna. The financial statements are expressed in thousands of kuna.

These financial statements are prepared using going concern assumption.

1.2.3 Use of judgements and estimates

In preparing the financial statements, the management has made judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities at the reporting date, as well as the amounts of income and expense for the period. The estimates and associated assumptions are based on the best information on current events and activities, and actual results may differ from these estimates.

The significant judgements made by the management in the application of accounting policies and the primary sources of estimation uncertainty were the same as those used in the preparation of the annual financial statements for 2015.

1.2.3.1 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 CNB recognises transfers between fair value hierarchies at the end of each reporting period in which transfer has occurred.

More detailed disclosures on fair value measurements of financial assets and liabilities are presented in Note 33.

1.2.3.2 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* (Note 2.6.4).

At the reporting date the Croatian National Bank had no impaired financial assets.

The Croatian National Bank did not form provisions for incurred but not reported credit losses, as due to the high credit quality of its assets it has never recorded specific impairment losses on its financial assets.

1.2.3.3 Estimation uncertainty relating to litigations and claims

The Croatian National Bank provided HRK 24,562 thousands (2015: HRK 3,010 thousands) in respect of liabilities for court cases. The management estimates these provisions as sufficient.

1.2.3.4 Held-to-maturity investments

The Croatian National Bank applies IAS 39 – Financial Instruments: Recognition and Measurement guidelines for the classification of non-derivative financial assets with fixed or determinable payments and fixed maturity in the held-to-maturity portfolio. This classification entails significant judgment. In making this judgment, the Croatian National Bank estimates its intention and ability to hold these investments to maturity.

Note 2 – Summary of significant accounting policies

2.1 Interest income and expense

Interest income also 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 available for sale is recognised in the Income Statement using the effective interest method. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability.

Interest income on debt securities at fair value through profit or loss is recognised based on the nominal coupon interest rate.

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 the Croatian kuna at the rates of exchange in effect at the dates of the transactions. At each reporting date, monetary assets and liabilities denominated in foreign currencies are retranslated at the exchange rates in effect on that date. Gains and losses on translation 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 gains or losses are included in unrealised income and expenses 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 2016 were as follows:

USD 1 = HRK 7.168536 (2015: HRK 6.991801)

EUR 1 = HRK 7.557787 (2015: HRK 7.635047)

XDR 1 = HRK 9.702917 (2015: HRK 9.688748)

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

2.6.1 Classification

2.6.1.1 Financial assets

Financial assets of the Croatian National Bank are classified into the following categories:

a) Financial assets at fair value through profit or loss

This category comprises marketable debt securities, acquired principally for the purpose of sale or repurchase in the near future. Assets under management with international institutions and precious metals are also included in this category.

b) Held-to-maturity investments

Included in this category are investments in debt securities that the Croatian National Bank has the ability and intends to hold to maturity.

c) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments, not quoted on an active market.

This category comprises cash, deposits with banks and financial institutions, reverse repo agreements, loans, trade and other receivables included in the financial assets.

d) Financial assets available for sale

Financial assets available for sale comprise debt securities and investments of the Croatian National Bank in equity securities of international financial institutions based on which the membership status in these institutions was realised, and participating interest of the Croatian National Bank in the European Central Bank which was recognised following the payment for one portion of the issued capital of the European Central Bank.

2.6.1.2 Financial liabilities

The Croatian National Bank classifies its financial liabilities as other financial liabilities.

2.6.2 Recognition and derecognition

The Croatian National Bank recognises and derecognises financial instruments on the settlement date.

2.6.3 Measurement

Financial instruments are measured initially at fair value plus, in the case of a financial asset or financial liability not designated at fair value through profit and loss, transaction costs.

Subsequent to initial recognition financial assets at fair value through profit or loss are measured at fair value. Gains and losses from changes in the fair value of these assets are recognised in the Income Statement.

Held-to-maturity securities comprise debt securities with fixed or determinable payments and fixed maturities. They are measured at amortised cost using the effective interest rate method less any impairment.

Loans and receivables are also measured at amortised cost using the effective interest rate method.

Financial assets available for sale are measured at fair value, except for investments in equity securities with no quoted price in an active market, and whose fair value cannot be reliably measured. Those investments are measured at cost. Gains or losses from changes in fair value (debt) monetary assets available for sale are recognized directly in

the fair value reserve in other comprehensive income and are disclosed in the Statement of Changes in Equity. Impairment losses, gains and losses from foreign exchange, interest income, interest expense if interest rates are negative, amortization of premium or discount using the effective interest rates on debt assets available for sale are recognized in profit or loss.

Financial liabilities are classified as other financial liabilities and are subsequently measured at amortised cost using the effective interest rate method, with the exception of banknotes and coins in circulation which are measured at their nominal value.

2.6.4 Impairment of financial assets

Financial assets are reviewed at each reporting date to determine whether there is objective evidence of impairment.

a) Financial assets at amortised cost

If there is objective evidence that an impairment loss on loans and receivables or held-to-maturity investments carried at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through use of an allowance account and the amount of the loss is recognised in profit or loss. For calculating impairment loss on loans and receivables or held-to-maturity financial assets with variable interest rates, the contractual effective interest rate at the date of impairment is used as a discount rate.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the previously recognised impairment loss is reversed by adjusting an allowance account. The amount of the reversal is recognised in profit or loss.

b) Financial assets at available for sale

If there is objective evidence of impairment of financial investment, its new fair value is calculated to determine amount of impairment.

When a decline in the fair value of an available-for-sale financial asset has been recognised in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that had been recognised in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment even though the financial asset has not been derecognised.

The amount of the cumulative loss that is reclassified from other comprehensive income to profit or loss is the difference between the acquisition cost (net of any principal repayment and amortisation) and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss.

Impairment losses recognised in profit or loss for an investment in an equity instrument classified as available for sale are not reversed through profit or loss, but are recognised as fair value reserve in other comprehensive income.

If, in a subsequent period, the fair value of a debt instrument classified as available for sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss shall be reversed, with the amount of the reversal recognised in profit or loss. Impairment may be reversed only up to the amount of the previously reported impairment.

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 on the Statement of Financial Position.

Payments arising from those agreements are recognised as amounts due from other banks or 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 Balances with the International Monetary Fund

Balances with the International Monetary Fund (IMF) are denominated in Special Drawing Rights (XDR).

2.10 Gold and other precious metals

Gold and other 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.

2.11 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.

2.12 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.

2.13 Taxation

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

2.14 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.

Given the review of useful lives of property, plant, equipment and intangible assets as a result of greater experience and new information, in 2016 there was a change in an accounting estimate of the useful life of computers and computing infrastructure as presented in the following table.

The following annual depreciation and amortization rates are used:

ASSET CLASS	EXPECTED USEFUL LIVE IN 2016 (NUMBER OF YEARS)	EXPECTED USEFUL LIFE IN 2015 (NUMBER OF YEARS)
Buildings	20 – 50	20 – 50
Computers and computing infrastructure	5 – 8	5
Furniture and equipment	4 – 20	4 – 20
Motor vehicles	4	4
Software and licences	2 – 10	2 – 10

2.15 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.

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 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.

2.16 Employees benefits

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 accrue.

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.

2.17 Appropriation

The operating surplus is allocated to general reserves and to the State Budget in

accordance with Article 57 of the Act on the Croatian National Bank. The allocation of the surplus of income over expenditures to general reserves is performed in the amount determined by the Council of the Croatian National Bank. The amount of surplus of income over expenditures which is allocated to general reserves in 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 to changes in market prices, nor higher than 20% of the realised surplus of income over expenditures.

Exceptionally, 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 to changes in 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. Any shortfall between income and expenditures is covered by the Croatian National Bank 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 and similar income

(All amounts are expressed in thousands of kuna)	2016	2015
Foreign currency deposits	1,412	5,259
Held-for-trading securities	75,743	113,571
Held-to-maturity securities	289,182	511,075
Available for sale securities	213,843	–
Loans to domestic banks	–	1
Foreign currency reverse repo agreements	23,710	13,797
Kuna reverse repo agreements	12,861	656
Foreign currency repo agreements (negative interest)	43,049	10,612
Other	276	21
	660,076	654,992

Note 4 – Interest and similar expenses

(All amounts are expressed in thousands of kuna)	2016	2015
Foreign currency deposits (negative interest)	6,533	1,611
Repo agreements	11,941	5,250
Reverse repo agreements (negative interest)	65,746	20,642
State Budget deposits	9,341	9,718
Other	1	1
	93,562	37,222

Note 5 – Fee and commission income

(All amounts are expressed in thousands of kuna)	2016	2015
Fees for the supervision of credit institutions	40,649	41,463
Other	8,379	5,649
	49,028	47,112

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 base, 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.

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

(All amounts are expressed in thousands of kuna)	2016	2015
Net securities trading result, including net changes in fair value of held-for-trading securities	(36,328)	(73,076)
Net result from assets under management with international financial institutions	11,908	1,510
Net result from revaluation of precious metals	796	(71)
	(23,624)	(71,637)

Note 7 – Net exchange differences

(All amounts are expressed in thousands of kuna)	2016	2015
Net unrealised exchange differences	(278,957)	1,548,763
Net realised exchange differences	169	39,415
	(278,788)	1,588,178

Decrease in the EUR/HRK exchange rate and increase in the USD/HRK exchange rate between the two reporting dates had the biggest effect on the net exchange differences.

Note 8 – Other income

(All amounts are expressed in thousands of kuna)	2016	2015
Sale of numismatics	207	330
Other income	22,989	129,269
	23,196	129,599

Within other income in 2015, the most important amount relates to income realised on legal settlement.

Note 9 – Operating expenses

(All amounts are expressed in thousands of kuna)	2016	2015
Staff costs (Note 9.1)	166,238	164,766
Materials, services and administrative expenses	85,275	84,881
Costs of production of banknotes and coins of Croatian kuna	45,614	37,967
Depreciation and amortisation costs	29,433	31,167
	326,560	318,781

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.

The result of using new estimates of useful lives of computers and computing infrastructure (refer to Accounting policy Note 2.14) is that the depreciation of property, plant, equipment and intangible assets in the reporting period was HRK 6,887 thousands lower than depreciation that would have been recognized if there was no change in the estimated useful lives.

Note 9.1 – Staff costs

(All amounts are expressed in thousands of kuna)	2016	2015
Net salaries	77,317	75,704
Contributions from and contributions on salaries	43,857	43,096
Taxes and surtaxes	18,951	18,630
Other employee related expenses	26,113	27,336
	166,238	164,766

The average number of employees during 2016 was 647 (2015: 640). Total staff costs for 2016 amount to HRK 166,238 thousands, of which the amount of HRK 27,232 thousands relates to contributions for pension insurance (2015: HRK 164,766 thousands, of which HRK 26,948 thousands was related to contributions for pension insurance).

Note 10 – Increase/(Decrease) in impairment losses and provisions

(All amounts are expressed in thousands of kuna)	2016	2015
A) ACCRUED INTEREST AND OTHER ASSETS		
Increase in provisions	–	–
Collection	–	(51,402)
B) PROVISIONS FOR RISKS AND CHARGES		
Increase in provisions	31,294	14,148
Reversals	(8,459)	(9,065)
	<u>22,835</u>	<u>(46,319)</u>

Note 11 – Cash and current accounts with other banks

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Cash on hand	1,400	1,135
Foreign currency cash in the CNB treasury vault	3,014,841	3,047,734
Current accounts with foreign banks	8,951,477	456,640
CNB account in TARGET2 system	529,205	–
	<u>12,496,923</u>	<u>3,505,509</u>

The national component TARGET2-HR commenced work on 1 February 2016 (refer to Note 23).

Note 12 – Deposits with other banks

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Deposits with foreign central banks	2,191,758	2,636,133
Deposits with foreign commercial banks	143,371	2,968,719
Deposits with domestic commercial banks	12,054	10,167
	<u>2,347,183</u>	<u>5,615,019</u>

Geographical concentration of deposits with other banks:

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Croatia	12,054	10,167
Europe	2,335,129	5,604,852
	<u>2,347,183</u>	<u>5,615,019</u>

Note 13 – Financial assets at fair value through profit or loss

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Held-for-trading securities (Note 13a)	23,278,682	28,435,569
Assets under management with international financial institutions (Note 13b)	1,436,029	1,398,940
Precious metals	6,608	5,810
	<u>24,721,319</u>	<u>29,840,319</u>

a) Trading securities

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
EUR-denominated securities	18,631,737	16,428,519
USD-denominated securities	4,646,945	12,007,050
	<u>23,278,682</u>	<u>28,435,569</u>

Held-for-trading securities include accrued interest in the amount of HRK 37,055 thousands at December 31, 2016 (December 31, 2015: HRK 61,041 thousands).

b) Assets under management with international financial institutions

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
USD-denominated funds entrusted to the management of international financial institutions	1,436,029	1,398,940
	<u>1,436,029</u>	<u>1,398,940</u>

Note 14 – Loans

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Other loans	54	60
	<u>54</u>	<u>60</u>

Note 15 – Reverse repo agreements

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Foreign currency reverse repo agreements	10,722,559	26,508,037
Reverse repo agreements in kuna	1,103,400	158,000
	<u>11,825,959</u>	<u>26,666,037</u>

Total fair value of collateral obtained by foreign currency reverse repo agreements (sovereign bonds of countries rated Aaa to Aa3 and debt securities of international financial institutions rated Aaa to Aa1) as at 31 December 2016 amounts to HRK 10,810,203 thousands (31 December 2015: HRK 26,416,450 thousands).

Reverse repo agreements in kuna are insured with debt securities of issuers from the Republic of Croatia and margin call deposits worth more than the deposit. The issuer or issue must have a credit rating at least equal to the rating of the Republic of Croatia, according to at least one of the international rating agencies Standard & Poor's, FitchRatings or Moody's. Total fair value of received collateral and margin call deposits on reverse repo agreements in kuna as of 31 December 2016 amounted to HRK 1,216,187 thousands (31 December 2015: HRK 168,563 thousands).

Note 16 – Held-to-maturity investments

Held-to-maturity investments comprise the following:

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Debt securities	21,336,267	35,938,273
Accrued interest	120,262	301,087
	<u>21,456,529</u>	<u>36,239,360</u>

Note 17 – Balances with the International Monetary Fund

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Membership quota	6,960,859	3,537,379
Special Drawing Rights (XDR) and deposits	2,963,289	2,959,311
	<u>9,924,148</u>	<u>6,496,690</u>

In accordance with the provisions of the Fourteenth General Review of Quotas and Reform of the Executive Board of the International Monetary Fund (Resolution No. 66-2), the Government of the Republic of Croatia adopted at its session on 27 October 2011 the Regulation on accepting the quota increase of the Republic of Croatia in the International Monetary Fund. The quota increase came into force on 26 January 2016, and the Republic of Croatia paid the increase of the quota in the manner prescribed by the mentioned Regulation.

Note 18 – Financial assets available for sale

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Debt securities	27,447,613	–
BIS shares	41,914	41,914
SWIFT shares	80	80
ECB paid-up capital	18,224	18,224
	<u>27,507,831</u>	<u>60,218</u>

Debt securities available for sale include accrued interest in the amount of HRK 164,759 thousands as at 31 December 2016.

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. The shares of the BIS are recorded at historical cost. 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 2016 the Croatian National Bank received a dividend in the amount of HRK 4,968 thousands (2015: HRK 5,241 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 and are carried at historical cost.

Paid in capital of the European Central Bank (ECB) represents participating interest of the Croatian National Bank in the ECB and it is carried at historical cost.

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 2014.

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 amendment in the ECB's capital key since 1 January 2014, the contribution of the CNB in the ECB capital amounts to 0.6023%. The CNB's share in issued and paid capital of the ECB amounts to EUR 65,199,017.58 and EUR 2,444,963.16 respectively.

Note 19 – Investments accounted for using the equity method

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Investment in Croatian Monetary Institute	22,083	21,247
	<u>22,083</u>	<u>21,247</u>

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 portion of the Croatian National Bank share in the capital of the Croatian Monetary Institute is 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 summarized financial information of the Croatian Monetary Institute:

(All amounts are expressed in thousands of kuna)	2016	2015
TOTAL ASSETS	63,098	61,098
Non-current assets	18,674	20,148
Current assets	44,335	40,764
Prepaid expenses	89	186
TOTAL LIABILITIES	10,383	12,707
Long-term provisions	4,047	3,000
Current liabilities	6,318	9,699
Accrued expenses	18	8
EQUITY	52,715	48,391
TOTAL REVENUE	58,864	44,550
TOTAL EXPENSES	(53,349)	(43,728)
Profit before tax	5,515	822
Income tax	(1,190)	(167)
PROFIT FOR THE FINANCIAL YEAR	4,325	655

The summarized financial information of the Croatian Monetary Institute for 2016 is presented based on the preliminary financial statements of the Croatian Monetary Institute for 2016 as the final official financial statements of the Croatian Monetary Institute for 2016 were not yet available at the time of preparation of these financial statements.

Note 20 – Accrued interest and other assets

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Accrued interest	25,284	10,882
Other participants funds in TARGET2	3,653,464	–
Prepaid expenses	314,951	311,517
Numismatics	12,642	12,734
Other assets	101,120	105,939
	4,107,461	441,072
Impairment allowance	(7,492)	(7,492)
	4,099,969	433,580
MOVEMENTS IN IMPAIRMENT ALLOWANCE:		
Balance at 1 January	(7,492)	(58,894)
New provisions	–	–
Collection	–	51,402
BALANCE AT 31 DECEMBER	(7,492)	(7,492)

The major portion of prepaid expenses in the amount of HRK 307,676 thousands (2015: HRK 302,056 thousands) relates to the prepaid expenses of printing banknotes and minting coins.

Note 21 – Property, plant, equipment and intangible assets

(All amounts are expressed in thousands of kuna)	LAND AND BUILDINGS	COMPUTERS AND COMPUTING 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
BALANCE AT 1 JANUARY 2015										
Cost or revaluation	493.899	138.625	38.848	10.066	16.180	697.618	79.521	4.045	83.566	781.184
Accumulated depreciation/amortisation	(4.807)	(94.698)	(31.192)	(9.895)	–	(140.592)	(60.235)	–	(60.235)	(200.827)
NET BOOK VALUE	489.092	43.927	7.656	171	16.180	557.026	19.286	4.045	23.331	580.357
FOR THE YEAR ENDED 31 DECEMBER 2015										
Opening net book amount	489.092	43.927	7.656	171	16.180	557.026	19.286	4.045	23.331	580.357
Additions	–	–	–	–	26.302	26.302	–	6.022	6.022	32.324
Brought into use	1.062	14.523	3.173	–	(18.758)	–	442	(442)	–	–
Net written off	–	(5)	–	–	–	(5)	–	–	–	(5)
Charge for the year	(8.051)	(16.055)	(2.006)	(43)	–	(26.155)	(5.012)	–	(5.012)	(31.167)
CLOSING NET BOOK AMOUNT	482.103	42.390	8.823	128	23.724	557.168	14.716	9.625	24.341	581.509
BALANCE AT 31 DECEMBER 2015										
Cost or revaluation	494.961	153.138	41.205	10.066	23.724	723.094	79.963	9.625	89.588	812.682
Accumulated depreciation/amortisation	(12.858)	(110.748)	(32.382)	(9.938)	–	(165.926)	(65.247)	–	(65.247)	(231.173)
NET BOOK VALUE	482.103	42.390	8.823	128	23.724	557.168	14.716	9.625	24.341	581.509
BALANCE AT 1 JANUARY 2016										
Cost or revaluation	494.961	153.138	41.205	10.066	23.724	723.094	79.963	9.625	89.588	812.682
Accumulated depreciation/amortisation	(12.858)	(110.748)	(32.382)	(9.938)	–	(165.926)	(65.247)	–	(65.247)	(231.173)
NET BOOK VALUE	482.103	42.390	8.823	128	23.724	557.168	14.716	9.625	24.341	581.509
FOR THE YEAR ENDED 31 DECEMBER 2016										
Opening net book amount	482.103	42.390	8.823	128	23.724	557.168	14.716	9.625	24.341	581.509
Additions	–	–	–	–	20.659	20.659	–	17.946	17.946	38.605
Brought into use	3.560	18.945	1.001	–	(23.506)	–	9.220	(9.220)	–	–
Net written off	–	–	(11)	–	–	(11)	–	–	–	(11)
Charge for the year	(8.094)	(14.132)	(2.245)	(42)	–	(24.513)	(4.920)	–	(4.920)	(29.433)
CLOSING NET BOOK AMOUNT	477.569	47.203	7.568	86	20.877	553.303	19.016	18.351	37.367	590.670
BALANCE AT 31 DECEMBER 2016										
Cost or revaluation	498.520	167.941	41.746	10.066	20.877	739.150	88.987	18.351	107.338	846.488
Accumulated depreciation/amortisation	(20.951)	(120.738)	(34.178)	(9.980)	–	(185.847)	(69.971)	–	(69.971)	(255.818)
NET BOOK VALUE	477.569	47.203	7.568	86	20.877	553.303	19.016	18.351	37.367	590.670

Revalued amounts of land and buildings were determined based on appraisals performed by independent experts in 2014. Valuation technique used to determine fair value was income approach. Certain significant inputs for valuation were not observable market data (Level 3 of fair value hierarchy). If the land and buildings were carried at cost less depreciation, their net book value as at 31 December 2016 would be HRK 138,456 thousands. Property, plant and equipment of the Croatian National Bank are not pledged, either as part of mortgage agreements or as a fiduciary relationship.

Note 22 – Banknotes and coins in circulation

(All amounts are expressed in thousands of kuna)

	2016	2015
Banknotes and coins in circulation as of January 1	25,317,915	23,155,977
Increase/(decrease) of banknotes and coins in circulation during the year	2,596,041	2,161,938
BANKNOTES AND COINS IN CIRCULATION – TOTAL AS OF DECEMBER 31	27,913,956	25,317,915

IN HRK	NOMINAL VALUE	31/12/2016		31/12/2015	
		PIECES	VALUE IN THOUSANDS OF KUNA	PIECES	VALUE IN THOUSANDS OF KUNA
Coins	0.01	125,723,585	1,257	125,729,596	1,257
Coins	0.02	84,095,259	1,682	84,089,285	1,682
Coins	0.05	348,991,892	17,450	330,007,201	16,500
Coins	0.10	512,416,672	51,242	489,897,969	48,990
Coins	0.20	386,439,336	77,288	366,352,299	73,270
Coins	0.50	223,799,030	111,899	212,240,036	106,120
Coins	1	248,954,560	248,954	235,591,785	235,592
Coins	2	144,204,171	288,408	133,018,857	266,038
Coins	5	95,813,052	479,065	88,653,280	443,266
Coins	25	1,208,832	30,221	1,161,759	29,044

IN HRK	NOMINAL VALUE	31/12/2016		31/12/2015	
		PIECES	VALUE IN THOUSANDS OF KUNA	PIECES	VALUE IN THOUSANDS OF KUNA
Banknotes	5	4,132,548	20,663	4,136,727	20,684
Banknotes	10	43,177,073	431,771	39,952,733	399,527
Banknotes	20	30,063,263	601,265	27,328,326	546,567
Banknotes	50	16,378,559	818,928	14,684,388	734,219
Banknotes	100	35,585,938	3,558,594	33,538,038	3,353,804
Banknotes	200	63,435,368	12,687,074	56,701,146	11,340,229
Banknotes	500	6,597,712	3,298,856	6,157,822	3,078,911
Banknotes	1,000	5,189,339	5,189,339	4,622,215	4,622,215
TOTAL			27,913,956		25,317,915

Note 23 – Due to banks and other financial institutions

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Kuna reserve requirements	21,563,311	22,341,342
Foreign exchange reserve requirements	–	3,802,157
Foreign currency accounts of TARGET2 system participants	3,653,464	–
Other deposits from domestic banks	23,987,914	16,196,620
Deposits from foreign banks and other financial institutions	72	72
Court-mandated deposits	35,994	13,747
	49,240,755	42,353,938

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 11) and “Accrued interest and other assets” (Note 20).

Note 24 – Repo agreements

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Foreign currency repo agreements	7,181,838	9,453,298
	<u>7,181,838</u>	<u>9,453,298</u>

Total fair value of collateral given in repo agreements as at 31 December 2016 amounted to HRK 7,208,550 thousands (31 December 2015: HRK 9,413,894).

Note 25 – Due to the State and State institutions

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Domestic currency account balances	3,315,581	4,932,062
Foreign currency denominated deposit account balances	54,537	3,144,767
	<u>3,370,118</u>	<u>8,076,829</u>

Note 26 – Due to the International Monetary Fund

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Kuna-denominated bills of exchange	6,941,268	3,526,564
Net cumulative allocations	2,941,313	2,937,017
Other IMF's accounts	17,484	8,938
	<u>9,900,065</u>	<u>6,472,519</u>

The bills of exchange denominated in the Croatian kuna relate to the membership of the Republic of Croatia in the International Monetary Fund.

Note 27 – Accrued interest and other liabilities

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Accrued interest	5,895	5,997
Amounts due to employees	6,530	6,320
Taxes and contributions	5,661	5,925
Obligations to European Commission in EUR	756	747
Obligations to European Commission in HRK	604,492	387,515
Due to the Ministry of Finance	49,630	490,233
Trade payables	20,721	24,760
Long-term provisions for risks and charges	45,232	22,397
Other liabilities	21,264	161,199
	760,181	1,105,093

Upon accession of the Republic of Croatia to the European Union, the European Commission has opened EUR and HRK transaction accounts with the Croatian National Bank for the performance of payment transactions.

Included in long-term provisions for risks and charges HRK 24,562 thousands (2015: HRK 3,010 thousands) are in respect of legal actions and HRK 20,670 thousands (2015: HRK 19,387 thousands) in respect of provisions for employee benefits.

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 2016	3,010	19,387	22,397
Released provisions	(600)	(7,859)	(8,459)
New provisions	22,152	9,142	31,294
Recognised in profit or loss	21,552	1,283	22,835
Amounts paid	–	–	–
AS AT 31 DECEMBER 2016	24,562	20,670	45,232

(All amounts are expressed in thousands of kuna)	COURT CASES	EMPLOYEE BENEFITS	TOTAL
AS AT 1 JANUARY 2015	25,380	19,304	44,684
Released provisions	(1,000)	(8,065)	(9,065)
New provisions	6,000	8,148	14,148
Recognised in profit or loss	5,000	83	5,083
Amounts paid	(27,370)	–	(27,370)
AS AT 31 DECEMBER 2015	3,010	19,387	22,397

Note 28 – 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 is held solely by the Republic of Croatia; the capital 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.

Note 29 – 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.

29.1 Maturity analysis of assets and liabilities

(All amounts are expressed in thousands of kuna)	UP TO 12 MONTHS	MORE THAN 12 MONTHS	TOTAL
BALANCE AS AT 31 DECEMBER 2016			
ASSETS			
Cash and current accounts with other banks	12,496,923	–	12,496,923
Deposits with other banks	2,335,129	12,054	2,347,183
Financial assets at fair value through profit or loss	24,714,711	6,608	24,721,319
Loans	–	54	54
Reverse repo agreements	10,832,559	993,400	11,825,959
Held-to-maturity securities	1,369,659	20,086,870	21,456,529
Balances with the International Monetary Fund	2,958,252	6,965,896	9,924,148
Financial assets available for sale	27,447,613	60,218	27,507,831
Investments accounted for using the equity method	–	22,083	22,083
Accrued interest and other assets	3,780,076	319,893	4,099,969
Property, plant, equipment and intangible assets	340	590,330	590,670
TOTAL ASSETS	85,935,262	29,057,406	114,992,668
LIABILITIES			
Banknotes and coins in circulation	27,913,956	–	27,913,956
Due to banks and other financial institutions	49,240,683	72	49,240,755
Repo agreements	7,181,838	–	7,181,838
Due to the State and State institutions	3,370,118	–	3,370,118
Due to the International Monetary Fund	–	9,900,065	9,900,065
Accrued interest and other liabilities	759,222	959	760,181
TOTAL LIABILITIES	88,465,817	9,901,096	98,366,913
NET POSITION	(2,530,555)	19,156,310	16,625,755

Note: According to convention, the amount of the kuna component of reserve requirements of HRK 21,563,311 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 reserve 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 available for sale 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.

(All amounts are expressed in thousands of kuna)	UP TO 12 MONTHS	MORE THAN 12 MONTHS	TOTAL
BALANCE AS AT 31 DECEMBER 2015			
ASSETS			
Cash and current accounts with other banks	3,505,509	–	3,505,509
Deposits with other banks	5,604,852	10,167	5,615,019
Financial assets at fair value through profit or loss	28,435,569	1,404,750	29,840,319
Loans	–	60	60
Reverse repo agreements	26,666,037	–	26,666,037
Held-to-maturity securities	14,450,875	21,788,485	36,239,360
Balances with the International Monetary Fund	2,954,281	3,542,409	6,496,690
Financial assets available for sale	–	60,218	60,218
Investments accounted for using the equity method	–	21,247	21,247
Accrued interest and other assets	131,525	302,055	433,580
Property, plant, equipment and intangible assets	–	581,509	581,509
TOTAL ASSETS	81,748,648	27,710,900	109,459,548
LIABILITIES			
Banknotes and coins in circulation	25,317,915	–	25,317,915
Due to banks and other financial institutions	42,353,866	72	42,353,938
Repo agreements	9,453,298	–	9,453,298
Due to the State and State institutions	8,076,829	–	8,076,829
Due to the International Monetary Fund	–	6,472,519	6,472,519
Accrued interest and other liabilities	1,103,982	1,111	1,105,093
TOTAL LIABILITIES	86,305,890	6,473,702	92,779,592
NET POSITION	(4,557,242)	21,237,198	16,679,956

Note: According to convention, the amount of the kuna and foreign exchange components of reserve requirements of HRK 26,143,499 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 change in the amount of reserves may result from change 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 available for sale 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.

Note 30 – Contingent liabilities and commitments and treasury inventory system

Legal actions: As at 31 December 2016, 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 24,562 thousands (refer to Note 27).

Capital commitments: As at 31 December 2016 the capital commitments of the Croatian National Bank amounted to HRK 8,728 thousands (2015: HRK 17,308 thousands).

Treasury inventory system

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Banknotes and coins not in circulation	48,893,063	53,427,135
Inventory of government stamps and bill-of-exchange forms	241,033	180,970
	<u>49,134,096</u>	<u>53,608,105</u>

Note 31 – Cash and cash equivalents

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Cash on hand (Note 11)	1,400	1,135
Foreign currency cash in the CNB treasury vault (Note 11)	3,014,841	3,047,734
Current accounts with foreign banks (Note 11)	8,951,477	456,640
Funds with the IMF	2,958,252	2,954,281
CNB account in TARGET2 system (Note 11)	529,205	–
	<u>15,455,175</u>	<u>6,459,790</u>

Note 32 – Result for the year and surplus appropriation

(All amounts are expressed in thousands of kuna)	31/12/2016	31/12/2015
Operating surplus	42,113	2,031,811
Transfer of surplus to general reserves	(8,423)	(1,548,763)
Surplus allocated to the State Budget	(33,690)	(483,048)
	<u>–</u>	<u>–</u>

The Croatian National Bank realised the surplus of income over expenditures for the year 2016 in the amount of HRK 42,113 thousands (2015: HRK 2,031,811 thousands). The result for 2016 is lower than the result for 2015 mainly due to the impact of net unrealized exchange differences for 2016 which are negative and amount to HRK 278,957 thousands, while in 2015 the CNB realised positive net unrealized exchange differences in the amount of HRK 1,548,763 thousands (refer to Note 7).

Given that in 2016 net unrealized exchange differences are negative (HRK 278,958 thousands), and the sum of net unrealized losses on financial assets at fair value through profit or loss and the results from investment measured under equity method is negative (HRK 32,769 thousands), the CNB allocated to the general reserves 20% of the surplus of income over expenditures in the amount of HRK 8,423 thousands. The rest is allocated to the State Budget.

Given that for 2015 positive net unrealised exchange differences amount to HRK 1,548,763 thousands, which is more than 20% of the surplus of income over expenditures in the amount of HRK 406,362 thousands, and that the sum of net unrealized losses on financial assets at fair value through profit or loss and the results from investments measured under equity method is negative (HRK 64,240 thousands), the amount of net unrealized exchange differences was allocated to general reserves. The rest was allocated to the State Budget.

Note 33 – Fair values 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.

a) 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)	31/12/2016		
	LEVEL 1	LEVEL 2	TOTAL
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS			
FOREIGN SECURITIES HELD FOR TRADING			
Government securities	14,928,138	7,517,633	22,445,771
Guaranteed bonds (public sector collateral)	76,388	–	76,388
Securities of international financial institutions	344,007	–	344,007
Bank bonds with government guarantees	305,052	107,464	412,516
TOTAL SECURITIES HELD FOR TRADING (NOTE 13a)	15,653,585	7,625,097	23,278,682
ASSETS UNDER MANAGEMENT WITH INTERNATIONAL FINANCIAL INSTITUTIONS (NOTE 13b)	1,436,029	–	1,436,029
PRECIOUS METALS	6,608	–	6,608
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	17,096,222	7,625,097	24,721,319
FINANCIAL ASSETS AVAILABLE FOR SALE			
FOREIGN SECURITIES AVAILABLE FOR SALE			
Government securities	24,240,973	–	24,240,973
Guaranteed bonds (public sector collateral)	71,955	–	71,955
Securities of international financial institutions	2,416,247	–	2,416,247
Bank bonds with government guarantees	718,438	–	718,438
TOTAL DEBT SECURITIES AVAILABLE FOR SALE (NOTE 18)	27,447,613	–	27,447,613
TOTAL FINANCIAL ASSETS AVAILABLE FOR SALE	27,447,613	–	27,447,613
GRAND TOTAL	44,543,835	7,625,097	52,168,932

(All amounts are expressed in thousands of kuna)	31/12/2015		
	LEVEL 1	LEVEL 2	TOTAL
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS			
FOREIGN SECURITIES HELD FOR TRADING			
Government securities	16,187,804	11,197,595	27,385,399
Guaranteed bonds (public sector collateral)	389,206	–	389,206
Securities of international financial institutions	270,081	–	270,081
Bank bonds with government guarantees	216,117	174,766	390,883
TOTAL SECURITIES HELD FOR TRADING (NOTE 13a)	17,063,208	11,372,361	28,435,569
ASSETS UNDER MANAGEMENT WITH INTERNATIONAL FINANCIAL INSTITUTIONS (NOTE 13b)	1,398,940	–	1,398,940
PRECIOUS METALS	5,810	–	5,810
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	18,467,958	11,372,361	29,840,319

b) Financial assets and liabilities not measured at fair value

Debt securities held to maturity are measured at amortized cost. The comparison of book and fair values is presented in the following table.

(All amounts are expressed in thousands of kuna)	DEBT SECURITIES	
	BOOK VALUE	FAIR VALUE
31/12/2016	21,456,529	22,475,422
31/12/2015	36,239,360	36,739,877

In determining the fair value of financial assets held to maturity Level 1 of fair value hierarchy input data was used.

Investments in equity securities are classified as available for sale financial assets and carried at cost less any impairment as it is not possible to determine their fair value with sufficient precision.

The fair values of remaining financial assets and liabilities of the Croatian National Bank are approximately equal to the accounting values due to the short maturities of the instruments.

Note 34 – 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 34.1 – 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 guarantee 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.

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 34.1.1 – 34.1.2) 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 34.1.1 – 34.1.2 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 34.1.1 – 34.1.2 include accrued interest, included in Accrued interest and other assets and Accrued interest and 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 notes Maximum exposure to credit risk and credit risk by counterparty credit rating and in Geographical concentration of credit risk.
- Line item Reverse repo agreements from the Statement of Financial Position is divided per currency in notes 34.1.1 – 34.1.2 and includes accrued interest presented in line items Accrued interest and other assets and Accrued interest and other liabilities.

34.1.1 Maximum exposure to credit risk and credit risk by counterparty credit rating

(All amounts are expressed in thousands of kuna)

	RATING (MOODY'S)	31/12/2016	31/12/2015
FOREIGN-CURRENCY DENOMINATED SECURITIES HELD FOR TRADING			
GOVERNMENT SECURITIES			
	Aaa	13,567,249	19,262,758
	Aa1	310,542	231,243
	Aa2	4,704,022	2,423,413
	A3	107,525	–
	Baa2	3,403,975	4,884,925
	AAA ^a	237,544	76,814
	AA ^b	114,914	506,246
TOTAL GOVERNMENT SECURITIES		22,445,771	27,385,399
GUARANTEED BONDS (PUBLIC SECTOR COLLATERAL)	Aaa	76,388	389,206
Securities of international financial institutions	Aa1	344,007	270,081
TOTAL SECURITIES OF INTERNATIONAL FINANCIAL INSTITUTIONS		344,007	270,081
Bank bonds with government guarantee	Aaa	184,054	321,074
	Aa1	228,462	69,809
TOTAL BANK BONDS WITH GOVERNMENT GUARANTEE		412,516	390,883
TOTAL FOREIGN-CURRENCY DENOMINATED SECURITIES HELD FOR TRADING		23,278,682	28,435,569
FOREIGN-CURRENCY DENOMINATED SECURITIES HELD TO MATURITY			
GOVERNMENT SECURITIES			
	Aaa	1,257,704	5,176,881
	Aa1	3,656,324	1,293,025
	Aa2	7,421,361	9,253,931
	Aa3	5,308,677	5,420,142
	Baa2	–	7,754,448
	AAA ^a	143,532	144,067
	AA ^b	573,601	2,126,742
TOTAL GOVERNMENT SECURITIES		18,361,199	31,169,236
GUARANTEED BONDS (PUBLIC SECTOR COLLATERAL)	Aaa	–	390,807
Securities of international financial institutions	Aaa	–	1,550,544
	Aa1	2,565,912	2,594,140
TOTAL SECURITIES OF INTERNATIONAL FINANCIAL INSTITUTIONS		2,565,912	4,144,684

(All amounts are expressed in thousands of kuna)

	RATING (MOODY'S)	31/12/2016	31/12/2015
BANK BONDS WITH GOVERNMENT GUARANTEE			
	Aaa	302,366	305,388
	Aa1	227,052	229,245
TOTAL BANK BONDS WITH GOVERNMENT GUARANTEE		529,418	534,633
TOTAL FOREIGN-CURRENCY DENOMINATED SECURITIES HELD TO MATURITY		21,456,529	36,239,360
FOREIGN-CURRENCY DENOMINATED SECURITIES AVAILABLE FOR SALE			
GOVERNMENT SECURITIES			
	Aaa	5,752,101	–
	Aa1	3,626,403	–
	Aa2	10,998,279	–
	Aa3	2,222,280	–
	A3	946,780	–
	AAA ^a	695,130	–
TOTAL GOVERNMENT SECURITIES		24,240,973	–
GUARANTEED BONDS (PUBLIC SECTOR COLLATERAL)		71,955	–
Securities of international financial institutions			
	Aaa	1,652,749	–
	Aa1	763,498	–
TOTAL SECURITIES OF INTERNATIONAL FINANCIAL INSTITUTIONS		2,416,247	–
Bank bonds with government guarantee			
	Aa1	718,438	–
TOTAL BANK BONDS WITH GOVERNMENT GUARANTEE		718,438	–
TOTAL FOREIGN-CURRENCY DENOMINATED SECURITIES AVAILABLE FOR SALE		27,447,613	–
TOTAL FOREIGN-CURRENCY DENOMINATED SECURITIES		72,182,824	64,674,929
FOREIGN-CURRENCY REVERSE REPO AGREEMENTS			
	Aaa	5,187,221	475,442
	Aa1	255,982	–
	Aa2	4,422,666	4,313,059
	Aa3	440,232	–
	A1	–	1,442,608
	A2	–	8,662,633
	A3	–	4,173,343
	Baa1	–	7,440,034
	AA ^b	415,528	–
TOTAL FOREIGN-CURRENCY REVERSE REPO AGREEMENTS		10,721,629	26,507,119

(All amounts are expressed in thousands of kuna)	RATING (MOODY'S)	31/12/2016	31/12/2015
FOREIGN-CURRENCY DEPOSITS			
	Aaa	11,668,908	2,697,056
	Aa1	208	51
	Aa2	562	35,928
	Aa3	1,104	546
	A1	1,072	2,019
	A2	–	7,428
	A3	38	349,253
	No rating ^c	211	47
TOTAL DEPOSITS		11,672,103	3,092,328
DEPOSITS OF INTERNATIONAL FINANCIAL INSTITUTIONS	No rating ^d	3,106,671	5,927,571
TOTAL FOREIGN-CURRENCY DEPOSITS		14,778,774	9,019,899
LOANS IN KUNA			
	No rating	54	60
REVERSE REPO IN KUNA	No rating	1,115,620	158,004
KUNA DEPOSITS			
Other deposits of domestic commercial banks			
	BBB– ^e	1,405	1,649
	No rating	10,924	8,803
TOTAL KUNA DEPOSITS		12,329	10,452
TOTAL		98,811,230	100,370,463

^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.

34.1.2 Geographical concentration of credit risk

(All amounts are expressed in thousands of kuna)

BALANCE AT 31 DECEMBER 2016			
INSTRUMENT	EURO AREA	OTHER	TOTAL
Government securities	57,341,211	7,706,732	65,047,943
Guaranteed bonds	148,343		148,343
Securities of international financial institutions	4,881,872	444,294	5,326,166
Bank bonds with government guarantee	1,660,372		1,660,372
TOTAL FOREIGN-CURRENCY DENOMINATED SECURITIES	64,031,798	8,151,026	72,182,824
REVERSE REPO AGREEMENTS	2,690,655	8,030,974	10,721,629
Deposits	11,665,605	6,498	11,672,103
Deposits with international financial institutions		3,106,671	3,106,671
TOTAL FOREIGN-CURRENCY DENOMINATED DEPOSITS	11,665,605	3,113,169	14,778,774
LOANS TO BANKS IN CROATIA	–	54	54
REVERSE REPO AGREEMENTS IN KUNA	–	1,115,620	1,115,620
Other deposits at domestic banks	–	12,329	12,329
TOTAL DEPOSITS IN KUNA	–	12,329	12,329
TOTAL 31 DECEMBER 2016	78,388,058	20,423,172	98,811,230
BALANCE AT 31 DECEMBER 2015			
INSTRUMENT	EURO AREA	OTHER	TOTAL
Government securities	47,261,486	11,293,149	58,554,635
Guaranteed bonds	780,013	–	780,013
Securities of international financial institutions	4,414,765	–	4,414,765
Bank bonds with government guarantee	925,516	–	925,516
TOTAL FOREIGN-CURRENCY DENOMINATED SECURITIES	53,381,780	11,293,149	64,674,929
REVERSE REPO AGREEMENTS	12,360,790	14,146,329	26,507,119
Deposits	3,082,952	9,376	3,092,328
Deposits with international financial institutions	–	5,927,571	5,927,571
TOTAL FOREIGN-CURRENCY DENOMINATED DEPOSITS	3,082,952	5,936,947	9,019,899
LOANS TO BANKS IN CROATIA	–	60	60
REVERSE REPO AGREEMENTS IN KUNA	–	158,004	158,004
Other deposits at domestic banks	–	10,452	10,452
TOTAL DEPOSITS IN KUNA	–	10,452	10,452
TOTAL 31 DECEMBER 2015	68,825,522	31,544,941	100,370,463

Note 34.2 – 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 managed by investing the international reserve funds into highly marketable bonds and partly in deposit instruments with short term 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 2016, approximately 65% of net international reserves were liquid (2015: approximately 35% 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. Future interest expenditures are included in the position Accrued interest and other liabilities.

(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
BALANCE AT 31 DECEMBER 2016						
LIABILITIES						
Banknotes and coins in circulation	27,913,956	–	–	–	–	27,913,956
Due to banks and other financial institutions	49,240,683	–	–	–	72	49,240,755
Repo agreements	7,181,838	–	–	–	–	7,181,838
Due to the State and State institutions	3,370,118	–	–	–	–	3,370,118
Due to the IMF	–	–	–	–	9,900,065	9,900,065
Accrued interest and other liabilities	661,875	53,994	45,232	–	959	762,060
TOTAL LIABILITIES	88,368,470	53,994	45,232	–	9,901,096	98,368,792

(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
BALANCE AT 31 DECEMBER 2015						
LIABILITIES						
Banknotes and coins in circulation	25,317,915	–	–	–	–	25,317,915
Due to banks and other financial institutions	42,353,866	–	–	–	72	42,353,938
Repo agreements	9,453,298	–	–	–	–	9,453,298
Due to the State and State institutions	8,076,829	–	–	–	–	8,076,829
Due to the IMF	–	–	–	–	6,472,519	6,472,519
Accrued interest and other liabilities	442,285	643,136	22,397	–	1,111	1,108,929
TOTAL LIABILITIES	85,644,193	643,136	22,397	–	6,473,702	92,783,428

Note 34.3 – 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 34.3.1 – 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. Foreign exchange risk is determined by the currency structure of international reserves, and it is based on the currency structure of external debt of the Republic of Croatia and the currency structure of imports, which is the case of many central banks. 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) are 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 3.3 billion.

34.3.1.1 Sensitivity analysis – impact of percentage fluctuations in exchange rates on the Income Statement

2016 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2016	USD	EUR
	±5%	±1%
Impact of fluctuations in exchange rates on the Income Statement	850,390/(850,390)	749,286/(749,286)

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 $\pm 1\%$ and in the case of an increase/decrease in the USD/HRK exchange rate by $\pm 5\%$. 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 2016, the result of the CNB reported in the Income Statement for the year would be lower by approximately HRK 749,286 thousands, while for a 5% decrease in the USD/HRK exchange rate, the result would be lower by approximately HRK 850,390 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.

2015 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2015	USD	EUR
	±5%	±1%
Impact of fluctuations in exchange rates on the Income Statement	955,500/(955,500)	660,400/(660,400)

34.3.1.2 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
BALANCE AT 31 DECEMBER 2016						
ASSETS						
Cash and current accounts with other banks	12,488,999	4,996	–	2,576	352	12,496,923
Deposits with other banks	2,191,758	143,371	–	–	12,054	2,347,183
Financial assets at fair value through profit or loss	18,631,737	6,082,973	–	–	6,609	24,721,319
Loans	–	–	–	–	54	54
Reverse repo agreements	6,806,331	3,916,228	–	–	1,103,400	11,825,959
Held-to-maturity securities	21,456,529	–	–	–	–	21,456,529
Balances with the IMF	–	–	9,924,148	–	–	9,924,148
Financial assets available for sale	18,092,855	9,354,758	–	–	60,218	27,507,831
Investments accounted for using the equity method	–	–	–	–	22,083	22,083

(All amounts are expressed in thousands of kuna)	EUR	USD	XDR	OTHER FOREIGN CURRENCIES	HRK	TOTAL
Accrued interest and other assets	3,658,294	1,856	–	3	439,816	4,099,969
Property, plant, equipment and intangible assets	–	–	–	–	590,670	590,670
TOTAL ASSETS	83,326,503	19,504,182	9,924,148	2,579	2,235,256	114,992,668
LIABILITIES						
Banknotes and coins in circulation	–	–	–	–	27,913,956	27,913,956
Due to banks and other financial institutions	3,653,464	–	–	–	45,587,291	49,240,755
Repo agreements	4,698,601	2,483,237	–	–	–	7,181,838
Due to the State and State institutions	42,194	11,617	–	725	3,315,582	3,370,118
Due to the IMF	–	–	9,900,065	–	–	9,900,065
Accrued interest and other liabilities	7,862	1,896	16,790	172	733,461	760,181
TOTAL LIABILITIES	8,402,121	2,496,750	9,916,855	897	77,550,290	98,366,913
NET POSITION	74,924,382	17,007,432	7,293	1,682	(75,315,034)	16,625,755
BALANCE AT 31 DECEMBER 2015						
ASSETS						
Cash and current accounts with other banks	3,494,455	4,669	–	6,070	315	3,505,509
Deposits with other banks	4,894,065	710,787	–	–	10,167	5,615,019
Financial assets at fair value through profit or loss	16,428,519	13,405,990	–	–	5,810	29,840,319
Loans	–	–	–	–	60	60
Reverse repo agreements	15,402,309	11,105,728	–	–	158,000	26,666,037
Held-to-maturity securities	36,239,360	–	–	–	–	36,239,360
Balances with the IMF	–	–	6,496,690	–	–	6,496,690
Financial assets available for sale	–	–	–	–	60,218	60,218
Investments accounted for using the equity method	–	–	–	–	21,247	21,247
Accrued interest and other assets	1,651	2,159	–	4	429,766	433,580
Property, plant, equipment and intangible assets	–	–	–	–	581,509	581,509
TOTAL ASSETS	76,460,359	25,229,333	6,496,690	6,074	1,267,092	109,459,548

(All amounts are expressed in thousands of kuna)	EUR	USD	XDR	OTHER FOREIGN CURRENCIES	HRK	TOTAL
LIABILITIES						
Banknotes and coins in circulation	–	–	–	–	25,317,915	25,317,915
Due to banks and other financial institutions	3,769,575	32,582	–	–	38,551,781	42,353,938
Repo agreements	3,516,677	5,936,621	–	–	–	9,453,298
Due to the State and State institutions	3,135,066	8,235	–	1,467	4,932,061	8,076,829
Due to the IMF	–	–	6,472,519	–	–	6,472,519
Accrued interest and other liabilities	5,804	141,309	17,115	189	940,676	1,105,093
TOTAL LIABILITIES	10,427,122	6,118,747	6,489,634	1,656	69,742,433	92,779,592
NET POSITION	66,033,237	19,110,586	7,056	4,418	(68,475,341)	16,679,956

Note 34.3.2 – 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 held to maturity and available for sale portfolio 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 available for sale and held-to-maturity portfolios, de facto, does not.

Trading portfolios have short duration, and thus interest rate risk is minimized.

Held to maturity portfolios, from the standpoint of interest rate risk, have no effect on the Income Statement, while securities classified as available for sale are, generally, sold only in situations favourable to the CNB. However, regardless of that, even for available for sale portfolios 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.

34.3.2.1 Sensitivity analysis – exposure of the CNB's net international reserves to fluctuations in interest rates

2016 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2016	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	(414)/414	(1,888)/1,888

Should as at 31 December 2016 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 414 thousands, while in the case of the EUR yield curve increasing by 1 basis points, the result would be lower by approximately HRK 1,888 thousands.

For a 1 b. p. 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 December 2016 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.

2015 Sensitivity analysis

(All amounts are expressed in thousands of kuna)

2015	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	(1,274)/1,274	(1,560)/1,560

34.3.2.2 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-INTEREST BEARING	TOTAL	AVERAGE EIR AS AT 31/12/16
BALANCE AT 31 DECEMBER 2016								
ASSETS								
Cash and current accounts with other banks	9,480,682	–	–	–	–	3,016,241	12,496,923	–0.53
Deposits with other banks	1,889,447	445,682	–	–	–	12,054	2,347,183	–0.47
Financial assets at fair value through profit or loss	23,241,626	–	–	–	–	1,479,693	24,721,319	–0.26
Loans	–	–	–	–	54	–	54	1
Reverse repo agreements	10,832,559	–	–	993,400	–	–	11,825,959	0.04
Held-to-maturity securities	–	–	1,366,580	4,811,268	15,158,419	120,262	21,456,529	1.02
Balances with the IMF	2,958,252	–	–	–	–	6,965,896	9,924,148	0.24
Financial assets available for sale	27,282,854	–	–	–	–	224,977	27,507,831	0.99
Investments accounted for using the equity method	–	–	–	–	–	22,083	22,083	–
Accrued interest and other assets	–	–	–	–	–	4,099,969	4,099,969	–
Property, plant, equipment and intangible assets	–	–	–	–	–	590,670	590,670	–
TOTAL ASSETS	75,685,420	445,682	1,366,580	5,804,668	15,158,473	16,531,845	114,992,668	–
LIABILITIES								
Banknotes and coins in circulation	–	–	–	–	–	27,913,956	27,913,956	–
Due to banks and other financial institutions	3,653,464	–	–	–	–	45,587,291	49,240,755	–
Repo agreements	7,181,838	–	–	–	–	–	7,181,838	–0.27
Due to the State and State institutions	1,882,477	–	–	–	–	1,487,641	3,370,118	0.08
Due to the IMF	2,941,312	–	–	–	–	6,958,753	9,900,065	0.24
Accrued interest and other liabilities	–	–	–	–	–	760,181	760,181	–
TOTAL LIABILITIES	15,659,091	–	–	–	–	82,707,822	98,366,913	–
NET POSITION	60,026,329	445,682	1,366,580	5,804,668	15,158,473	(66,175,977)	16,625,755	–

Note: In 2016, fixed interest rate is charged on presented interest bearing amounts, except on the part of the position Due to the State and State institutions, amounting to HRK 1,882,477 thousands (31 December 2015.: HRK 2,836,531 thousands), and the part of the position Financial assets at fair value through profit or loss in the amount of HRK 144,219 thousands (dollar floater), on which variable floating rate is charged.

(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-INTEREST BEARING	TOTAL	AVERAGE EIR AS AT 31/12/16
BALANCE AT 31 DECEMBER 2015								
ASSETS								
Cash and current accounts with other banks	90,136	–	–	–	–	3,415,373	3,505,509	–0.23
Deposits with other banks	4,027,222	1,577,630	–	–	–	10,167	5,615,019	–0.27
Financial assets at fair value through profit or loss	28,435,568	–	–	–	–	1,404,751	29,840,319	0.07
Loans	–	–	–	–	60	–	60	1.00
Reverse repo agreements	23,838,273	2,827,764	–	–	–	–	26,666,037	–0.03
Held-to-maturity securities	687,240	1,297,108	12,286,996	4,821,682	16,845,247	301,087	36,239,360	1.22
Balances with the IMF	2,954,281	–	–	–	–	3,542,409	6,496,690	0.05
Financial assets available for sale	–	–	–	–	–	60,218	60,218	–
Investments accounted for using the equity method	–	–	–	–	–	21,247	21,247	–
Accrued interest and other assets	–	–	–	–	–	433,580	433,580	–
Property, plant, equipment and intangible assets	–	–	–	–	–	581,509	581,509	–
TOTAL ASSETS	60,032,720	5,702,502	12,286,996	4,821,682	16,845,307	9,770,341	109,459,548	–
LIABILITIES								
Banknotes and coins in circulation	–	–	–	–	–	25,317,915	25,317,915	–
Due to banks and other financial institutions	–	–	–	–	–	42,353,938	42,353,938	–
Repo agreements	9,453,298	–	–	–	–	–	9,453,298	0.02
Due to the State and State institutions	2,836,531	–	–	–	–	5,240,298	8,076,829	0.49
Due to the IMF	2,937,017	–	–	–	–	3,535,502	6,472,519	0.05
Accrued interest and other liabilities	–	–	–	–	–	1,105,093	1,105,093	–
TOTAL LIABILITIES	15,226,846	–	–	–	–	77,552,746	92,779,592	–
NET POSITION	44,805,874	5,702,502	12,286,996	4,821,682	16,845,307	(67,782,405)	16,679,956	–

Note 34.3.3 – 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.

34.3.3.1 Sensitivity analysis – impact of changes in prices of financial instruments on the Income Statement

2016 Sensitivity analysis – funds entrusted to the management of international financial institutions

(All amounts are expressed in thousands of kuna)

2016

Financial assets price exposed to price risk increase/decrease	±1%
Effect of change in the level of price on the Income Statement	14,360/(14,360)

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 $\pm 1\%$.

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 financial instruments by 1% compared to the prices recorded on 31 December 2016, the result of Croatian National Bank in the Income Statement would be higher by approximately HRK 14,360 thousands, while the fall in prices by 1% would result in the Income Statement being lower by approximately HRK 14,360 thousands.

2016 Sensitivity analysis – precious metals

(All amounts are expressed in thousands of kuna)

2016

Financial instruments price increase/decrease	±5%
Effect of a change in the level of price on the Income Statement	330/(330)

The table shows the sensitivity of the Croatian National Bank Income Statement result in the case of rise or fall of prices of financial instruments 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 financial instruments by 5% compared to the prices recorded on 31 December 2016, the result of Croatian National Bank in the Income Statement would be higher by approximately HRK 330 thousands, while the fall in prices by 5% would result in the Income Statement being lower by approximately HRK 330 thousands.

Calculation methodology:

Investments in financial assets exposed to price risks as at 31 December 2016 in the balance sheet has been increased or reduced by the selected percentage change in the price of financial instruments.

2015 Sensitivity analysis – funds entrusted to the management of international financial institutions and precious metals

(All amounts are expressed in thousands of kuna)

2015

Financial assets price exposed to price risk increase/decrease	$\pm 5\%$
Effect of change in the level of price on the Income Statement	70,237/(70,237)

Note 35 – 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. 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)

	2016		2015	
	STATE	STATE ENTITIES	STATE	STATE ENTITIES
ASSETS				
Accrued interest and other assets	1,753	–	2,461	–
TOTAL	1,753		2,461	–
LIABILITIES				
Deposits	2,080,582	1,289,536	6,078,547	1,998,282
Interest and similar expenses	33,820	–	484,361	–
TOTAL	2,114,402	1,289,536	6,562,908	1,998,282
REVENUES				
	–	–	–	–
EXPENDITURE				
Accrued interest and other liabilities	9,341	–	9,718	–
TOTAL	9,341	–	9,718	–

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 19.

Relations with the Croatian Monetary Institute are presented in the following table:

(All amounts are expressed in thousands of kuna)	2016	2015
ASSETS		
Investments accounted for using the equity method	22,083	21,247
Accrued interest and other assets	5,024	10,212
TOTAL	27,107	31,459
LIABILITIES		
Other liabilities	1	1
TOTAL	1	1
REVENUES		
Gains in the alignment of investments in the Croatian Monetary Institute	1,842	1,285
Other revenues	207	34
TOTAL	2,049	1,319
EXPENDITURE		
Losses in the alignment of investments in the Croatian Monetary Institute	1,006	–
Minting of Kuna and Lipa coins*	51,234	37,811
TOTAL	52,240	37,811

* 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 9).

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 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 Vice Governors.

Short-term compensations to the key management of Croatian National Bank for 2016 amounted to HRK 9,190 thousands, of which HRK 1,318 thousands refers to the pension insurance contributions (2015: HRK 9,134 thousands, out of which HRK 1,304 thousands refers to pension insurance contributions).



HNB

ANNUAL REPORT 2016

ISSN 1334-0107 (online)

www.hnb.hr