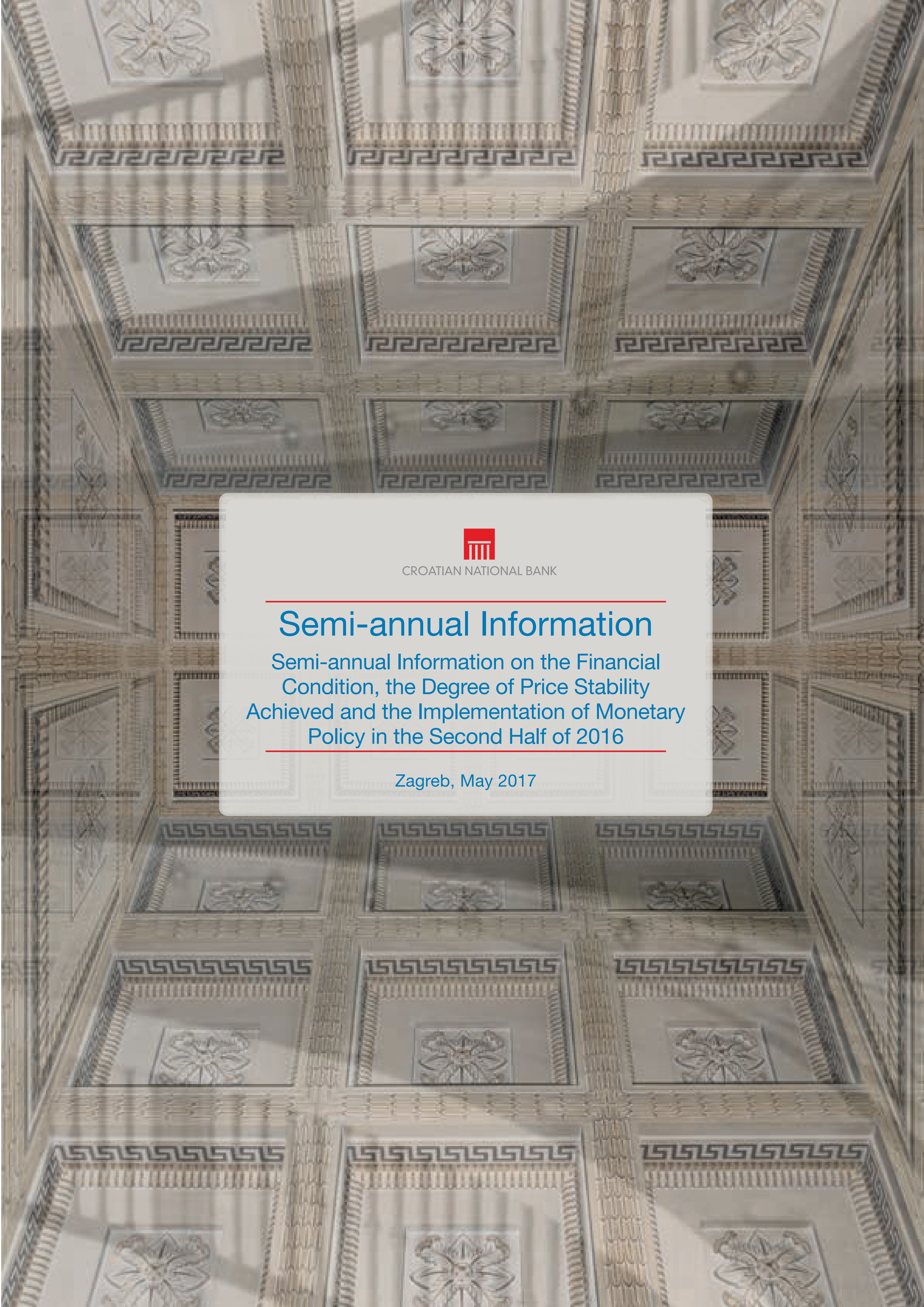

CROATIAN NATIONAL BANK

Semi-annual Information

Semi-annual Information on the Financial Condition, the Degree of Price Stability Achieved and the Implementation of Monetary Policy in the Second Half of 2016

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2016

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1 Summary

The favourable developments in Croatia's economic activity that marked the first six months of 2016 continued in the second half of the year. The annual real GDP growth rate accelerated to 3.1% on average, from the 2.7% in the first half of the year. Economic activity increased across the board. The exports of goods and services accelerated due to favourable developments in tourism, so the contribution of net foreign demand was positive in the second half of 2016. The personal consumption growth rate increased as well, reflecting continued favourable developments in the labour market and a noticeable rise in consumer confidence. Government spending also grew at a faster rate. Only the growth of gross fixed capital formation slowed down in the second half of the year.

The labour market continued to recover. The number of persons employed grew strongly, the unemployment rate declining to 12.4% in the second half of 2016. The annual growth of the average gross wage was 1.6%, while growth in real earnings, i.e. the growth in purchasing power, was even greater.

In the second half of 2016, inflation grew noticeably. This was primarily a result of the strengthening of imported inflationary pressures, i.e. of the growth in the price of oil and other raw materials in the global market and to a lesser extent of the increase in the euro area inflation and the strengthening of domestic demand. The annual inflation rate in Croatia thus increased from –1.6% in June to 0.2% in December, the reduction in the negative contribution of energy prices playing the greatest role. The latter resulted from the increase in prices of refined petroleum products spurred by the rise in the prices of crude oil in the global market and the base period effect, i.e. a substantial drop in these prices in the second half of 2015.

Favourable developments continued in external economic relations as well. The current and capital account balance deteriorated in the second half of 2016 from the same period the year before exclusively due to the disappearance of the base effect of the conversion of loans in Swiss francs. At the same time, the surplus in the trade in services (especially in tourism) and in the use of EU funds increased, exceeding the deterioration in the primary income account balance due to greater profits of economic entities owned by non-residents and from foreign trade in goods. Net capital outflow from Croatia, although weaker than in the same period of the previous year, reflected the deleveraging of domestic sectors, especially banks, which contributed to the further improvement of relative indicators of external debt and the net international investment position.

In the second half of 2016, the CNB continued to support the recovery of the domestic economy through its expansionary monetary policy and to maintain the stable exchange rate of the kuna against the euro, as a prerequisite for the preservation of financial stability and an anchor for expectations of future price trends. Structural repo operations continued, aiming to provide banks with long-term kuna liquidity, thus facilitating a long-term decrease in interest rates and stimulating lending in kuna. Due to mounting upward pressures on the kuna, the CNB purchased a large amount of foreign exchange funds from banks in September and at the end of the year, in particular, which noticeably raised the already strong kuna liquidity of the monetary system.

High liquidity in the domestic and international financial markets spurred a further decline in the lending and deposit rates of commercial banks in Croatia. This, together with positive business and household expectations of future economic trends and improved credit standards, boosted loan demand and placement growth. Household lending increased after several years in which this sector deleveraged.

At the end of 2016, total international reserves of the CNB decreased slightly on an annual level (by 1.4%). Factors involved in the fall in total international reserves included a decision to repeal the requirement of allocation of the foreign currency component of reserve requirements, the reduced balance in the government's foreign exchange account with the CNB, a lower level of repo transactions and the sale of foreign currency to the European Commission. In the same period, net international reserves rose by 9.1%, reflecting the purchase of foreign currency from banks and the government and earnings from reserves management. Despite the negative yield on eurobonds maturing in less than five years, the CNB realised a +0.59% rate of return on the euro part of net reserves in 2016, while the rate of return on the dollar portion totalled 1.26%.

Bank assets decreased slightly in 2016, and their profitability recovered. This annual decrease was primarily a result of the conversion of loans in Swiss francs, of exchange rate developments, of the sale of irrecoverable claims and of the exit of two banks from the system[1]. Following the losses of the previous year caused by the loan conversion, in 2016 returns on assets and equity reached their highest levels since the onset of the financial crisis.

The share of partly recoverable and fully irrecoverable loans continued to decrease, totalling 13.8% at the end of 2016. This decline predominantly reflects better collection, improved client creditworthiness and a more dynamic sale of bank placements, partly under the influence of the CNB's progressive rules on the allocation of additional value adjustments. The conversion of loans in Swiss francs also contributed to the improvement in the credit quality of the household sector. The sale of claims and the conversion of loans limited the exposure to credit risk, contributing to the rise in the total capital ratio, which reached its all-time high of 22.5% at the end of 2016.

Fiscal policy in the second half of 2016 was marked by the continuation of the sharp annual decline in the deficit due to a more marked growth in revenues than expenditures. Tax revenues increased strongly during the period in question, largely thanks to the recovery in economic activity, as well as in capital revenues, which is associated with greater use of EU funds. On the expenditure side of the budget, the majority of the constituents increased in the second half of the year, while expenditures on social benefits and interest payments decreased. The continuation of favourable economic and fiscal trends in the second half of 2016 led to a reduction in borrowing costs, as well as to a decrease in the general government debt-to-GDP ratio which stood at 84.2% at the end of 2016. At the same time, debt maturity was extended and the share of kuna debt instruments increased.

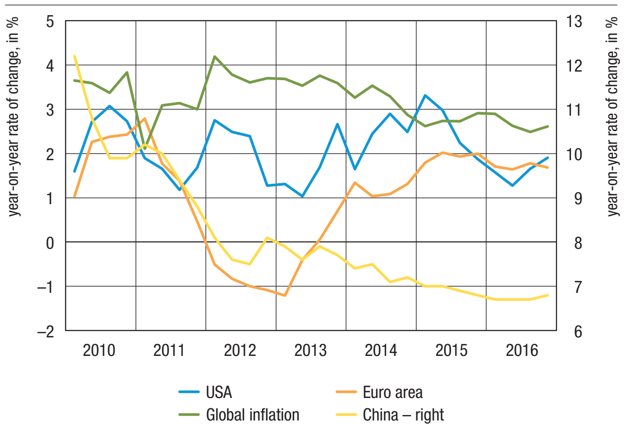
1 Bankruptcy proceedings were opened against Banka splitsko-dalmatinska d.d., Split, at the beginning of July. BKS Bank d.d., Rijeka, merged with BKS Bank AG, Klagenfurt in October 2016. At the same time BKS Bank AG, main branch Rijeka, became operational.

2 Global developments

Global economic activity accelerated in the second half of 2016. Positive trends were particularly evident among developed countries. At the same time, the slowdown in economic activity in developing and emerging market countries came to a halt, which to a significant extent reflected a slight acceleration in the growth of the Chinese economy and the mitigation of the crises in Russia and Brazil.

Among developed countries, the strengthening of growth was most notable in the US. Following weak results in the first half of the year, the US economy accelerated considerably on the eve of the highly unpredictable presidential elections. Thus in the second half of the year, thanks to the surge in exports, GDP growth accelerated to 1.8%.

Figure 2.1 Economic growth in selected markets and global inflation



Sources: Eurostat, BEA, NBS and IMF.

The growth of economic activity in the euro area in the second half of the year was stable (1.8%), which was mostly attributed to continued domestic demand. Favourable financing conditions, supported by the ECB's stimulus measures, as well as the relatively low prices of energy, continued to boost disposable income and personal consumption of households, while investment activity, due to long-standing structural issues and high corporate debt in some member states, was still subdued. Contrary to expectations, following the referendum decision in June 2016 to exit the European Union, the UK economy continued to record solid growth.

2.1 Croatia's main trading partners

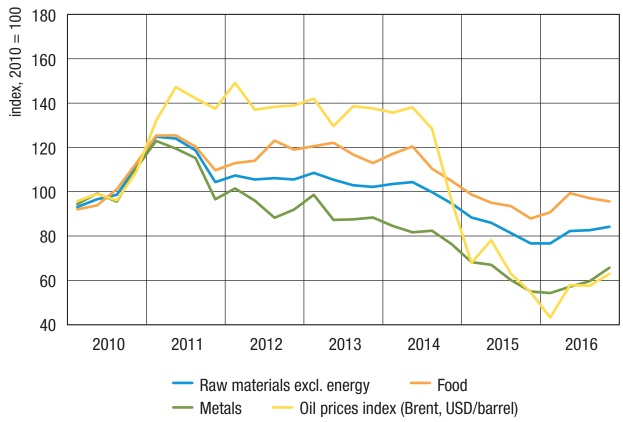
Economic trends in Croatia's major trading partner countries were relatively favourable in the second half of 2016. Among euro area partners, increasingly dynamic economic activity was recorded in Slovenia, where in addition to the strengthening of personal consumption and exports, annual growth reached 3.2%. At the same time, Germany continued its stable growth (1.7%), recording the strengthening of government consumption and exports, while the growth of investments was still relatively weak. Economic growth in Italy was still below the euro area average (1.0%), although investments started to show signs of recovery by the end of the year.

Favourable movements continued in most of the regional trading partners. Economic activity in Serbia strengthened the most, thanks to robust exports and investments. Bosnia and Herzegovina also recorded the continuation of stable growth, while economic activity in Macedonia in the second half of 2016 was unfavourably affected by growing political instability.

2.2 Prices, exchange rates and financing conditions

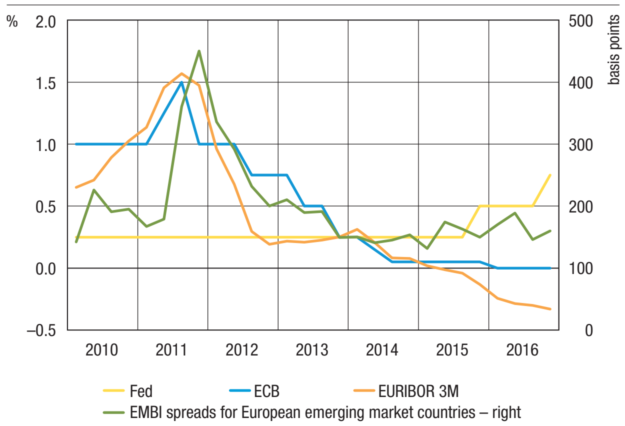
At the end of 2016, the price of crude oil rose sharply, following a period of stabilisation in the third quarter of 2016

Figure 2.2 Raw material prices in the world market



Sources: IMF and Bloomberg.

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



Source: Blomberg.

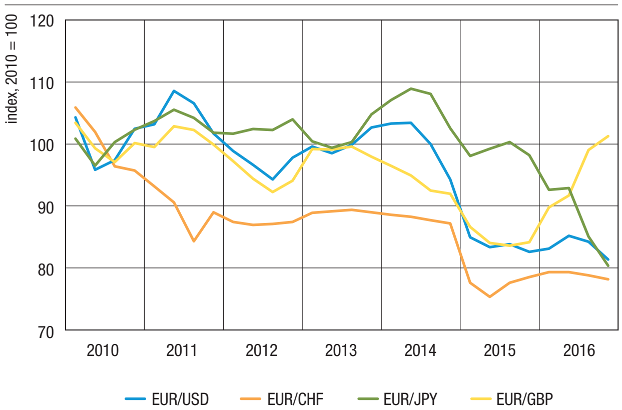
when on average it stood at USD 46 per barrel. This was mostly contributed to by the decision to reduce daily output, reached by OPEC country members at the end of November, so that the price of a barrel of Brent crude oil stood at USD 55 at the end of December. Raw material prices (excluding energy) increased in the second half of 2016, in particular the prices of metals and agricultural raw materials, while the prices of food decreased, primarily the prices of cereals and meat.

In the second half of 2016, markets anticipated further divergence in the monetary policies of the US and the euro area. However, the Fed only raised its benchmark interest rate by 25 basis points in December, for the second time since the outbreak of the global financial crisis. During the same period, the ECB continued to lead a very accommodative monetary policy, after having cut its key benchmark interest rate to zero in March and expanded its programme of unconventional monetary policy measures. In December, the ECB also extended the foreseen duration of the programme of unconventional measures until the end of 2017, decreasing the monthly amount of its programme of net purchase of securities from EUR 80bn to EUR 60bn from April 2017.

Financing conditions for European emerging market countries, including Croatia, were relatively favourable in the second half of 2016, although the EMBI yield spread increased in the fourth quarter. After the US presidential elections in November, the EMBI index in the course of several days increased by about 30 basis points, which shows that the risk perception of emerging market countries increased after the elections. Financing conditions in the European interbank market continued to improve, which was also reflected by the further decline in the EURIBOR.

With regard to the global foreign exchange market, divergent trends in the movement of the euro against the world's most important currencies continued. After strengthening in

Figure 2.4 Exchange rates of the euro against individual currencies



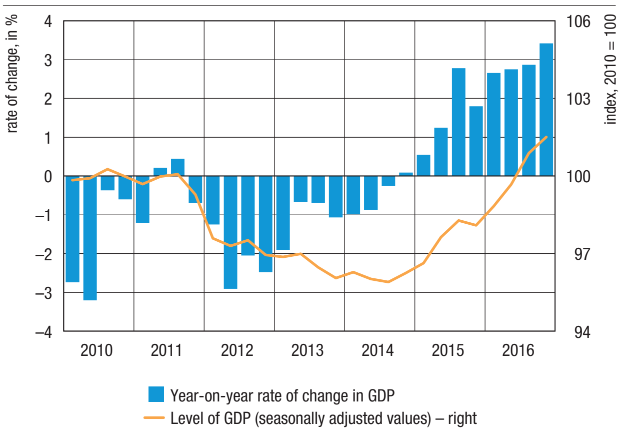
Note: An increase in the index indicates an appreciation of the euro against a currency.
Source: Eurostat.

the first half of the year, the euro mostly depreciated against the US dollar in the second half of 2016. This was particularly emphasised after the US presidential elections at the beginning of November and the Fed's decision to raise its key interest rates in mid-December. The euro thus depreciated against the US dollar by the end of December to EUR/USD 1.05, the lowest value in 2016. At the same time, the euro weakened against the Swiss franc. By contrast, the euro appreciated strongly against the pound sterling after the referendum on the UK's membership in the EU in June 2016. In December, the EUR/GBP exchange rate was up by about 7% from June, although the pound sterling slightly recovered at the very end of the year.

3 Aggregate demand and supply

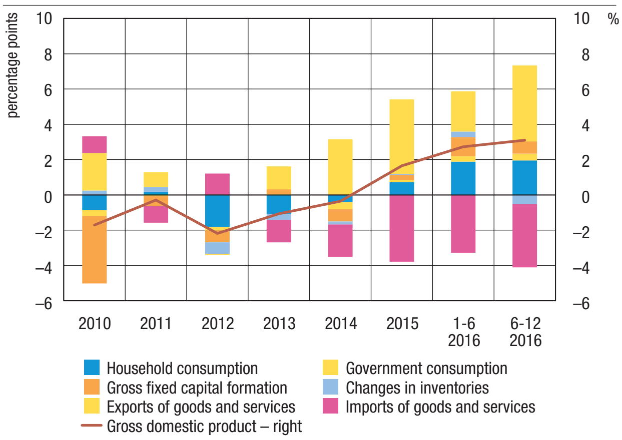
The annual real GDP growth rate in the second half of 2016 accelerated to a 3.1% average from 2.7% in the first six months of 2016. The increase in the exports of goods and services contributed the most to GDP growth at an annual level and net foreign demand made a more positive contribution in the mentioned period than in the second half of 2015. Personal consumption made a strong positive contribution and other components of domestic demand also increased. GDP by the production approach shows that gross added value increased by 2.9% year-on-year, which can be attributed to an increase in all activities, except agriculture, forestry and fishing.

Figure 3.1 Gross domestic product
real values



Source: CBS (seasonally adjusted by the CNB).

Figure 3.2 Change in GDP
contribution by components



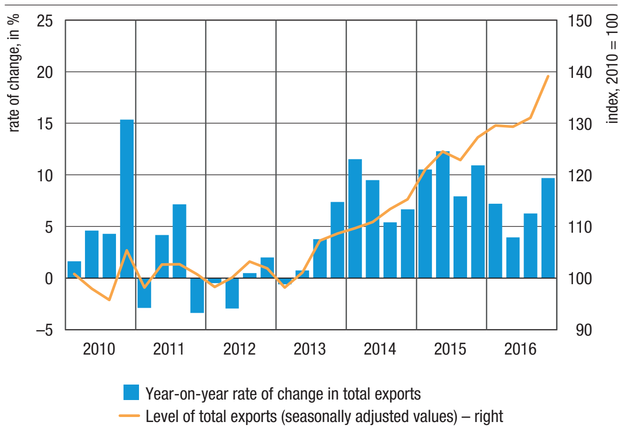
Source: CBS.

3.1 Aggregate demand

The annual growth of the real exports of goods and services in the second half of 2016 stood at 7.6%, or up by 2.2 percentage points from the first six months of 2016. Dynamic foreign demand was the consequence of favourable movements in the exports of services, in particular in the third quarter. The data on revenues from tourism in the balance of payments and the number of foreign tourist nights point to very favourable results in tourism.

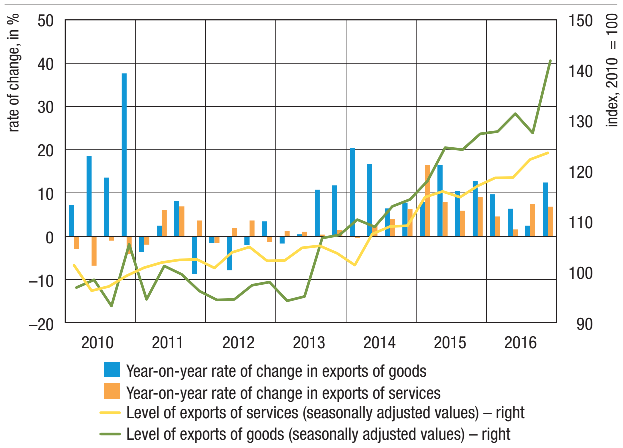
The annual growth in exports of goods slowed down moderately from 7.9% in the first six months of 2016 to 7.5% in the second half of 2016. Annual growth slowed down strongly to 2.4% in the third quarter, while in the last quarter the annual growth rate accelerated to 12.4%. Nominal data on trade in goods show that growth was broadly dispersed by industrial

Figure 3.3 Exports of goods and services
real values



Source: CBS (seasonally adjusted by the CNB).

Figure 3.4 Real exports of goods and services



Source: CBS (seasonally adjusted by the CNB).

groupings and groups of goods.

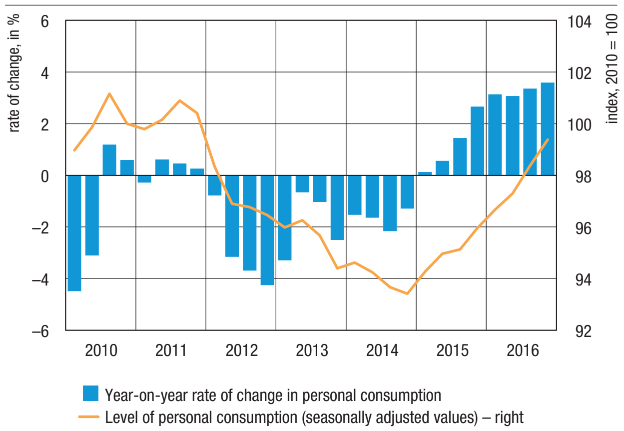
Personal consumption in the second half of 2016 showed the stable growth trend already started at the beginning of 2015, so that the annual growth rate increased to 3.5% from 3.1% in the first half of the year. Favourable trends reflect the continued recovery of the labour market and the increased inflow of funds from the provision of tourist services. In addition, consumer confidence remained at a relatively high level in the third quarter, improving at the end of the year primarily because of improved expectations concerning the economic and financial situation in the next 12 months. The improvement in confidence might also have been driven by the announced tax reform, the objective of which is the decrease in tax burden of households.

In the second half of 2016, gross fixed capital formation increased by 3.7% at an annual level, while six months earlier growth stood at 5.4%. In the third quarter, the annual growth of capital investment slowed down to 2.9%, which was probably associated with the delay of investments because of political uncertainty before the early elections and the finalisation of investment projects related to tourism before the main tourist season. The decline in the annual growth rate was partly the reflection of the base effect. In the last quarter, investment activity intensified again at a quarterly level, so that the annual growth rate increased to 4.6%. Capital investment not only of the public sector but also of the private sector increased.

The annual growth in government consumption accelerated from 1.5% in the first six months of 2016 to 2.0% in the period from July to December 2016. Thus in 2016, government consumption increased considerably for the first time since 2009. Fiscal data indicate that the annual growth of government consumption in the second half of 2016 was mostly the consequence of the growth of intermediate consumption.

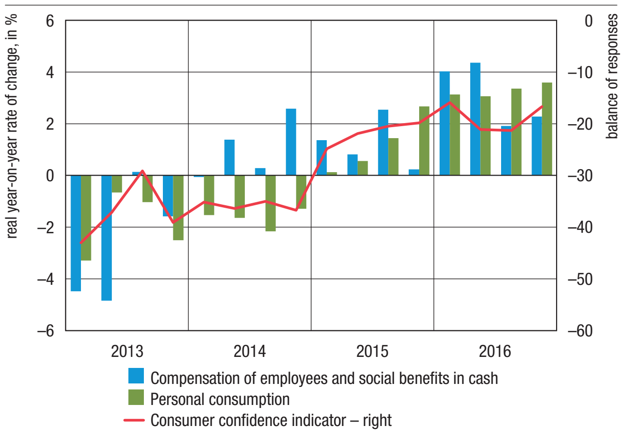
In parallel with the growth of total domestic and export demand, imports of goods and services also continued to trend upwards. The annual increase in imports accelerated by a bit more than one percentage point from the first half of the year (to 7.8%). Imports of both goods and services continued to grow. Nominal data on trade in goods indicate that the growth of the imports of goods was also broadly dispersed, with a notable growth of non-durable consumer goods.

Figure 3.5 Personal consumption
real values



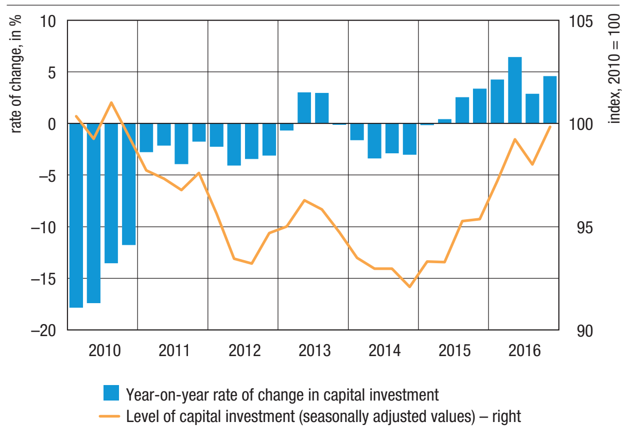
Source: CBS (seasonally adjusted by the CNB).

Figure 3.6 Determinants of personal consumption
real values and index



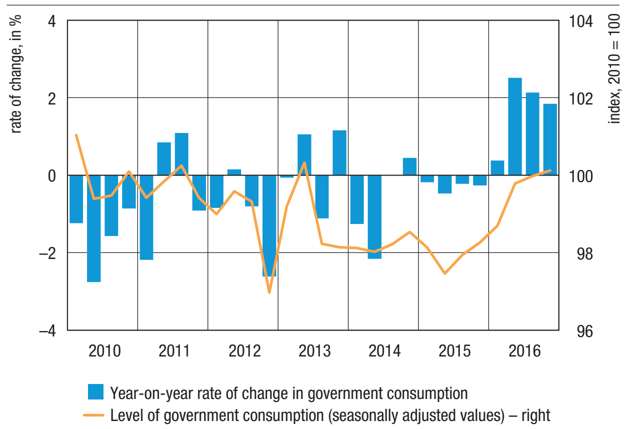
Note: Real values of compensation of employees and social benefits in cash were calculated by deflating nominal values using the personal consumption deflator.
Sources: CBS, Ipsos and CNB.

Figure 3.7 Gross fixed capital formation
real values



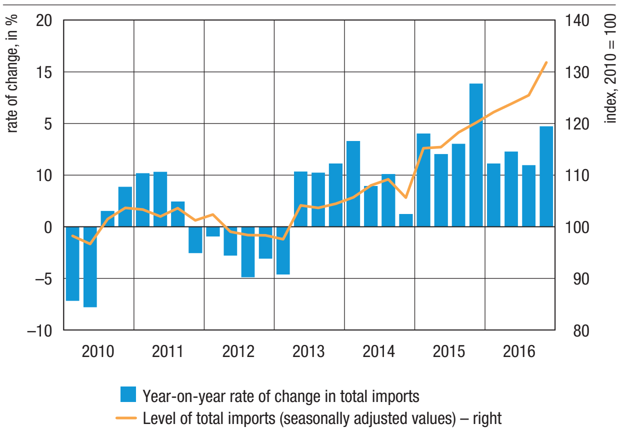
Source: CBS (seasonally adjusted by the CNB).

Figure 3.8 Government consumption
real values



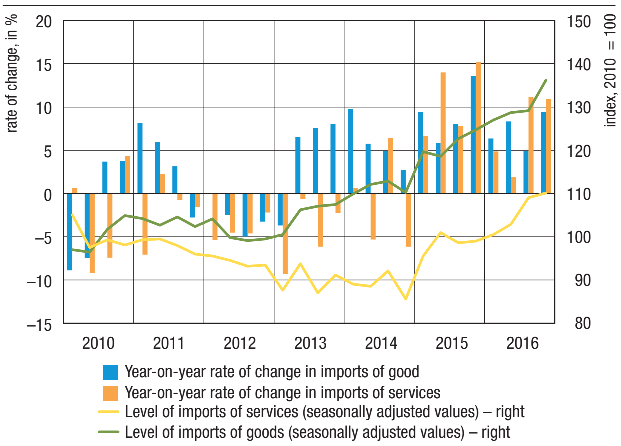
Source: CBS (seasonally adjusted by the CNB).

Figure 3.9 Imports of goods and services
real values



Source: CBS (seasonally adjusted by the CNB).

Figure 3.10 Real imports of goods and services

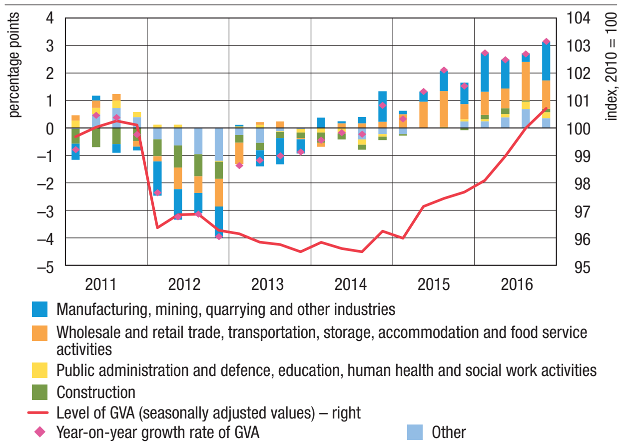


Source: CBS (seasonally adjusted by the CNB).

3.2 Aggregate supply

The annual growth of gross value added (GVA) accelerated in the second half of 2016 to 2.9% from 2.6% in the previous six months. A noticeable contribution to GVA growth came from trade, transportation and tourism, which continued positive current developments from the first half of the year in the second half of 2016, at the same time reflecting favourable trends in tourism, but also further increase in household purchasing power. Manufacturing made a significant contribution to GVA annual growth, which was also recorded in the majority of other activities. On the other hand, in agriculture, forestry and fishing the decline continued at a quarterly level, which was present from the beginning of the year, so that their activity in the second half of the year was 1.3% lower than the year before.

Figure 3.11 Change in GVA
contribution to the annual change by components



Source: CBS (seasonally adjusted by the CNB).

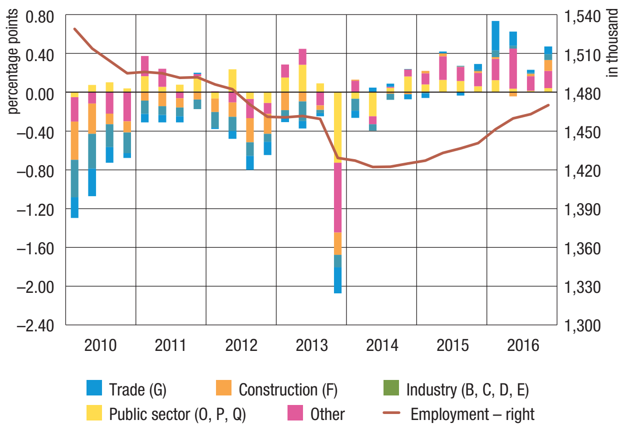
4 Labour market

4.1 Employment and unemployment

In the second half of 2016, the number of employed persons continued to grow sharply and increased by 1.9% from the same period of the previous year. The growth of total employment was mainly attributed to private sector service activities. Employment of young people was notable thanks to tax reliefs for employers.[2]

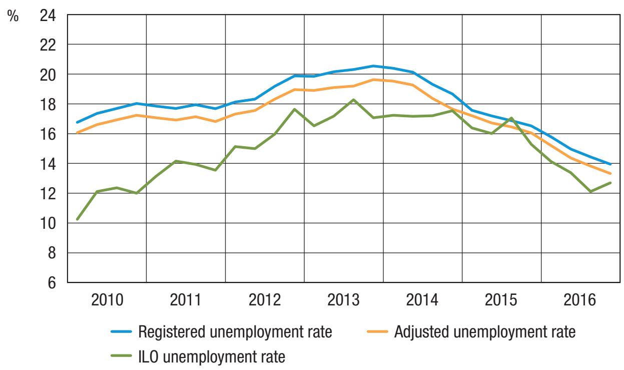
Unemployment continued decreasing in the second half of 2016, if at a slower pace than in the first six months. In December 2016, the number of unemployed persons was 7.4% lower than in June, the consequence of intensified removal from the register for non-compliance with legal provisions, registration cancellation and failure to report regularly, but also of new employment. At an annual level, unemployment continued decreasing sharply, so that in the second half of 2016 it was as much as 17.5%, or approximately 50 thousand persons, lower than in the same period in 2015. The decline in unemployment is intensified by the emigration of working age population to developed EU countries.[3]

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



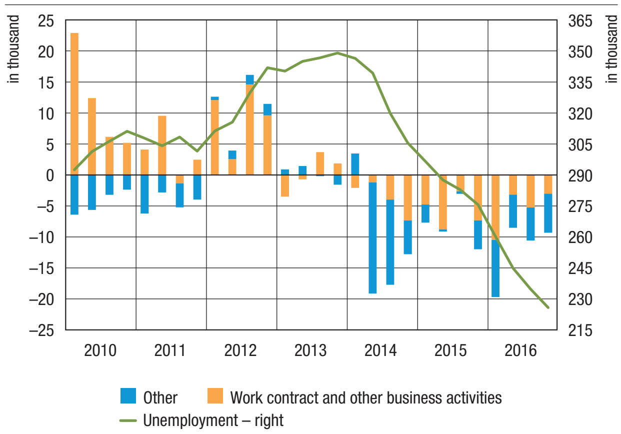
Source: CPIA (seasonally adjusted by the CNB).

Figure 4.3 Unemployment rates
seasonally adjusted data



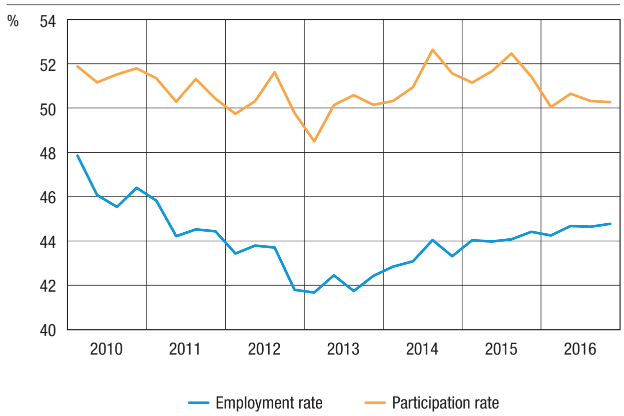
Note: The adjusted unemployment rate is the CNB estimate and is calculated as the share of the number of registered unemployed persons in the working age population estimated as the sum of unemployed persons and persons insured with the CPIA. Since January 2015, the calculation of the registered unemployed rate published by the CBS has been made using the data on employed persons from the JOPPD form.
Sources: CBS, CES and CNB calculations (seasonally adjusted by the CNB).

Figure 4.2 Total unemployment and net unemployment inflows
seasonally adjusted data



Source: CES (seasonally adjusted by the CNB).

Figure 4.4 Labour Force Survey
seasonally adjusted series

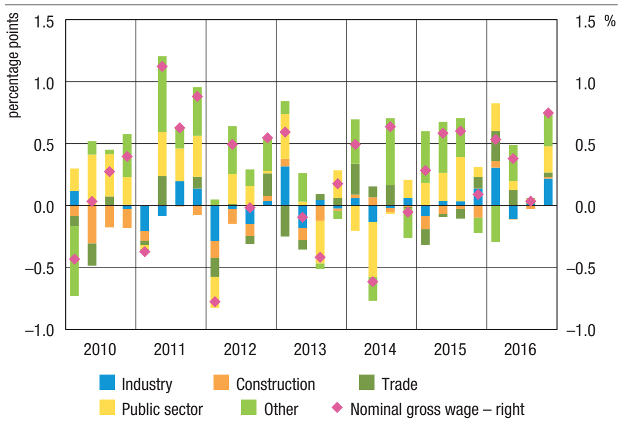


Source: CBS (seasonally adjusted by the CNB).

2 The largest positive contribution to the annual growth in total employment in the second half of 2016 was recorded in the category of youth employment (persons under the age of 30) on open-ended contracts according to the Contributions Act (OG 143/2014), under which employers are exempted from payment of wage contributions for the period of five years.

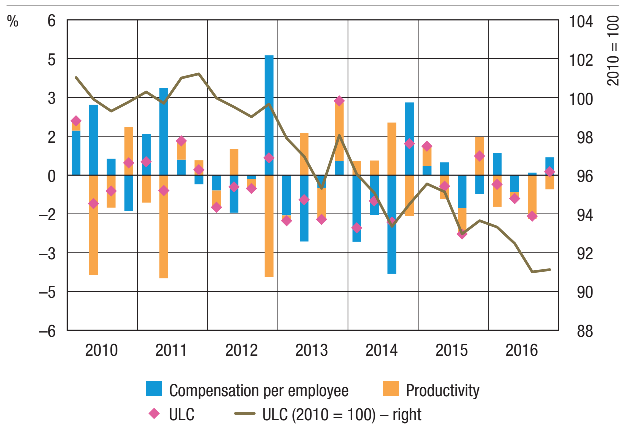
3 The official CBS data show that almost 30,000 Croatian citizens (about 0.7% of total population) emigrated from the country in 2015, or as much as three times more than in 2008, the last year before the beginning of the crisis. However, it is possible that the number of emigrants is

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



Note: Data on the average nominal gross wage by activity refer to data from the RAD-1 form, and from January 2016 to data from the JOPPD form.
Sources: CBS and CNB calculations (seasonally adjusted by the CNB).

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



Note: Productivity growth carries a negative sign.
Sources: CBS and Eurostat data seasonally adjusted by the CNB.

The decrease in the number of unemployed persons was reflected in the further decline in the registered unemployment rate, which according to seasonally adjusted data in December 2016 stood at 13.9% as against the 14.8% in June (if the CPIA data are used in the calculation of the unemployment rate, at the end of 2016, the unemployment rate stood at 13.2%).

According to the Labour Force Survey data for the second half of 2016, the unemployment rate dropped to 12.1% in the third quarter, which was the lowest recorded value from mid-2010, while it increased to 12.7% in the fourth quarter. The participation rate (i.e. the share of the labour force in the working age population) remained unchanged relative to the average of the first six months, while the unemployment rate increased moderately.

4.2 Wages and unit labour costs

The second half of 2016 was marked by the relatively favourable movement of financial indicators of the labour market. Following the stagnation in the third quarter relative to the average recorded in the period from April to June, the average nominal gross wage increased notably in the last three months of 2016. Observed at an annual level, gross wages increased by 1.6% in the second half of the year. Wages grew considerably in all activities, except the public sector. At the same time, the increase in real wages, including their purchasing power, was more pronounced due to the decline in consumer prices.

Unit labour costs declined substantially in the second half of 2016 from the first six months because the increase in labour productivity was more pronounced than the increase in employee compensation. A considerable decline in unit labour costs from the second half of 2015 was also noticeable because of the robust growth of labour productivity and the slight increase in employee compensation.

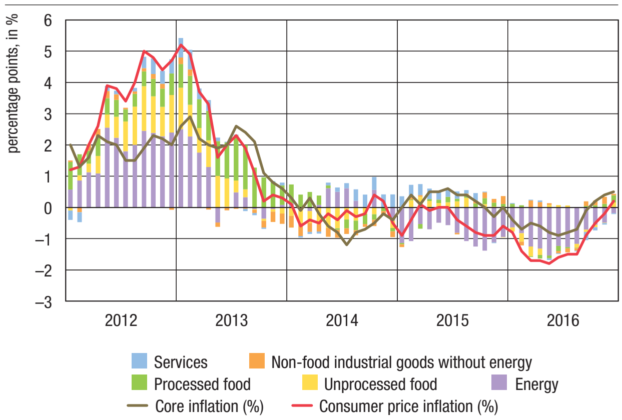
underestimated by official statistical data for they include only those persons who changed their place of residence for a period longer than one year and so informed the Ministry of Interior.

5 Inflation

Inflation grew substantially in the second half of 2016, which was mostly the result of the strengthening of imported inflationary pressures, i.e. the rise in the prices of oil and other raw materials in the world market and the increase in inflation in the euro area. The annual consumer price inflation rate increased from –1.6% in June to 0.2% in December. The annual core inflation rate increased from –0.9% in June to 0.5% in December. At the same time, the annual fall in industrial producer prices (excluding energy) slowed down from –1.5% in June to –0.9% in December, mostly the prices of non-durable consumer goods, such as food products. This indicates the weakening of deflationary pressures coming from this source.

Indicators of current inflation trends grew substantially from mid-2016, indicating the strengthening of inflationary pressures. In the same period, the inflation diffusion index increased considerably, standing at 61% in December, which indicates the increase in the number of products in the HICP basket, the prices of which grew.

Figure 5.1 Year-on-year inflation rate and contribution of components to consumer price inflation

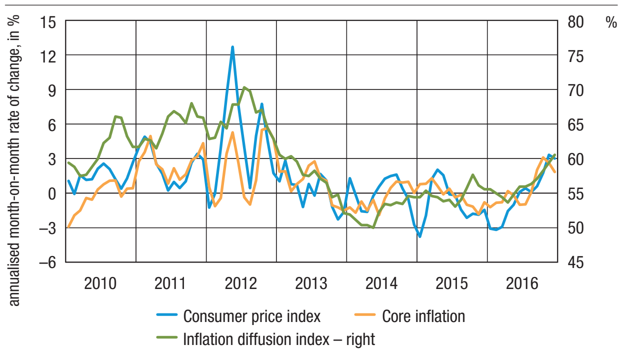


Note: Core inflation does not include agricultural product prices and administrative prices. Processed food includes alcoholic beverages and tobacco.
Sources: CBS and CNB calculations.

If analysed by the main groups, the increase in the annual inflation rate in the second half of 2016 was mostly due to a decline in the negative contribution of energy prices, i.e. from –1.2 percentage points in June to –0.2 percentage points in December. This was mainly due to the prices of refined petroleum products, the contribution of which to overall inflation increased to 0.2 percentage points in December from –0.9 percentage points in June. On the one hand, this is attributable to the current rise in refined petroleum products prices, reflecting the increase in crude oil prices in the world market, and on the other hand to the base period effect, i.e. a pronounced fall in these prices in the second half of 2015. The price of a barrel of Brent crude oil rose from the average USD 48 in June to USD 54 in December, while in the same period of 2015 it dropped by almost 40%. The still negative contribution of energy prices to overall consumer price inflation was the result of the decrease in the administrative price of natural gas in the first half of the year.

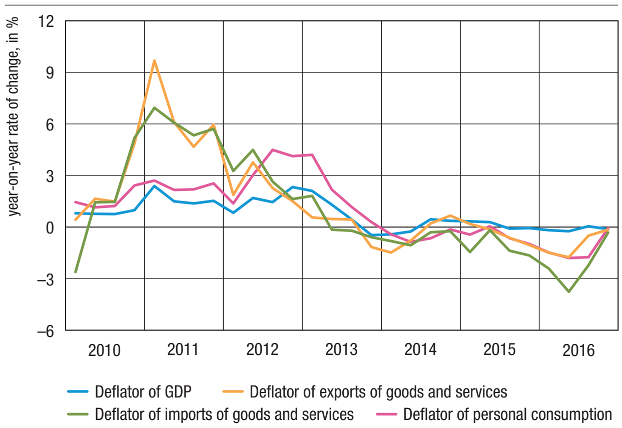
The annual inflation rate also grew substantially due to the prices of processed food. Their contribution to overall inflation increased from –0.2 percentage points in June to 0.2 percentage points in December. This was mostly the result of the increase in the annual rate of change in the price of milk and dairy products because of the current increase in the price of these products, but also the base period effect (the fall in these prices in the same period of 2015 due to the suspension of quotas for the production of milk in the EU) and in part the result of the increase in the prices of tobacco products due to the rise in excise duties. The contribution of the prices of industrial products (excluding food and energy) increased to a lesser extent in overall annual inflation. This was mostly attributed to the rise in the annual rate of change in footwear prices because of the base period effect, i.e. the more pronounced decline in these prices in the second half of 2015. In addition, the contribution of unprocessed food prices increased moderately,

Figure 5.2 Indicators of current inflation trends



Note: The month-on-month rate of change is calculated from the quarterly moving average of seasonally adjusted consumer price indices. The inflation diffusion index shows the share of the number of products whose prices increased in a given month in the total number of products, measured by a 6-month moving average, and is based on the monthly rates of change derived from the seasonally adjusted components of the HICP.
Sources: CBS, Eurostat and CNB calculations.

Figure 5.3 Deflator of GDP and its individual components



Source: CBS.

Table 5.1 Price indicators
year-on-year rate of change

	12/2015	3/2016	6/2016	9/2016	12/2016
Consumer price index and its components					
Total index	–0.6	–1.7	–1.6	–0.9	0.2
Energy	–5.0	–7.4	–7.3	–4.2	–1.1
Unprocessed food	–0.1	–3.4	0.8	–0.8	1.7
Processed food	0.5	–0.1	–0.7	0.2	1.0
Non-food industrial goods without energy	1.1	0.9	–0.3	0.6	0.2
Services	0.0	0.1	–0.1	–1.0	–0.1
Other price indicators					
Core inflation	0.0	–0.5	–0.9	–0.1	0.5
Index of industrial producer prices on the domestic market	–4.1	–5.0	–4.8	–3.0	–0.1
Index of industrial producer prices on the domestic market (excl. energy)	–0.5	–1.1	–1.5	–1.3	–0.9
Harmonised index of consumer prices	–0.3	–0.9	–1.2	–0.7	0.7
Harmonised index of consumer prices at constant tax rates	–0.7	–1.3	–1.2	–0.7	0.6

Sources: CBS and Eurostat.

mostly because of the rise in the annual rate of change of meat prices which entered positive territory in October for the first time in almost three years.

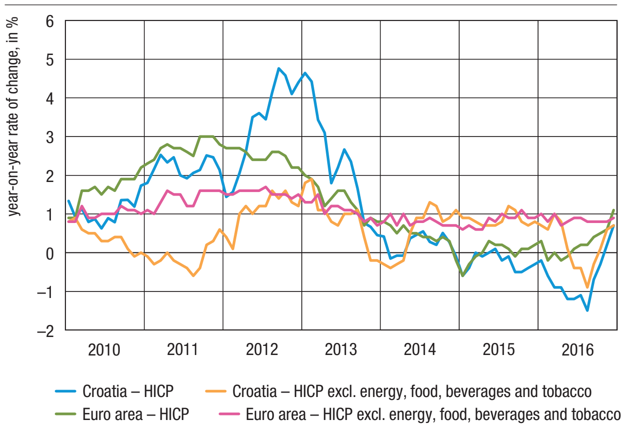
In the second half of 2016, the annual drop in the deflator of imports of goods and services slowed down significantly, which indicates a significant strengthening of inflationary pressures resulting from the increase in the prices of imported raw materials and finished goods. The annual fall in the deflator of exports of goods and services also slowed down, but to a much smaller extent, while trade conditions remained almost unchanged.

Inflation in the euro area also accelerated from mid-2016, from 0.1% in June to 1.1% in December. This almost entirely resulted from the slowdown in the annual fall of energy prices, mainly attributable to the current rise in the price of refined petroleum products due to the increase in the price of crude oil in the world market and the base period effect, i.e. a sharp fall in these prices in the second half of 2015. At the same time, core inflation (excluding energy, food, beverages and tobacco prices) was relatively stable, standing at 0.9% in December, unchanged from June 2016.

In Croatia, for purposes of comparison, the annual consumer price inflation rate, measured by the HICP, increased from –1.2% in June to 0.7% in December. As in the euro area, this was mostly attributable to the increase in the annual rate of change in energy prices, which was largely the consequence of the base period effect. The contribution of other HICP main categories also increased, mostly of the prices of services. The annual rate of change in prices of accommodation services and package holidays increased considerably. However, this was the result of the waning of the impact of methodological changes on the calculation of the HICP (for more details see Box 1 in Macroeconomic Developments and Outlook, No. 1, 2016). As a result, the difference in overall inflation between Croatia and the euro area decreased to –0.4 percentage points in December (from –1.3 percentage points in June).

With regard to core inflation (measured by the HICP excluding energy, food, beverages and tobacco prices), it increased in Croatia from –0.4% in June to 0.7% in December. This was mostly driven by the above-mentioned rise in the prices of accommodation services and package holidays. At the end of the year, core inflation in Croatia was only 0.2 percentage points lower than core inflation in the euro area.

Figure 5.4 Indicators of price developments in Croatia and euro area

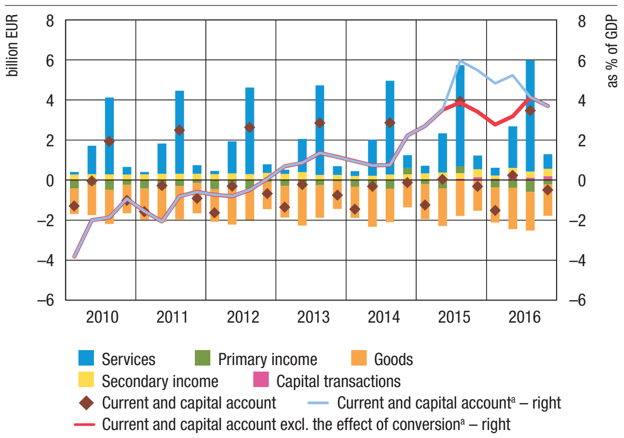


Source: Eurostat.

6 Current and capital account

The surplus in the current and capital account fell in the second half of 2016, due mainly to the waning effects of the conversion of loans in Swiss francs on banks' business results in the primary income account (estimated at about 2% of GDP in 2015) and the widening of the deficit in foreign trade in goods. At the same time, net revenues from exports of services grew strongly and the utilisation of EU funds increased. At the entire-2016 level, the surplus in the current and capital account stood at 3.7% of GDP (5.5% of GDP in 2015), increasing slightly if the effect of conversion is excluded.

Figure 6.1 Current and capital account balance and its structure



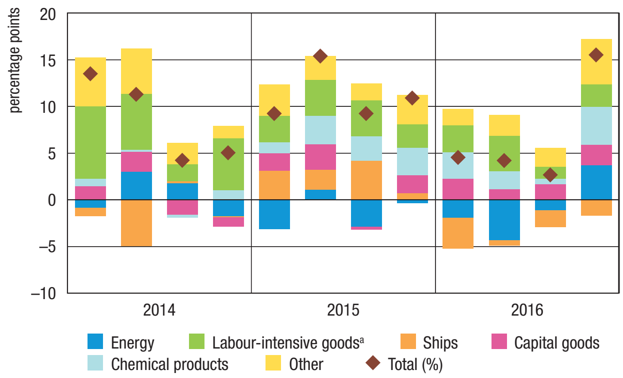
[a] Sum of the last four quarters.
Source: CNB.

6.1 Foreign trade and competitiveness

The deficit in foreign trade in goods widened in the second half of 2016 from the same period in 2015 on the back of increased personal consumption. According to the CBS data,[4] the main contributors to the deficit growth were the increase in net imports of medical and pharmaceutical products and the decrease in net exports of other transport equipment. In addition, an increase was also observed in net imports of road vehicles, capital goods and wearing apparel. By contrast, the decrease of the deficit in trade of energy products (notably oil and refined petroleum products and electricity) and, to some extent, in trade of certain food products (primarily cereals and cereal preparations, and sugar, sugar products and honey) mitigated the effects of unfavourable developments.

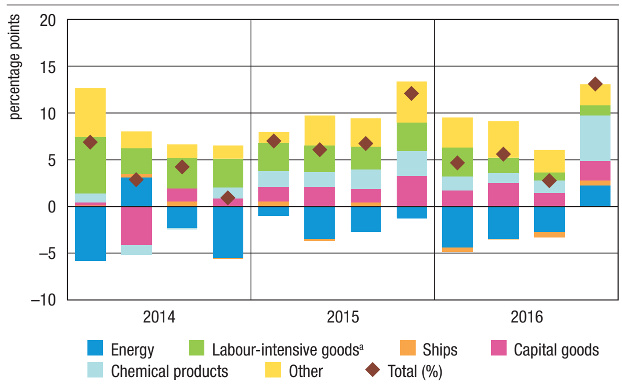
The annual growth of goods exports accelerated markedly in the second half of 2016 (from 4.6% in the first half of 2016 to 8.9% according to the CBS data). A sharp increase was observed in the exports of medical and pharmaceutical products to the USA, capital goods (mostly electrical machinery, apparatus and appliances), various agricultural and food products (the most significant being exports of cereals and cereal preparations to Italy) and metal industry products to Italy and Germany. At the entire-2016 level, total exports of goods grew by 6.9%, a rate of growth slower than the 11.2% of the previous year, due to the fall in exports of ships and oil and refined petroleum products and a modest slowdown in

Figure 6.2 Goods exports (f.o.b.)
year-on-year rate of change and contributions



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

Figure 6.3 Goods imports (c.i.f.)
year-on-year rate of change and contributions



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

4 Data on foreign trade in goods, published by the CBS, also include certain transactions exclusively performed by non-residents, the volume of which became significant after Croatia's accession to the EU. In contrast, in the balance of payments statistics, data series on credits and debits in the goods account include only transactions involving a change in ownership between resident and non-resident, while the exclusion of the mentioned non-resident transactions, in addition to other adjustments for coverage and classification, result in lower annual growth rates of goods trade compared to the CBS data. The annual growth rates of goods exports, imports and deficit trended down by 3.6 percentage points, 2.5 percentage points and 0.9 percentage points respectively in 2016.

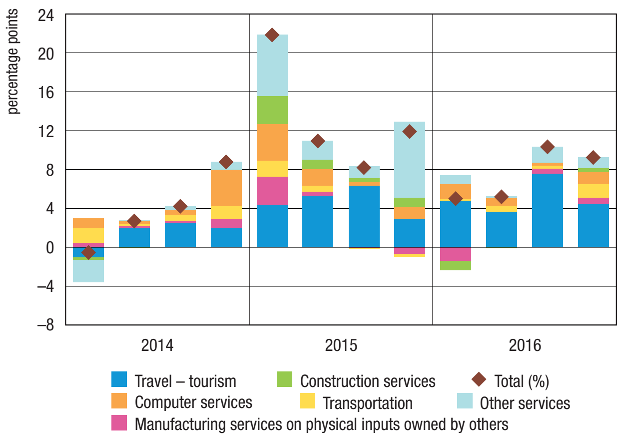
exports of other goods.

The growth of total imports of goods also accelerated in the second half of 2016, albeit at a slower rate than the growth of goods exports. The annual growth rate stood at 7.3%, after being at 5.7% in the first six months. Imports grew mostly due to stronger imports of medical and pharmaceutical products from the Republic of Korea, individual capital goods (notably machinery specialised for particular industries from Germany and general industrial machinery and equipment from Germany and Italy) and road vehicles from Germany and Slovenia. By contrast, the fall in imports of electricity (notably from Slovenia and Hungary) was counteracted by higher imports from Bosnia and Herzegovina, while imports of leather, leather manufactures and dressed fur skins from Austria trended down. The annual growth rate of total imports of goods amounted to 6.5% in 2016, which is also a decrease from 2015 (7.9%).

The foreign trade in services continued to be marked by very favourable trends in the second half of 2016, largely owing to travel services. Revenues from tourism consumption of non-residents were upped by 9.2% from the same period in 2015, accompanied by a significant improvement of volume indicators. The number of arrivals and nights stayed by foreign tourists in commercial accommodation facilities grew by 11.5% and 10.8% respectively, the major contributors being tourists from Germany, Austria, Slovenia, Poland and the UK. This was paralleled by a marked rise in tourism consumption of residents abroad. In addition to travel services, the annual growth in net exports was observed in other categories of services, favourable trends being recorded in telecommunication, computer and information services and personal, cultural and recreational services.

The price competitiveness of Croatian exports, measured by the developments in the real effective exchange rates, was relatively stable in the second half of 2016. The real effective kuna exchange rate deflated by consumer prices strengthened only slightly on an annual basis, while the real effective kuna exchange rate deflated by producer prices edged down. On the other hand, developments in the real effective kuna exchange rates deflated by unit labour costs at the level of manufacturing industry and the economy as a whole suggest considerable improvement in price competitiveness from previous periods. This trend is attributable to a substantial drop in unit labour costs in Croatia, because compensation per employee declined more than productivity, particularly in industry.

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

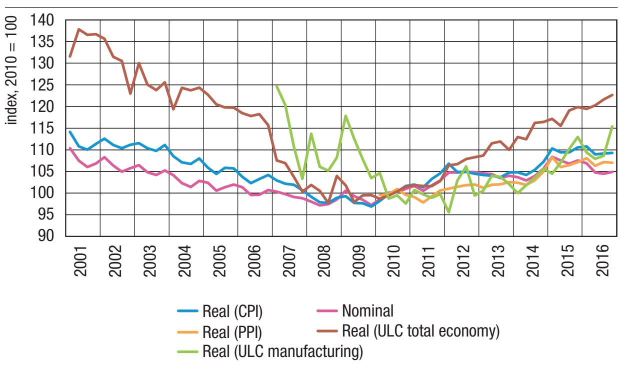


Source: CNB.

6.2 Incomes and transactions with the EU

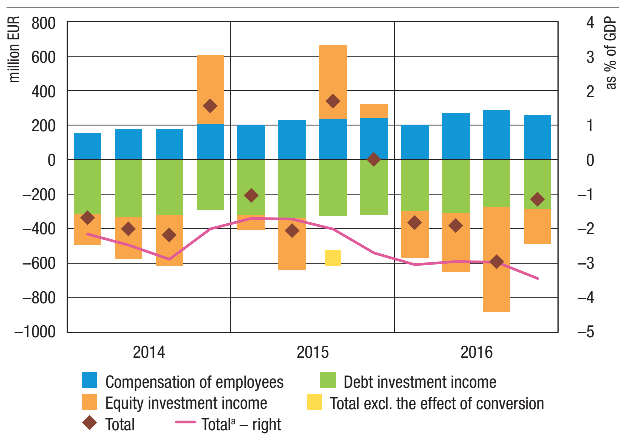
Following an unusual surplus connected with the effect of the conversion of loans in Swiss francs in the second half of 2015, a significant negative balance in the primary income account materialised again in the second half of 2016. The deterioration in the balance was contributed to by better business results of domestic business entities owned by non-residents, particularly in the financial and pharmaceutical activities and petroleum products manufacturing. By contrast, business performance of residents improved on the back of their foreign investment. Moreover, favourable contributors to the primary income balance were the decrease in interest expenditures on foreign financing and the growth of revenues from compensations

Figure 6.5 Nominal and real effective exchange rates of the kuna



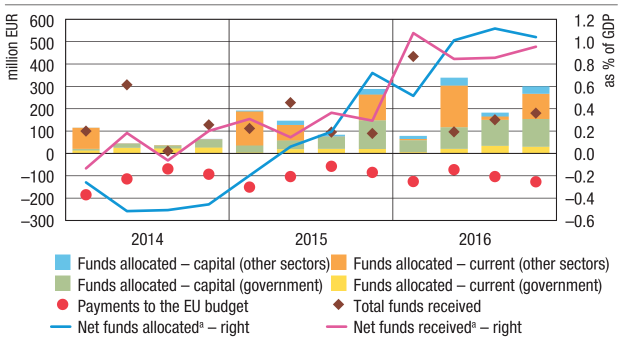
Note: The real effective exchange rate of the kuna deflated by producer prices includes the Croatian index of industrial producer prices on the non-domestic market, which is available from January 2010. The unit labour cost is calculated as the ratio between compensation per employee and labour productivity (defined as GDP per person employed). A fall in the index indicates an effective appreciation of the kuna.
Source: CNB.

Figure 6.6 Primary income account balance and its structure



[a] Sum of the last four quarters; in the period from the third quarter of 2015 to the second quarter of 2016 excludes the effect of conversion.
Source: CNB.

Figure 6.7 Transactions with the EU budget



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

to residents working abroad.

Net revenues in the secondary income account edged down in the second half of 2016 from the same period in 2015 due to higher payments to the EU budget. However, a parallel increase in withdrawals from EU funds, notably capital ones, pushed up the surplus in the capital transactions account. The average annual amount of the surplus of funds utilised from EU funds over the payments to the EU budget continued to grow, reaching 1.0% of GDP at the end of 2016.

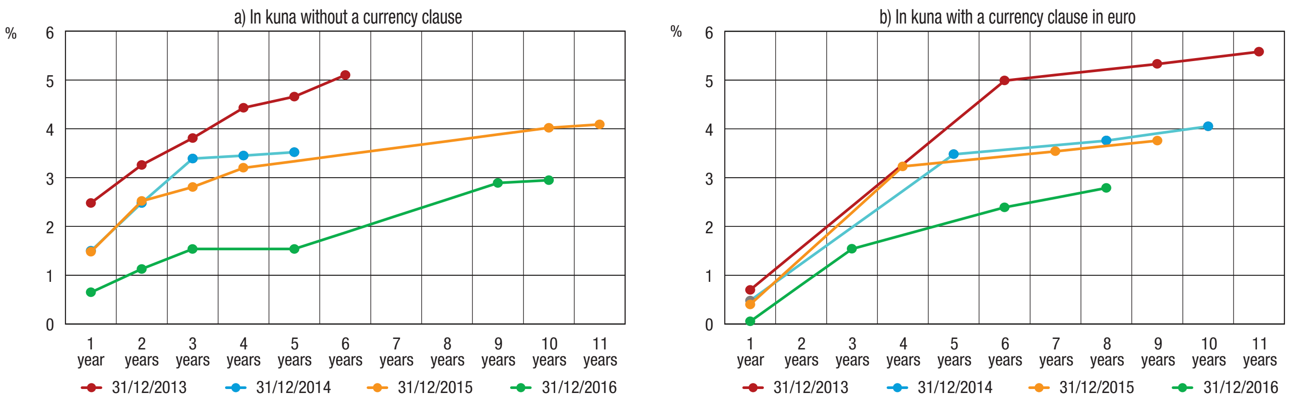
7 Private sector financing

The second half of 2016 saw a further trend of improvement in domestic sectors' (households and enterprises) financing conditions, spurred by high liquidity on the international and domestic financial markets. Exceptionally high liquidity of the domestic monetary system was supported by the expansionary monetary policy pursued by the CNB. The costs of government borrowing, one of the determinants of the borrowing costs of other domestic sectors, fell additionally. The interest rate on one-year kuna T-bills without a currency clause fell to a historical low of 0.65% in December 2016, and the interest rate on one year euro T-bills fell to 0.05% in November, from 0.25% in mid-2016.

According to the yield curve for Croatian government bonds, long-term interest rates on government bonds fell even more sharply. Yield to maturity on the ten-year kuna bond without a currency clause fell by 0.9 percentage points towards the end of 2016 from mid-year, also helped by long-term kuna liquidity creation based on CNB's structural repo operations. The yield on the eight-year bond with a currency clause in the euro fell by 0.6 percentage points during the same period. The price of government financing abroad, estimated by the sum of the EMBI index for Croatia and the yield on the German government bond was also more favourable than in the first half of the year.

The trend of decline in the average short-term and long-term costs of corporate financing, present for many years, continued in the second half of 2016. The interest rates on long-term corporate loans with a currency clause and those on loans up to HRK 7.5m fell the most. By contrast, the interest rates on loans above HRK 7.5m were the only ones that rose slightly in the second half of 2016, while the difference between interest rates on loans up to HRK 7.5m and loans above that

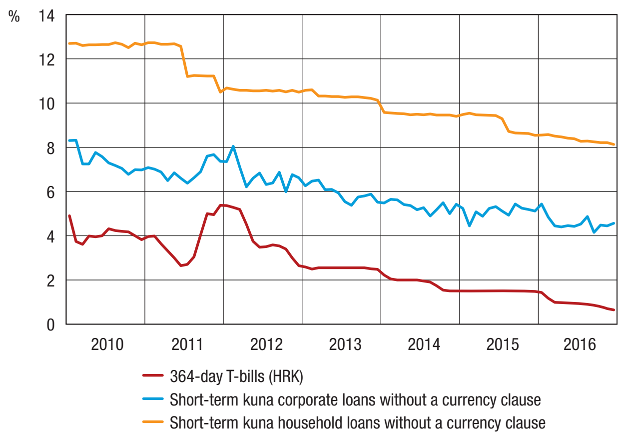
Figure 7.1 Yield-to-maturity on RC bonds



Note: The dots show the achieved yields, while other values have been interpolated. Data for one-year yield refer to the achieved interest rate on one-year kuna T-bills without a currency clause.
Source: CNB.

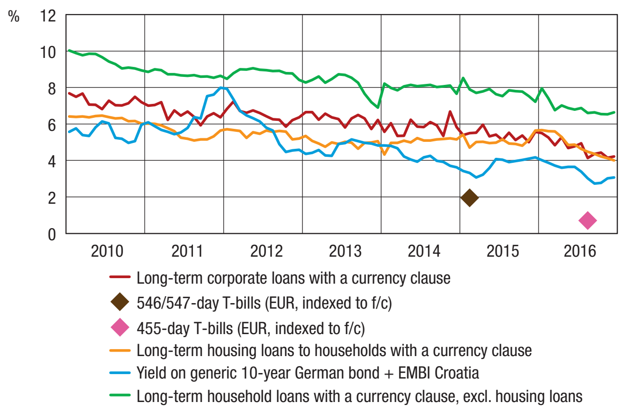
Note: The dots show the achieved yields, while other values have been interpolated. Data for one-year yield refer to the achieved interest rate on one-year kuna T-bills with a currency clause in euro.
Source: CNB.

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



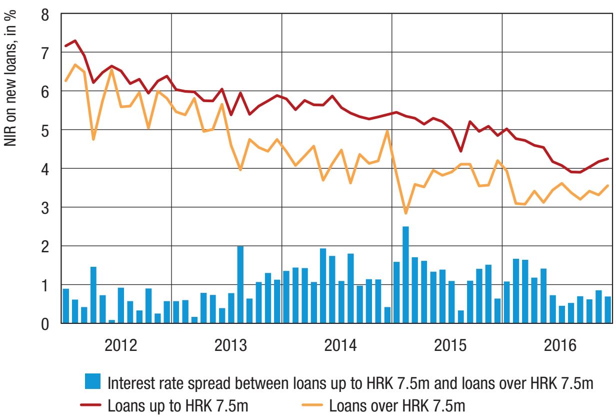
Sources: MoF and CNB.

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



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

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

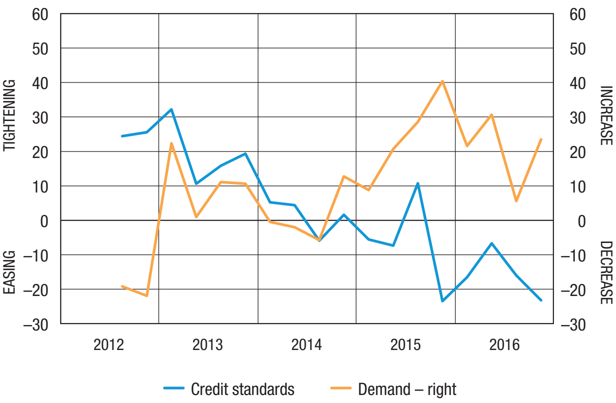


Source: CNB.

amount decreased during the same period.

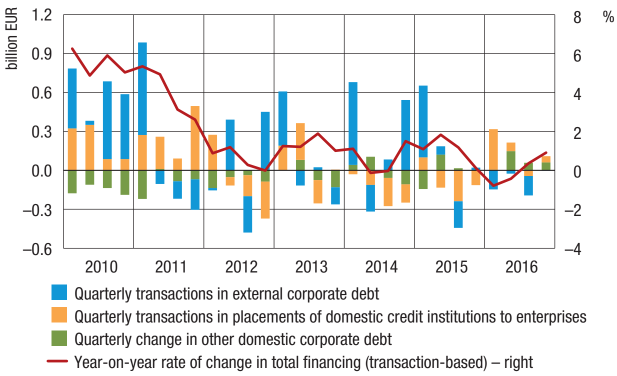
The interest rates on short-term household loans in kuna and on long-term loans with a currency clause were also more favourable in the July to December 2016 period than in the first half of the year. Interest rates on housing loans with a currency clause fell the most, partly due to the completion of the procedure of conversion of loans indexed to the Swiss franc to loans indexed to the euro, which, from December 2015 to April 2016 led to a temporary jump in interest rates on new housing loans with a currency clause in the euro (which also included the converted loans). The interest rates on converted loans, determined by a special law and recorded in interest rate statistics as newly negotiated euro loans, were mostly higher than market interest rates on housing loans applicable at the time. The fall in domestic interest rates was driven by high liquidity as well as the further continuous trend of fall in the cost of sources of funds of the Croatian banking system, with EURIBOR and the national reference rate[5] standing at the lowest recorded levels ever (for more information on the impact of variable parameters on interest rate developments, see Box

Figure 7.5 Credit standards and corporate demand for loans



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

Figure 7.7 Corporate financing



Notes: Other domestic financing includes borrowing from domestic leasing companies and the CBRD. Foreign financing includes borrowing from foreign banks and foreign affiliated enterprises and excludes the effect of debt-to-equity transactions. Rate of change was calculated based on transactions (except for other domestic debt).
Sources: HANFA, CNB and CNB calculations.

Figure 7.6 Credit standards and household demand for loans

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

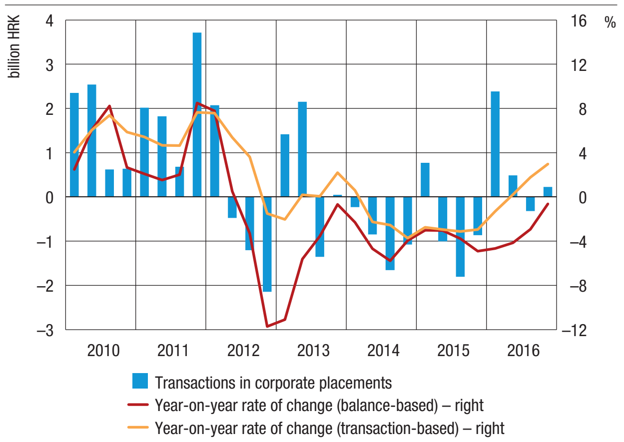
1 The issue of interest rate risk – a review of the results of the Interest rate survey).

Credit standards for enterprises continued to ease in the second half of 2016 and the demand for loans continued to rise. According to the results of the bank lending survey, the easing of credit standards for enterprise was spurred by favourable conditions on the banking market (bank liquidity, possibility for bank financing on the market and competition among banks) and by positive expectations regarding general economic developments. The improvement in economic conditions also had a positive effect on loan demand, with the need for gross fixed capital formation financing making the biggest contribution to growth in corporate credit demand.

The household sector also saw further easing of credit standards in the second half of 2016, mainly influenced by competition among banks and lower costs of the sources of funds but also by positive expectations regarding economic developments (the only exception being the tightening of standards for granting consumer and other loans to households in the last quarter of 2016). Rising consumer confidence and increased consumption of households were the main factors behind household demand for loans.

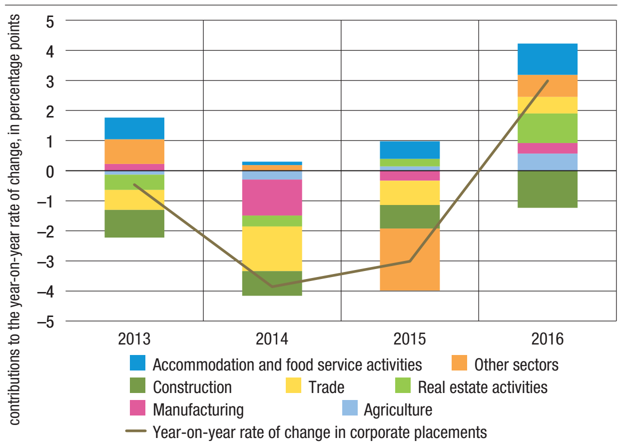
The total debt of non-financial corporations[6], after growing moderately in the first half of the year, fell slightly in the last six months of 2016. This was the result of corporate deleveraging abroad while financing with domestic credit institutions held steady and other domestic financing rose. Nevertheless, at the entire 2016 level, total domestic corporate financing rose

Figure 7.8 Corporate domestic placements of credit institutions



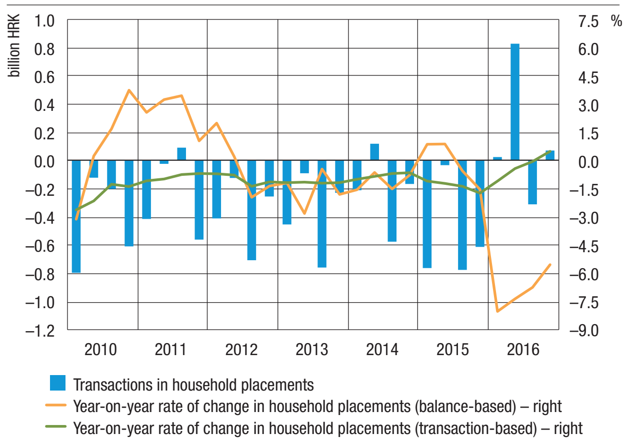
Source: CNB.

Figure 7.9 Growth of corporate placements by activity
transaction-based



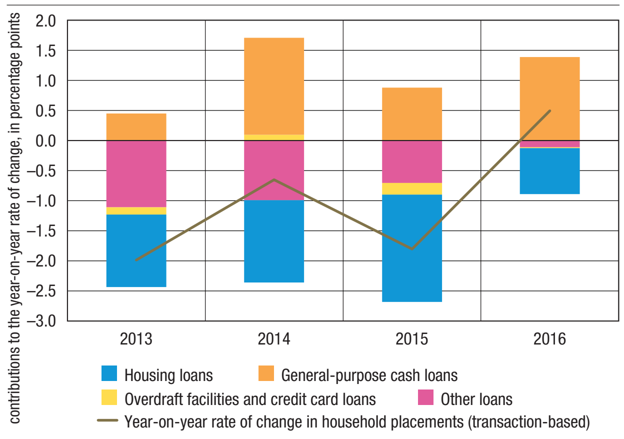
Source: CNB.

Figure 7.10 Household placements



Source: CNB.

Figure 7.11 Growth of household placements by loan type
transaction-based



Source: CNB.

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

6 The total debt of non-financial corporations included the debt of private and public enterprises (excluding public enterprises included in the general government sector).

while enterprises deleveraged abroad. As a result, the total debt of non-financial corporations rose by 0.9% (based on transactions).

Notwithstanding their stagnation in the second half of 2016, the annual growth in placements of domestic credit institutions to non-financial corporations (based on transactions) recorded an upward trend in 2016 and reached 3.0% at the end of that year. By contrast, the nominal rate of change in placements to corporates remained negative but this was mainly due to sales of non-performing corporate placements, which were stepped up in 2016 and came to HRK 4.3bn.

As regards corporate lending by activities, in the second half of 2016, the biggest growth in placements (based on transactions) was seen in real estate activities and agriculture, while manufacturing and construction played a major role in deleveraging. At the entire 2016 level, placements grew in almost all the observed activities, particularly in accommodation and food service activities and real estate activities. By contrast, the construction sector deleveraged at a faster pace than during the same period of 2015.

Despite a fall in placements to households in the second half of 2016, more favourable financing conditions and further recovery in economic activity, coupled with positive developments in the labour market led to recovery in household lending on the entire 2016 level. The annual growth rate of household placements was positive for the first time since 2009 and stood at 0.5% towards the end of 2016 (based on transactions). This can be attributed to a significant increase in general-purpose cash loans and ampler kuna lending (for more details, see Box 2 Kuna lending). By contrast, the nominal stock of household placements fell by 5.5% in 2016, primarily due to the process of the conversion and partial write-off of loans indexed to the Swiss franc.

Box 1 The issue of interest rate risk – a review of the results of the Interest rate survey

The amendments to the Consumer Credit Act made at the end of 2013 have provided a detailed legal framework for the setting and changing of variable interest rates for household loans. The variable interest rate is thus defined as a sum of the agreed variable parameter and the bank's fixed margin which is not allowed to increase over the period of loan repayment and which has to be agreed along with the variable parameter (Consumer Credit Act, Article 11a, paragraph 2). Legally prescribed variable parameters which may be used in setting the interest rate include the following rates: EURIBOR, LIBOR, NRR – the national reference rate, yield on the T-bills of the Ministry of Finance and the average interest rate on household deposits in the respective currency.

The aforementioned legal amendments have significantly improved the transparency of interest rate setting and changing, enabling consumers to find out, at any point, of which components the interest rate that they are being charged is made: the fixed component which remains the same throughout the credit relationship and the variable component which fluctuates according to the set permitted variable parameters. However, considering the specific context in which the Act was amended and in which it entered into force, there is potential for risk to which particular client segments may be exposed as the choice of the variable parameter in interest rate structure results in the specific exposure of consumers to interest rate risk, i.e. to the nature and the dynamics of its materialisation.

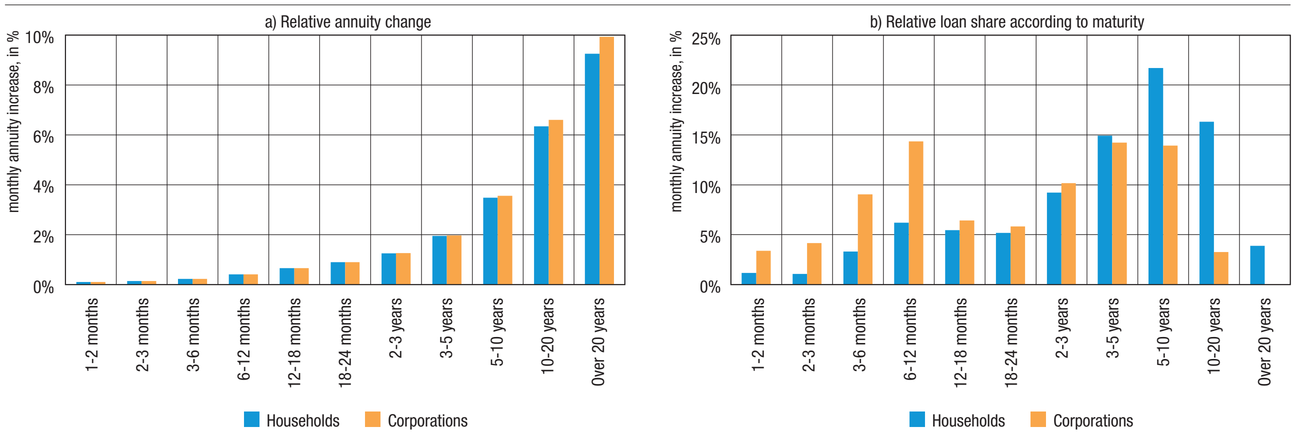
Primarily, parameters set as the basis for the calculation of variable interest rates in credit operations have stood at record lows over the last few years, particularly EURIBOR. Having in mind the (expected) change of course in the monetary policies of leading central banks, this suggests that the probable increase in reference interest rates in the upcoming period may be a significant source of risk for consumers. Furthermore, it is worth noting that, due to the application of the aforementioned legal provisions, the invariable component of interest rates in EURIBOR-linked loans implicitly contains, among other elements, the country's risk premium valid at the moment the interest rate was agreed/set, implying that its future changes (in terms of both increase and decrease) will not be automatically reflected in the change of interest rate level and thus in the final interest rate expense of the client. On the other hand, in case of loans where the interest rate is linked to the NRR, variations in the country's risk premium will cause the reference variable parameter, in which it is implicitly contained, to change, thus changing the level of the interest rate itself. The CNB warned the public of such risks on several occasions: Financial Stability, No. 12, February 2014, Financial Stability, No. 15, Box 2 Interest rate risk in the Republic of Croatia, July 2015 and Risks to the consumer in the credit relationship, June 2016.

In mid-2016, the Croatian National Bank conducted a survey of credit institutions' business practice in defining interest rates in the segment of private non-financial sector funding within its regular risk monitoring activities associated with the stability of the financial system. The aim of the survey was to gain insight into the interest rate structure in the credit relationships of households and corporations and their consequential exposure to interest rate risk. In the survey, credit institutions were asked to distribute the gross amount of relevant exposure according to individual credit instruments, the currency in which the instrument was granted and interest rate type, depending on the reference interest rate, including the amount of interest charged, as at 31 March 2016. Credit institutions were asked to categorise foreign currency-indexed kuna loans according to the foreign currency they are indexed to. The survey covered only loans granted to resident households and non-financial corporations.

Survey results – variable interest rates

The results of the conducted survey confirm that credit institutions mainly charge variable interest rates for the financing of households and nonfinancial corporations, which, in the case of a significant increase in reference variable parameters, exposes these sectors to the risk of an increase in the loan servicing burden (interest rate risk), and which, on the other hand, exposes banks to the risk of being unable to collect claims (on time and/or in full), i.e. to interest rate-induced credit risk. In addition to the change of interest rate level itself, the materialisation of interest rate-induced credit risk is also affected by other factors such as the level of client income, or, more precisely, the client's debt service-to-income ratio (DSTI) and loan maturity. Repayments of loans having longer remaining maturities increase sharply in

Figure 7.12 Increase in the amount of monthly loan annuity according to its remaining maturity in the event of a one-percentage-point increase in interest rates



Note: For every category of remaining maturity shown on the x axis, the relative change in the amount of loan annuity was calculated for a loan with a remaining maturity calculated as category average in case of a one-percentage-point increase in interest rates.
Source: CNB.

case of the rise in interest rate level due to the fact that interest rate expense constitutes a greater share of the amount to be repaid for loans with longer remaining maturities where the share of interest in the repayment decreases as the loan matures (Figure 7.12).

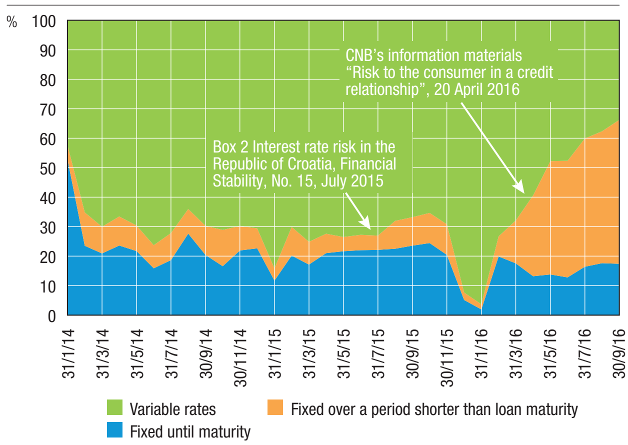
At the end of March 2016, according to survey data, 81% of all corporate loans were granted with a variable interest rate. Although their number was slightly smaller, loan agreements with variable interest rates were also predominant in the household sector, in which 67% of loans were granted with variable interest rates. A similar variable-to-fixed-interest-rate loan ratio is observed when supervisory data on exposure to interest rate risk in the non-trading book (see Decision on the management of interest rate risk in the non-trading book, OG 54/2013) are considered, for according to them 85% of nonfinancial corporate loans and 71% of household loans were granted with a variable interest rate.

As for the variable parameter to which the changes in interest rates are linked, EURIBOR and the NRR are almost evenly distributed among household variable interest rate loans (47% of household variable interest rate loans are linked to the NRR, while 43% of such loans were granted with reference to EURIBOR). The NRR predominates in the segment of the increasingly popular kuna household loans (71%), while 57% of euro loans were granted with a variable interest rate linked to EURIBOR and 40% were linked to the NRR. Non-financial corporate loans granted with a variable interest rate are predominantly linked to EURIBOR as the variable parameter (45%), while the share of NRR-linked variable interest rate loans in the corporate loan portfolio (5%) is significantly smaller than in household loans. As the legal framework for interest rate setting, structure and change in non-financial corporate lending is not as detailed as in consumer lending (in the case of non-financial corporations, lending is regulated by the Civil Obligations Act and the Act on Financial Operations and Pre-Bankruptcy Settlement), credit institutions, according to survey results, still relatively frequently use other reference parameters in the financing of non-financial corporations, as well as reference rates set on the basis of a decision by the bank's management (almost 36% of variable interest rate loans granted to non-financial corporations were linked to another variable parameter with a significant share of non-financial corporate loans granted with an interest rate that may be changed according to a decision by the bank's management, i.e. with a so-called administrative interest rate).

Survey results – fixed interest rates

Fixed interest rates were reported in 19% of non-financial corporate loans and 33% of household loans. In this segment, almost all loans to the private non-financial sector were granted with an interest rate that is invariable throughout the entire duration of the credit relationship (until loan maturity). Only around 4% of the invariable interest rate loans granted to the private non-financial sector (6% of household loans and only 0.2% of corporate loans) included interest rates invariable over a limited period of time shorter than loan maturity. Upon the expiry of the initial period of fixed interest rate application, interest rates in such loans will become variable, and, according to survey results, they will primarily be linked to the NRR, while a smaller share will be linked to EURIBOR. To some extent, such loans are expected to see a hike in interest rate level in the transition from the fixed level to the new one, determined by the ratio between

Figure 7.13 Increase of fixed interest rate share in newly-granted loans



Source: CNB.

Figure 7.14 Loan portfolio structure according to interest rate type
as at the end of March 2016

Note: The colours and their intensity in the figures indicate interest rate risk associated with individual types of interest rate. Interest rates which expose clients to interest rate risk (variable interest rates) are shown in red, with darker tones indicating a somewhat smaller interest rate risk. Interest rates that are fixed until loan maturity and do not expose clients to interest rate risk are shown in green, while interest rates that are fixed over a period shorter than loan maturity are shown in yellow and refer to the delay of clients' exposure to interest rate risk. The majority of such interest rates will be linked to the NRR as the variable parameter after the initial period in which they are fixed expires.
Source: CNB, Survey on interest rate variability.

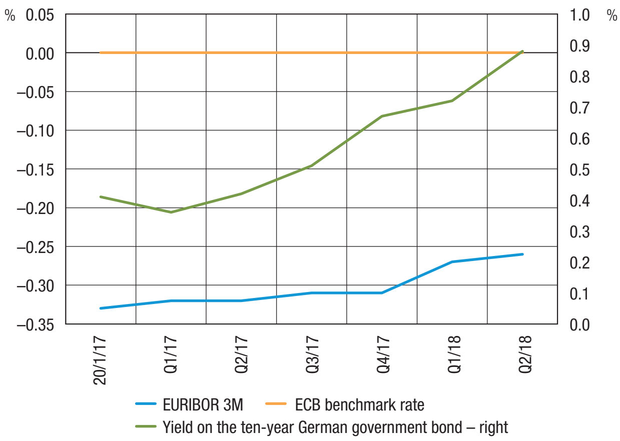
the variable parameter and the fixed margin, which is a specific characteristic of risks in such arrangements.

Interest rates that are fixed over a period of time shorter than loan maturity are primarily associated with housing loans (one fifth of fixed interest rate housing loans, or only around 4% of total housing loans, were granted with an interest rate which is invariable over a limited period of time starting from the moment the loan was granted and lasting mostly up to five years). As of mid-2015, the share of loans with interest rates fixed over a period of time shorter than loan maturity in total housing loans offered by banks has been growing almost continuously. The trend was particularly pronounced around mid-2016 when almost 40% of new housing loans were granted with this kind of interest rate. Such trends confirm that clients have become more reluctant to assume interest rate risk, which prompted the banks to adjust their products in the environment of relatively slow credit growth. This was partly a result of the CNB's long-standing efforts to warn consumers of risks deriving from credit relationships, including the interest rate risk (particularly within the context of the choice of the reference variable parameter) through both its regular publications and special information materials (Figure 7.13).

Every loan, irrespective of the type of interest rate it is associated with, exposes borrowers to potential unfavourable outcomes depending on the future developments in reference interest rates. Since invariable interest rates determine the loan servicing burden regardless of the changes in reference rates, their potential decrease does not affect borrowers in terms of lower repayment amounts. On the other hand, variable interest rates result in a certain degree of uncertainty in terms of future loan repayment amounts which may be higher or lower than the current ones depending on the direction the reference variable parameters move in.

Therefore, a possible increase in reference variable parameters constitutes a significant source of risk for clients considering the marked predominance of variable interest rates in private non-financial sector financing. The probability of risk materialisation is increased in the context of historically low, even negative, reference interest rates and the recent change of course in the Fed's monetary policy, which may, in the medium term, be seen in the euro area as well. Such developments would directly affect the interest rate expense in the financing of the domestic private sector considering the predominance of EURIBOR as the reference parameter and the current level and structure of interest rates, particularly those agreed/set in long-term credit relationships with consumers.

Figure 7.15 Individual interest rate projections



Source: Bloomberg.

As previously stated, interest rate risk materialisation significantly depends on the type of variable parameter to which interest rate dynamics are linked. Changes in an international reference interest rate such as EURIBOR could spill over to a rise in lending interest rates relatively fast and thus increase the clients' amounts of repayment. On the other hand, the NRR is a rate formed in the domestic market, but is primarily affected by the cost of financing of several major banks and is likely to react more slowly to change (see: Financial Stability, No. 15, July 2015, Box 2 Interest rate risk in the Republic of Croatia).

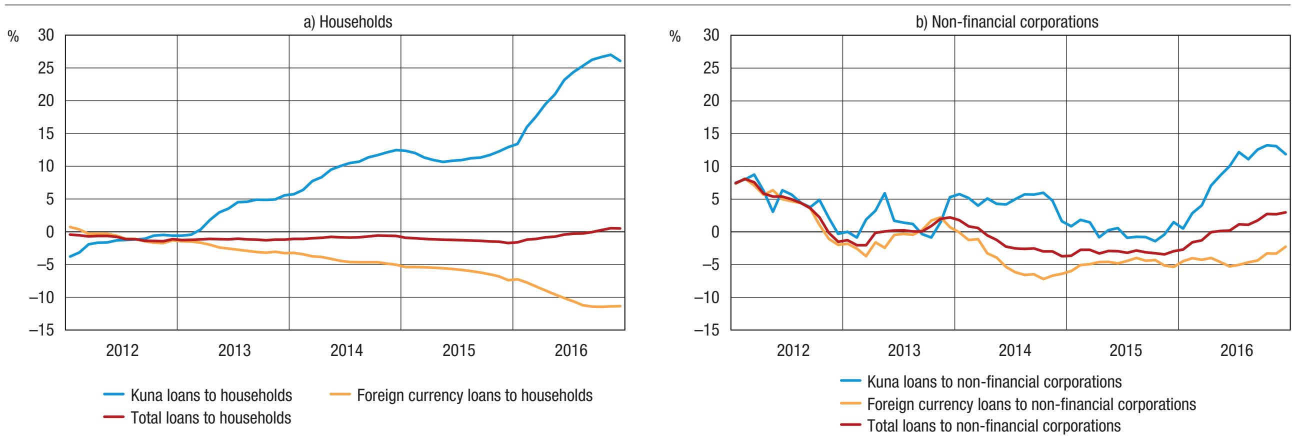
It is necessary to stress that the dynamics of EURIBOR and NRR increase are curbed in the short term by the provisions on the maximum allowed level of interest rate and by effective interest rate limitation (Consumer Credit Act, Articles 11a, 11b, 11c and Article 20a). However, if the pressures on the increase in overall interest rate levels become more persistent, the aforementioned factor may bring a certain inertia to the change of interest rates, but will not prevent interest rate increase in the long term. What is more, interest rate limitations do not have a linear effect, but rather influence loans whose interest rates are closer to the limit. For some loans, or clients, even a relatively moderate increase in reference interest rates could significantly hamper the servicing of assumed loan obligations if not offset by a relative reduction of the bank's fixed margin[7] or an equivalent increase in current income from which loan expenses are serviced. Interest rate risk is particularly significant if it occurs simultaneously with another macroeconomic shock (e. g. a depreciation of the domestic currency and/or a slowdown in the domestic economy, which has negative effects on household income), as evidenced by the recent experience with Swiss franc-indexed loans.

Box 2 Kuna lending

After being on the rise since 2013, lending in the domestic currency picked up strongly in 2016. The total increase in kuna loans largely reflects increased kuna lending to households and, to a lesser extent, non-financial corporations. The upturn in kuna lending was driven by the interaction of several factors in the domestic credit market, among which one should mention the expansionary monetary policy of the CNB. A key precondition for the continuance of this trend is the growth in kuna deposits of domestic sectors, which may be supported by sustained macroeconomic and financial stability in the country as well as by other factors present.

Total kuna loans to domestic sectors (not including the

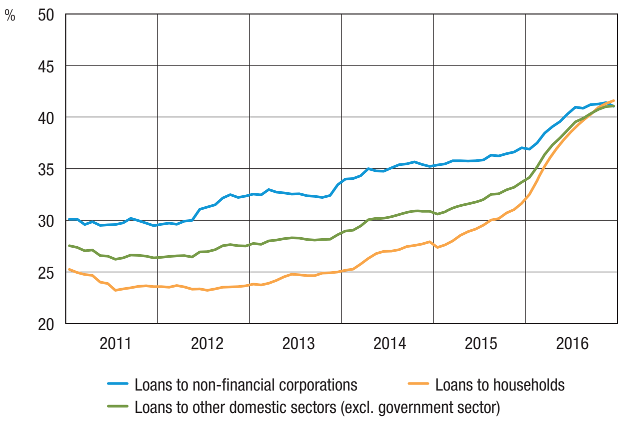
Figure 7.16 Annual rates of change in loans to households and non-financial corporations (transaction-based)



Source: CNB.

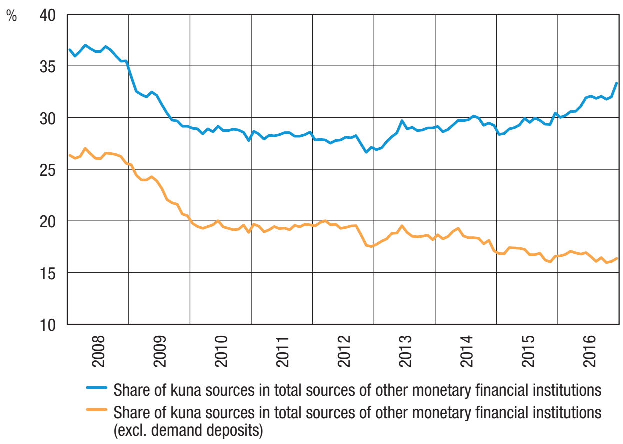
7 The Consumer Credit Act explicitly prohibits the increase of a previously agreed bank margin during the period of loan duration (Article 11a paragraph 2), but does not prohibit its decrease (although legal provisions imply that a one-off decrease of the bank's margin prevents its later increase).

Figure 7.17 Share of kuna loans in total loans



Source: CNB.

Figure 7.18 Share of kuna sources in total sources



Note: Total sources also include foreign liabilities.
Source: CNB.

government) grew by HRK 27.8bn (40.2%) on a cumulative basis from early 2013 to end-2016, while foreign currency loans dropped by HRK 31.9bn (–18.4%). The largest contribution to the increase in kuna lending came from the household sector – its kuna loans grew by a total of HRK 20.5bn, while foreign currency loans decreased by HRK 24.4bn. As regards non-financial corporations, kuna loans to that sector went up by HRK 6.9bn, while foreign currency loans went down by HRK 8.6bn from 2013 to end-2016.

In terms of annual growth rates, the increase in kuna loans to households reached two-digit annual growth rates as early as mid-2014, coming to a high 26.1% in December 2016, while kuna loans to non-financial corporations grew by 11.8% at end-2016 (Figures 7.16a and 7.16b). As a result, the trend of household deleveraging, present from 2009, lost much momentum, while total corporate sector loans recorded positive annual growth in mid-2016, for the first time since early 2014.

The strong growth in kuna loans was driven by several factors: (i) the fall in the general level of interest rates that led to the decrease in interest rates on kuna loans, which was aided by the CNB's expansionary monetary policy and stronger competition among banks to grant new loans in the context of generally subdued lending; (ii) household demand for kuna loans triggered by the negative experience with Swiss franc-indexed loans (including the refinancing of converted euro loans by kuna loans); (iii) CNB regulatory measures that ensure consumers are more aware of currency risk and encourage banks to grant kuna loans; and (iv) changes in the structure of bank sources, mostly in favour of demand deposits, and a sharp decrease in external sources in foreign currency. In addition to stronger kuna lending, the rise in the share of kuna loans in total loans was due to the maturity of the existing foreign currency debt, i.e. deleveraging, and the write-off and sale of the existing credit portfolio, mostly linked to a foreign currency.

The share of kuna loans in total loans went up from 27.5% at end-2012 to 41.1% at end-2016 (Figure 7.17). Broken down by sector, the share of kuna loans in total household loans grew from 23.7% at end-2012 to 41.6% at the end of 2016, while kuna loans to the corporate sector went up from 32.3% to 41.1%.

The growth in the share of kuna loans in total bank loans (credit de-euroisation) may be correlated with the growth in the share of kuna sources in total bank sources (deposit de-euroisation). It is noticeable that the share of kuna sources in total sources of bank financing increased in the last four years. After decreasing sharply following the onset of the crisis, this share has been increasing almost constantly from early 2013 and currently stands at 33.3% (Figure 7.18). The main source of this increase was the rise in demand deposits (kuna funds in current and giro accounts). By contrast, the currency structure of savings and time deposits remained unchanged, which means that most of these deposits are still denominated in the euro. The growth in demand deposits actually reflects client preference for holding more liquid financial assets in the environment of falling deposit interest rates. At the same time, the banks have steadily decreased their external funding sources (mostly foreign exchange).

In the long run, banks will not be able to base credit growth exclusively on kuna loans without a decrease in the share of foreign currency time deposits in total deposits. A further reduction of deposit euroisation is therefore a precondition for continued credit de-euroisation as banks strive to balance their currency positions. More precisely, if the share of foreign currency deposits in total time deposits remains the same, the trend of de-euroisation can be sustained in the long run only if the growth of total credit activity is extremely gradual and only if demand deposits continue to rise strongly. The trend of deposit de-euroisation could be supported by the continued maintenance of macroeconomic and financial stability in the country, including exchange rate stability, as well as the steady recovery of the Croatian economy based on the further reduction of macroeconomic imbalances.

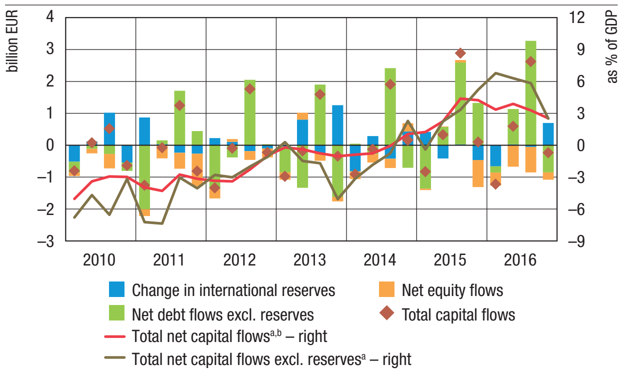
8 Foreign capital flows

Net capital outflows from Croatia were slower in the second half of 2016 than in the same period in previous years, in line with growth in economic activity. Net foreign liabilities on the financial account of the balance of payments fell by EUR 1.4bn[8], despite a rise in equity liabilities. This led to a further improvement in the net international investment position. If developments on the entire year level are observed, the net capital outflow in 2016 was smaller than in the previous year, owing to a greater net inflow from equity investment, while the intensity of deleveraging accelerated slightly.

The net inflow from equity investments of EUR 1.0bn in the second half of 2016 was mostly due to exceptionally high reinvested earnings on the liabilities side, with the total value of reinvested earnings throughout 2016 largely exceeding historical values. This was particularly true of financial intermediation activity, which, after losses in 2015 associated with the cost of the expected conversion of loans in Swiss francs, recorded very good business results and much lower dividend payouts. At the same time, new foreign equity investments into Croatia were modest and mainly involved investments in real estate, accommodation capacities and information service activity. Total new investments in the whole of 2016 were smaller than in the previous year, even if a large takeover transaction in the tobacco industry in 2015 is excluded.

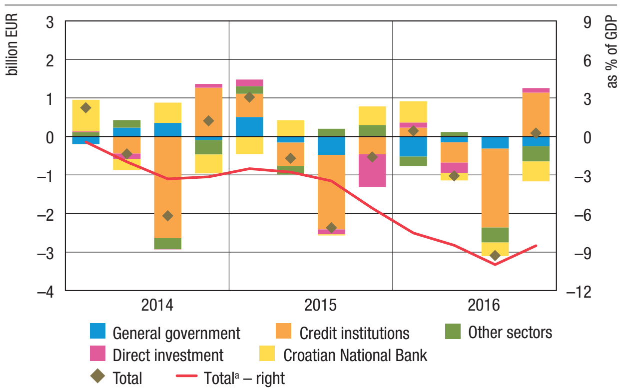
A large net outflow of debt capital (EUR 2.4bn, excluding a net change in CNB reserves) was mostly determined by a

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



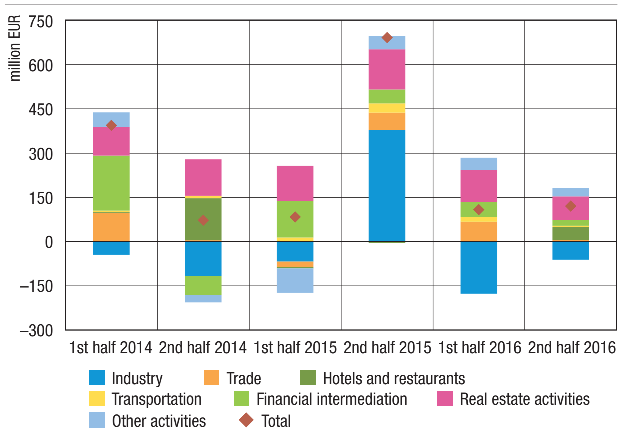
[a] Changes in gross international reserves net of CNB foreign liabilities.
[b] Sum of the previous four quarters.
Note: Net flows mean the difference between changes in assets and liabilities. Equity flows comprise changes in foreign direct equity investments, reinvested earnings and portfolio equity investment. Positive value means net capital outflow abroad.
Source: CNB.

Figure 8.3 Net external debt transactions by sectors



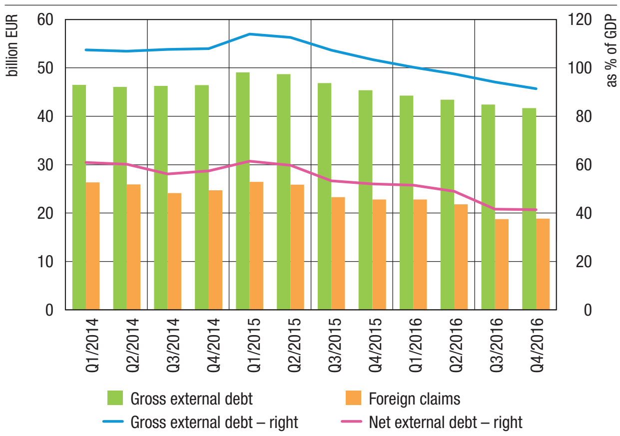
[a] Sum of the previous four quarters.
Note: Transactions refer to the change in debt excl. cross-currency changes and other adjustments. Net external debt is calculated as gross external debt stock net of foreign debt claims.
Source: CNB.

Figure 8.2 Foreign direct equity investment in Croatia by activities



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

Figure 8.4 Stock of gross and net external debt



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

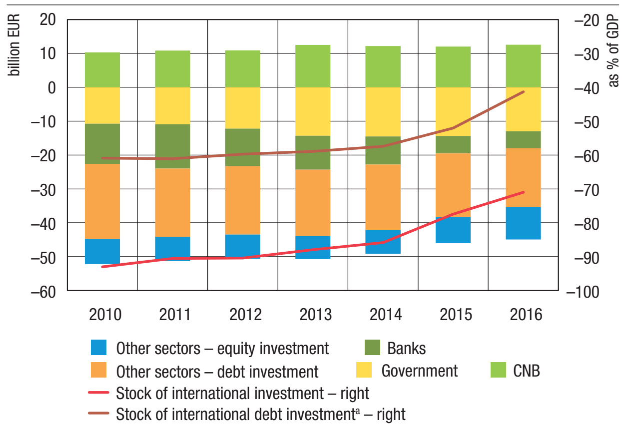
8 Excluding the change in reserves and liabilities of the CNB. The investment of a share of international reserves in repo agreements resulted in an increase in gross international reserves and an increase in the external debt of the CNB in the same amount.

decline in foreign liabilities and, to a lesser extent, an increase in foreign assets. All domestic sectors engaged in deleveraging abroad, particularly credit institutions. As regards the central bank, in foreign exchange interventions towards the end of the year it purchased EUR 0.9bn from the banks which resulted in a growth in international reserves in the second half of 2016.

The deleveraging of all the domestic sectors led to an improvement in relative external debt indicators. At the end of 2016, gross external debt stood at EUR 41.7bn or 91.4% of GDP, a decrease of 6.0 percentage points from the end of June 2016, which was driven by the fall in debt and the nominal rise in GDP. Given a concomitant rise in foreign assets, the decline in net external debt in the second half of 2016 was even more pronounced. At the end of 2016, the net external debt fell to EUR 18.9bn or 41.4% of GDP, a decrease of 7.6 percentage points from the end of June.

In contrast with the fall in debt, the stock of net equity liabilities of domestic sectors continued to rise, fuelled by growth in retained earnings of credit institutions and even more by an increase in the market value of direct investments accumulated earlier. Since the impact of deleveraging outweighed the increase in net liabilities from equity investments, the long-term trend of reduction in external imbalances continued. The net international investment position improved, having fallen from –76.0% of GDP at the end of June to –71.0% of GDP at the end of December 2016.

Figure 8.5 Stock of international investments (net) by sectors

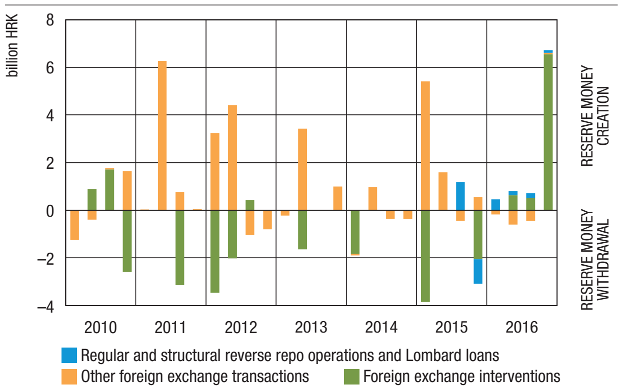


[a] Stock of international debt investments (net) equals the negative value of the net external debt.
Source: CNB.

9 Monetary policy

During the second half of 2016, the CNB continued pursuing an expansionary monetary policy while maintaining the stability of the kuna exchange rate against the euro. High kuna liquidity of the monetary system was strengthened additionally by two structural repo operations, supporting the trend for domestic interest rates to fall and for bank kuna lending to rise. In July and November, the CNB placed to banks a total of HRK 281.9m with a four-year maturity and at an interest rate of 1.4%. In addition to the HRK 711.5m placed in the first half of the year at an interest rate of 1.8%, the total amount of long-term kuna liquidity created through these operations reached HRK 993.4m. The CNB also continued to conduct regular weekly reverse repo operations at a fixed repo rate, which in September was lowered from 0.5% to 0.3%. The average amount of funds placed by means of regular weekly operations stood at HRK 191.1m in the second half of the year.

Figure 9.1 Flows of reserve money (M0) creation



Note: Other foreign exchange transactions include the purchase of foreign exchange from and the sale of foreign exchange to the MoF and the EC and foreign currency swaps with banks, where the positive values refer to the purchase of foreign exchange by the CNB.
Source: CNB.

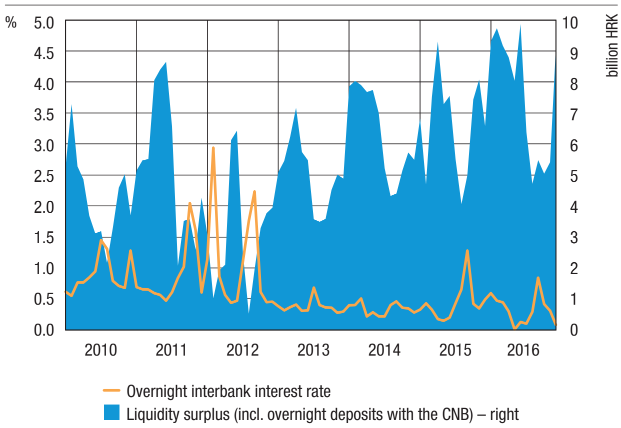
In the second half of 2016, the surplus of liquidity in bank accounts with the central bank remained at a high level of HRK 6.0bn, only slightly lower than in the same period in 2015. Foreign exchange transactions of the CNB in December contributed to the sharp increase in the surplus liquidity at the end of the year. In such circumstances, the average weighted overnight interbank interest rate, in addition to the notable downward trend in the trading volume, edged down to 0.08% in December, as against 0.24% in the first half of the year.

Foreign exchange transactions of the CNB were mostly directed at preventing the appreciation of the kuna. Due to the appreciation pressures on the kuna exchange rate, the CNB intervened in September purchasing EUR 69m from banks. The CNB intervened again in December when it purchased in all EUR 866.3m from banks in a series of transactions. Observed from the beginning of the year, the CNB purchased from banks and the MoF a total of EUR 1,018.8m and EUR 125.6m respectively. At the same time, it sold to the European Commission a total of EUR 277.8m, which resulted in the net purchase of EUR 866.6m and the creation of HRK 6.5bn in all foreign exchange transactions in 2016.

The average exchange rate of the kuna against the euro in the second half of 2016 stood at EUR/HRK 7.50, or down from EUR/HRK 7.56 in the first half of the year. Pressures in the direction of the appreciation of the kuna were partly related to solid results in the tourism sector and the strengthening of the inflow of EU funds. In order to mitigate such pressures, the CNB intervened in the foreign exchange market in September and December. The exchange rate of the kuna against the US dollar trended up in the second half of the year, reflecting the strengthening of the dollar/euro exchange rate in global financial markets. The Swiss franc also strengthened against the kuna.

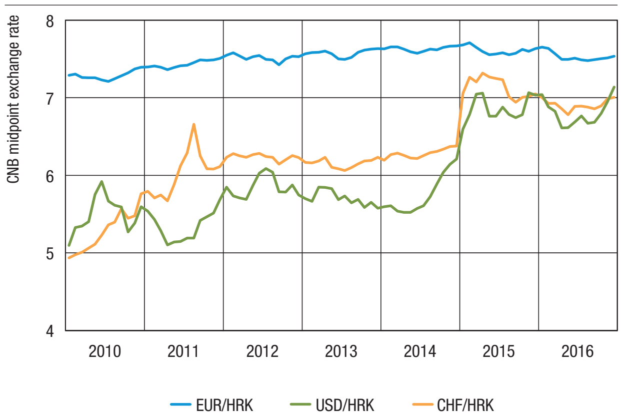
Gross international reserves stood at EUR 13.5bn at the end of 2016, down by EUR 0.2bn from the end of 2015. The decrease in reserves in 2016 was the result of the suspension of the foreign currency reserve requirement allocation at the

Figure 9.2 Bank liquidity and overnight interbank interest rate



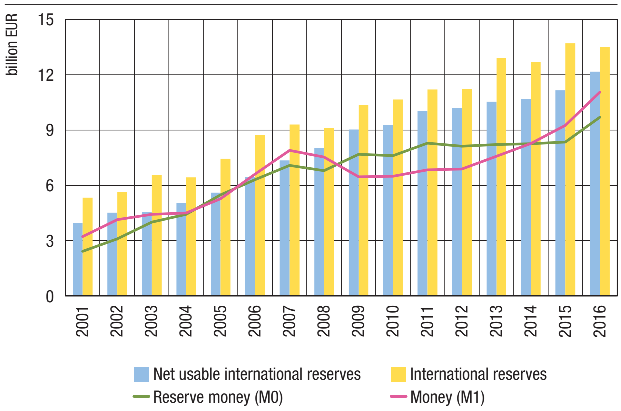
Source: CNB.

Figure 9.3 Nominal exchange rates of the kuna against selected currencies



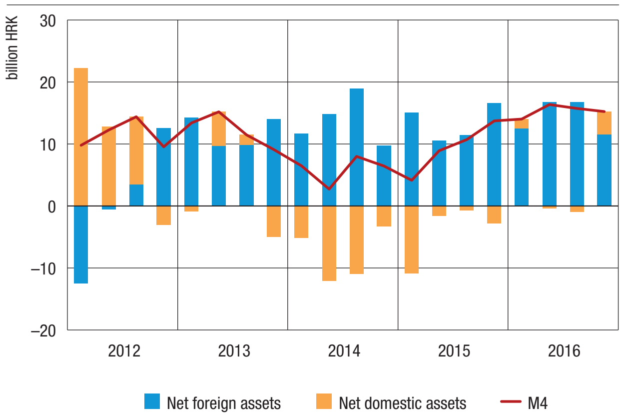
Source: CNB.

Figure 9.4 International reserves of the CNB and monetary aggregates



Note: Net usable international reserves are defined as international reserves net of the CNB foreign liabilities, reserve requirements in f/c, government foreign currency deposits and off-balance sheet liabilities (swaps).
Source: CNB.

Figure 9.5 Net foreign assets, net domestic assets and total liquid assets (M4)



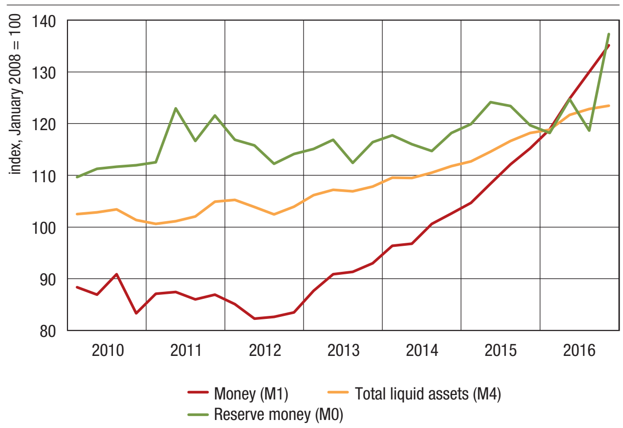
Note: Absolute changes in the last twelve months excluding the exchange rate effect.
Source: CNB.

beginning of the year, the fall in government foreign currency deposits with the central bank and a lower level of agreed repo transactions at the very end of the year. By contrast, net usable reserves saw a strong growth of EUR 1.0bn (9.1%) in 2016, as a result of the net foreign exchange purchases and to a smaller extent of the earnings from reserves management and the strengthening of the US dollar against the euro. Gross and net international reserves remained at higher levels than money (M1) and reserve money (M0).

The marked annual growth of total liquid assets (M4) continued in the second half of 2016, mostly on the back of the strong growth in net foreign assets of the monetary system, due to the continuation of the several-year-long trend of credit institution deleveraging abroad. The increase in the monetary aggregate (M4) was attributable to the inflows from the record tourist season, better absorption of EU funds and a mild recovery of domestic lending.

The strong upward trend in real monetary aggregates continued in the second half of 2016. The growth in money (M1) was particularly pronounced, supported by the decrease in interest rates on savings and time deposits and the recovery of economic activity. At the same time, the real value of reserve money (M0) increased noticeably, which was attributable to the creation of reserve money through foreign exchange transactions at the end of the year.

Figure 9.6 Real monetary aggregates
index of developments in seasonally adjusted values, deflated by the consumer price index



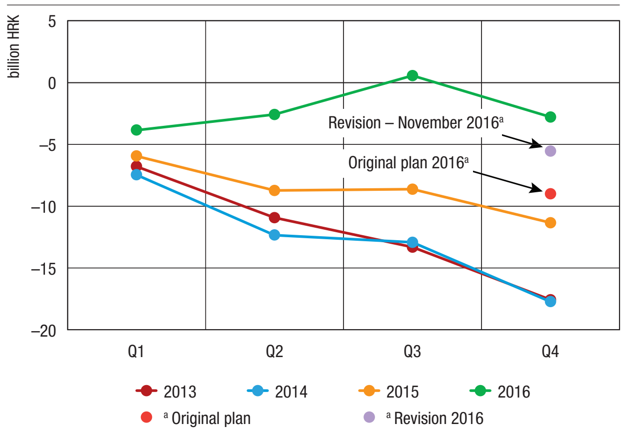
Source: CNB.

10 Public finance

Fiscal data show that strong fiscal adjustment continued in the second half of 2016. The general government deficit (ESA 2010) decreased in the reference period to merely HRK 0.2bn, which was HRK 2.4bn or 0.7% of GDP down from the same period in 2015. Such developments were the result of the continuation of a sizeable growth in revenues and restrictions on growth on the expenditure side of the budget. Due to a better than expected outturn, Amendments to the State Budget and Financial Plans of Extrabudgetary Users were adopted in November, showing that the general government budget deficit according to the national methodology was planned at 1.7% of GDP, or much below the 2.7% of GDP from the original budget. Finally, general government deficit was also more favourable than in the revision of November 2016.

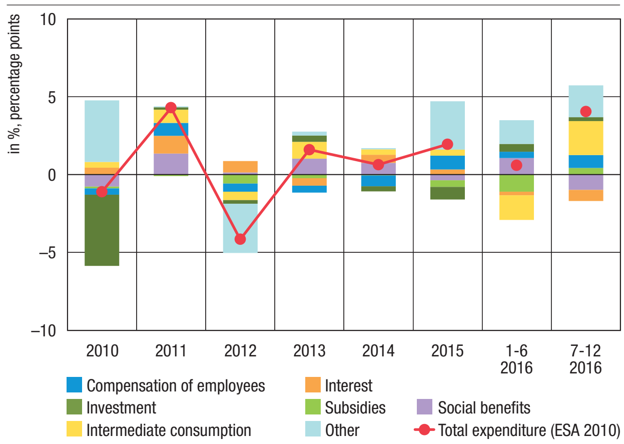
Total revenues grew by 7.2% on an annual basis in the second half of 2016, with positive changes recorded in all items on the revenue side of the general government budget (ESA 2010), except direct taxes. Favourable developments in general government revenues reflect growing economic activity and related recovery in the labour market. Indirect taxes made the largest contribution to total revenue growth, in particular value added tax, as a result of a growth in personal consumption and favourable movements in tourism. With regard to direct taxes, after the high rates of growth in the first half of the year, in the third quarter a notable downward trend was recorded and a slight growth in the fourth quarter from the same period of the previous year. Overall, at the level of the second half of the year, a slight negative contribution was recorded. Such movements are probably partially determined by the different dynamics of income tax payments and returns. Positive developments were seen in other revenue categories, particularly capital revenues, in part attributable to greater use of EU funds.

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



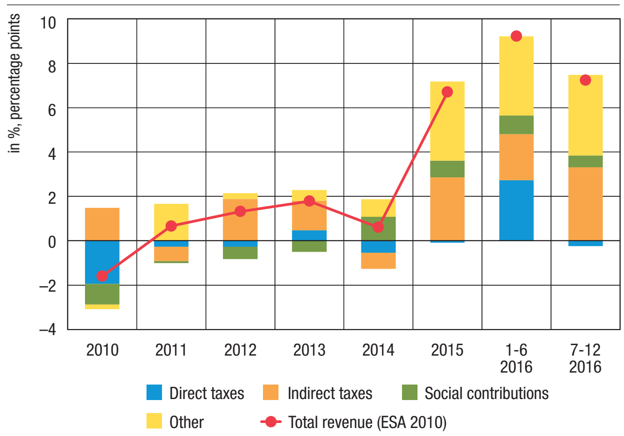
Sources: Eurostat and MoF (CNB calculations).

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



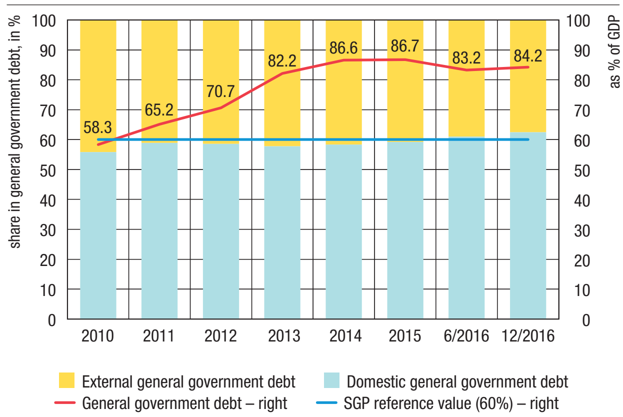
Source: Eurostat (CNB calculations).

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



Source: Eurostat (CNB calculations).

Figure 10.4 General government debt
end-period stock



Note: Nominal GDP for 2016 was used for the calculation of the relative indicator at the end of June and December 2016.
Source: CNB.

The expenditure side of the consolidated general government budget (ESA 2010) saw an increase of 4.0% in the second half of 2016 from the same period of the previous year. Broken down by quarters, a different dynamics of total expenditure movement is observed, but also of their individual categories. After a slight decrease in the third quarter, total expenditures increased considerably in the last quarter. The fall in total expenditures in the third quarter was mostly attributed to the reduction in the expenditures for social benefits. On the other hand, other current expenditures grew significantly in the same period. With regard to the last quarter, although the majority of expenditure categories grew, the largest positive contribution to such a surge in expenditures came from the considerable growth of intermediate government consumption. At an annual level, employee compensation continued to grow in both quarters, which reflected not only the increase in the number of employed persons and the average gross wage of civil servants and government employees but also the payment of the Christmas bonus. By contrast, expenditures for interest fell from the third and fourth quarter of 2015, due to the favourable effect of the fall in government borrowing costs.

The consolidated general government debt stood at HRK 285.7bn at the end of the first half of 2016, reaching HRK 289.1bn at the end of the year, but it was still slightly lower than at the end of 2015. In the third quarter, debt dynamics was under the effect of the issue of a kuna bond on the domestic market in July and of euro-denominated T-bills in August, refinancing due liabilities and raising part of the funds required to finance the deficit late in 2016. With regard to the share of debt in GDP, it was reduced to 84.2% of GDP at the end of December 2016 under the effect of favourable fiscal and economic movements. During the second half of the year, borrowing costs were reduced considerably, due to the favourable effect of high kuna liquidity on the domestic financial market and the narrowing of the risk premium. In 2016, the share of long-term debt increased and the growth in the share of kuna debt instruments was recorded.

11 International reserves management

The Croatian National Bank manages the international reserves of the Republic of Croatia; under the Act on the Croatian National Bank, these reserves constitute a part of the central bank balance sheet. The manner in which the international reserves are managed is consistent with the established monetary and foreign exchange policies; in managing the international reserves, the CNB is governed primarily by the principles of liquidity and safety. The international reserves of the Republic of Croatia comprise all claims and all banknotes in a convertible foreign currency as well as special drawing rights.

11.1 Institutional and organisational framework of international reserves management

The Council of the CNB formulates the strategy and policy of international reserves management and approves the risk management strategic framework. The International Reserves Commission is the body responsible for the development of international reserves investment strategies in accordance with the objectives and criteria set by the Council of the CNB and for the adoption of tactical decisions on international reserves management, while taking into account market conditions. The International Reserves and Foreign Exchange Liquidity Department is responsible for investing, and maintaining the liquidity of, international reserves on a daily basis, for risk management and the preparation of reports for the Commission and the Council.

11.1.1 Principles of and risks in international reserves management

In managing the international reserves of the Republic of Croatia, the central bank is guided by the principles of liquidity and safety of investment (Article 19 of the Act on the Croatian National Bank). In this context, it maintains the reserves at a high liquidity level and appropriate risk exposure and, within the given restrictions, attempts to ensure favourable rates of return on its investments. These determinants are also incorporated in the Decision on international reserves management adopted by the CNB Council. This Decision specifies the guidelines, criteria and limits on risk exposures (liquidity, credit, interest rate and currency risk).

Risks present in international reserves management are primarily financial risks such as credit, interest rate and currency risks, though other risks, such as liquidity and operational risks, also play a role. The CNB limits exposure to credit risk by investing in highly rated government bonds, collateralised deposits and non-collateralised deposits with financial institutions with the highest credit rating and by imposing limits on maximum exposure for each investment category. Interest rate risk, or the risk of a fall in the value of the international reserves portfolio due to unfavourable interest rate changes, can be controlled by means of benchmark portfolios and investment of a part of international reserves in the held-to-maturity portfolio. Currency risk arises from currency fluctuations between the kuna and the euro and between the kuna and the US dollar. Liquidity risk is controlled by investing reserves in readily marketable bonds and partly in deposit instruments with short maturities. Operational risk can be controlled by strict separation of functions and responsibilities, precisely defined methodologies and procedures, and regular internal and external audits.

11.1.2 Manner of international reserves management

As provided by the Decision on international reserves management, the Croatian National Bank manages international reserves in two ways: in line with its own guidelines and in accordance with obligations assumed, depending on the way in which international reserves are formed.

The component of international reserves acquired through outright purchases of foreign currency from banks and the MoF, through IMF membership and through the income derived from the investment of international reserves and other CNB assets, is managed by the CNB in line with its own guidelines.

The other component of the reserves, formed on the basis of deposits of the Ministry of Finance, repo agreements with banks, foreign currency swaps in the domestic market, IMF membership and other assets owned by other legal persons, is managed by the CNB in accordance with the obligations assumed, the aim being to ensure protection against currency and interest rate risks.

The CNB manages the funds based on allocated foreign currency reserve requirements in accordance with the currency structure of the assumed obligations while the maturity of investments may be different from the maturity of the assumed obligations.

The component of international reserves managed by the CNB in line with its own guidelines can be kept in held-for-trading and investment portfolios or may be entrusted to foreign asset management companies. Held-for-trading portfolios, comprising held-for-trading financial instruments, are important for maintaining the daily liquidity of international reserves. The minimum daily liquidity and held-for-trading instruments used for daily liquidity maintenance are prescribed by a Governor’s decision. Held-for-trading portfolios are carried at market (fair) value through profit and loss. Investment portfolios may be formed as held-to-maturity portfolios or available-for-sale portfolios. Held-to-maturity portfolios comprise fixed income and fixed maturity securities held by the CNB until maturity and are carried at amortised cost. Available-for-sale portfolios are valued in the Income Statement through amortisation of yield to maturity, while changes in bond market prices are recorded under revaluation reserves on the CNB balance sheet.

The terminology of reporting on CNB international reserves includes the terms gross and net reserves. The term gross reserves implies total international reserves. Net reserves refer to that component of the reserves managed by the CNB in line with its own guidelines.

11.2 International reserves in 2016

In 2016, the global financial system was marked by monetary policy divergence between the Fed and the central banks of other developed countries, increased political uncertainty (the UK's vote for exit from the EU, presidential elections in the USA) and rising market volatility. The European Central Bank eased its monetary policy twice in 2016, in an effort to maintain the favourable financial conditions required for a sustainable inflation rate convergence below but close to 2% over a medium term. The Fed decided to raise the range for its benchmark interest rate by 25 basis points, to 0.50% – 0.75% in December, after acceleration in economic growth, faster growth in inflationary pressures and with the labour market approaching full employment. The announced more expansionary fiscal policy of the new American president provided an additional impetus to the further process of normalisation of the Fed's monetary policy. The unexpected election of the Republican candidate resulted in the strengthening of the American dollar, the value of which against the euro rose by 3.58% in 2016.

On 31 December 2016, the total international reserves of the CNB stood at EUR 13,513.76m, having fallen by EUR 192.59m, or 1.4%, from the EUR 13,706.35m at the end of 2015. Factors involved in the fall in total international reserves included a decision to repeal the requirement of allocation of the foreign currency component of reserve requirements, the reduced balance in the foreign exchange account of the Ministry of Finance with the CNB, a lower level of repo transactions and the sale of foreign currency to the European Commission.

Table 11.1 Monthly changes in total and net CNB international reserves

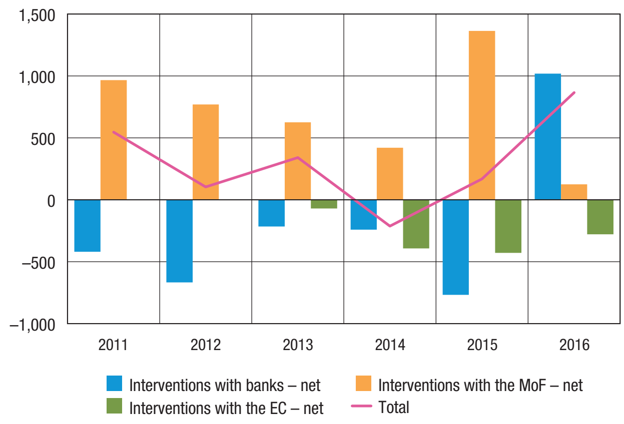
end of period, in million EUR

Month	Total reserves	Net reserves
December 2015	13,706.35	11,152.45
January 2016	13,556.91	11,266.68
February 2016	12,985.64	11,177.39
March 2016	13,198.39	11,073.60
April 2016	13,218.49	11,022.38
May 2016	12,828.08	11,065.56
June 2016	12,936.19	11,263.68
July 2016	13,905.50	11,259.94
August 2016	14,096.99	11,210.92
September 2016	13,038.90	11,271.09
October 2016	12,992.70	11,276.94
November 2016	13,970.54	11,264.57
December 2016	13,513.76	12,164.21
Change Dec. 2016 – Dec. 2015	–192.59	1,011.76

Source: CNB.

Figure 11.1 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.

Net international reserves, excluding 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, rose by EUR 1,011.76m or 9.1% in 2016, from EUR 11,152.45m to EUR 12,164.21m. The factors behind the increase in net international reserves included a purchase of foreign exchange from the banks and the Ministry of Finance and earnings from reserves management.

11.2.1 Total CNB turnover in the foreign exchange market in 2016

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 them to the European Commission and the MoF. In 2016, the CNB purchased a total of EUR 1,144.41m and sold EUR 277.85m, thus purchasing net EUR 866.56m and creating 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 to the Ministry EUR 0.01m.

Table 11.2 Total CNB turnover in the foreign exchange market, 1 January – 31 December 2016

at the exchange rate applicable on the value date, in million

	Purchase (1)		Sale (2)		Net (1 – 2)	
	EUR	HRK	EUR	HRK	EUR	HRK
Domestic banks	1,018.80	7,689.64	0.00	0.00	1,018.80	7,689.64
European Commission	0.00	0.00	277.84	2,107.40	–277.84	–2,107.40
Ministry of Finance	125.61	953.49	0.01	0.04	125.60	953.45
Total	1,144.41	8,643.13	277.85	2,107.44	866.56	6,535.69

Source: CNB.

Table 11.3 Structure of international reserves investment as at 31 December 2016

in %

Investment	31 December 2016		31 December 2015	
	Net reserves	Total reserves	Net reserves	Total reserves
1 Countries				
Government bonds	70.75	63.69	68.77	55.95
Reverse repo agreements	2.95	9.69	10.07	21.25
Central banks	16.15	14.59	6.66	5.98
Covered bonds	0.16	0.15	0.92	0.75
2 International financial institutions				
Deposits	0.16	3.04	0.80	5.66
Securities	5.79	5.21	5.18	4.22
Reverse repo agreements	0.67	0.60	4.45	3.62
External manager (USD)	1.56	1.41	1.64	1.34
3 Banks				
Deposits	0.00	0.00	0.42	0.35
Securities[a]	1.81	1.63	1.09	0.88
Total	100.00	100.00	100.00	100.00

[a] Refers to securities guaranteed by German federal states.
Source: CNB.

11.3 Structure of international reserves investment

The CNB invests funds with financial institutions and in countries with an investment grade rating; the assessment of creditworthiness is based on ratings issued by internationally recognised rating agencies (Moody's, Standard & Poor's and FitchRatings) and on an internally-developed creditworthiness assessment model.

There are restrictions on investments in individual financial institutions and countries, which serves to diversify credit risk.

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.

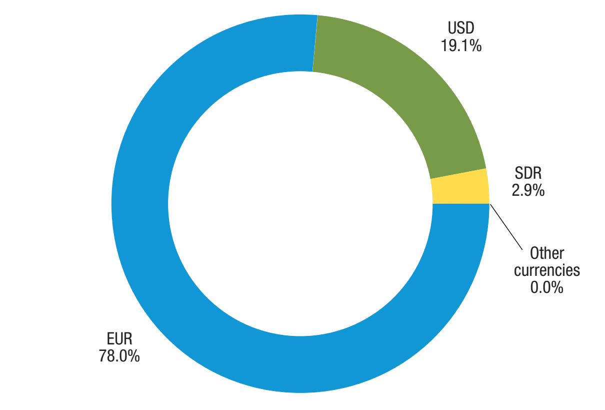
The share of investments in government bonds, deposits with central banks and securities of international financial institutions grew from the end of December 2015. By contrast, there was a decrease in the share of investments in reverse repo agreements collateralised by government bonds and securities of international financial institutions, as well as in the share of investments in deposits of international financial institutions.

On the last day of 2016, approximately 58% of total CNB international reserves 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.

11.4 Currency structure of international reserves

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

Figure 11.2 Currency structure of total international reserves
as at 31 December 2016



Source: CNB.

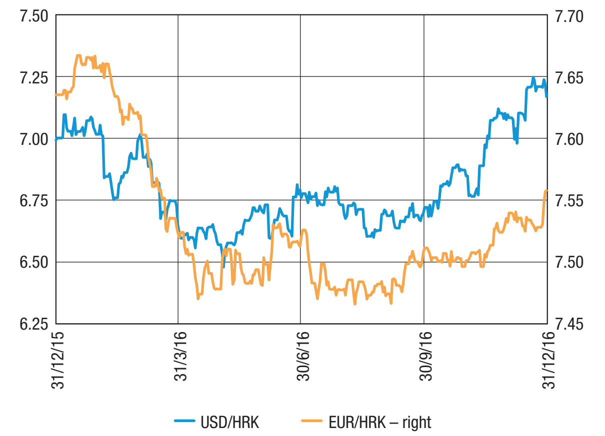
international reserves, 24.11% at the end of 2015, had fallen to 19.10% by the end of December 2016. The greater share of the euro was due to a change in the currency structure of net international reserves and a larger share of euro in repo transactions.

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

11.5 Foreign exchange gains and losses on CNB foreign currency portfolios in 2016

The financial performance of all central banks, including the CNB, depends on the volume and structure of their assets and liabilities. The Croatian National Bank belongs among banks with a large share of international reserves in their assets. As at 31 December 2016, the share of total international reserves in CNB assets was as high as 95.54%, with the bulk of liabilities denominated in kuna. One of the consequences

Figure 11.3 Daily changes in USD/HRK and EUR/HRK exchange rates in 2016



Source: CNB.

of this currency structure of assets and liabilities is the CNB's exposure to a significant currency risk, i.e. the risk of a change in the currency price of investments in relation to the reporting currency – the kuna. Foreign exchange gains and losses arising from fluctuations in the EUR/HRK and USD/HRK exchange rates have a direct impact on the income and expense calculation reported in kuna in the CNB Income Statement.

In 2016, the EUR/HRK exchange rate fell from 7.635 to 7.558 (–1.01%), with the result that unrealised foreign exchange losses on the CNB euro portfolio totalled HRK –668m. The US dollar strengthened in relation to the kuna from 6.992 to 7.169 (2.53%) in the same period. As a result, unrealised foreign exchange gains on the US dollar portfolio totalled HRK 389m in 2016. Realised foreign exchange gains arising from interventions of the CNB were HRK 0.1m in the reporting period.

As a result of fluctuations in the EUR/HRK and USD/HRK exchange rates, and exchange rate differentials resulting from the CNB interventions, foreign exchange losses totalled HRK –279m in the reference period.

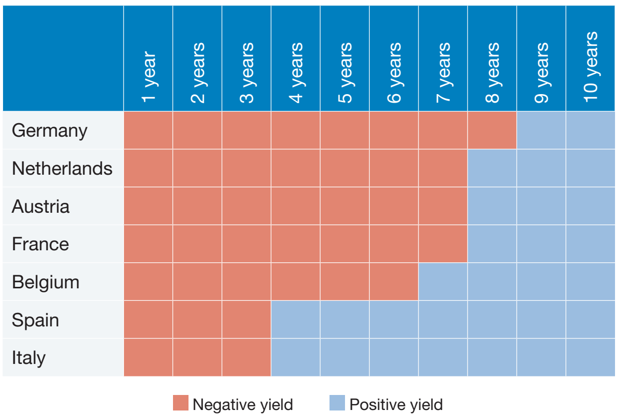
11.6 Results and analysis of CNB foreign currency portfolio management in 2016

The bulk of international reserves of the CNB is held in euro and since a large share of euro government bonds in which the CNB invests carries negative yields, the conditions for making a profit were extremely difficult. The share of government securities of euro area member states with negative yields towards the end of 2016 was as high as 45%.

In 2016, the European Central Bank eased its monetary policy twice, in an effort to maintain the favourable financial conditions required for a sustainable inflation rate convergence below but close to 2% over a medium term.

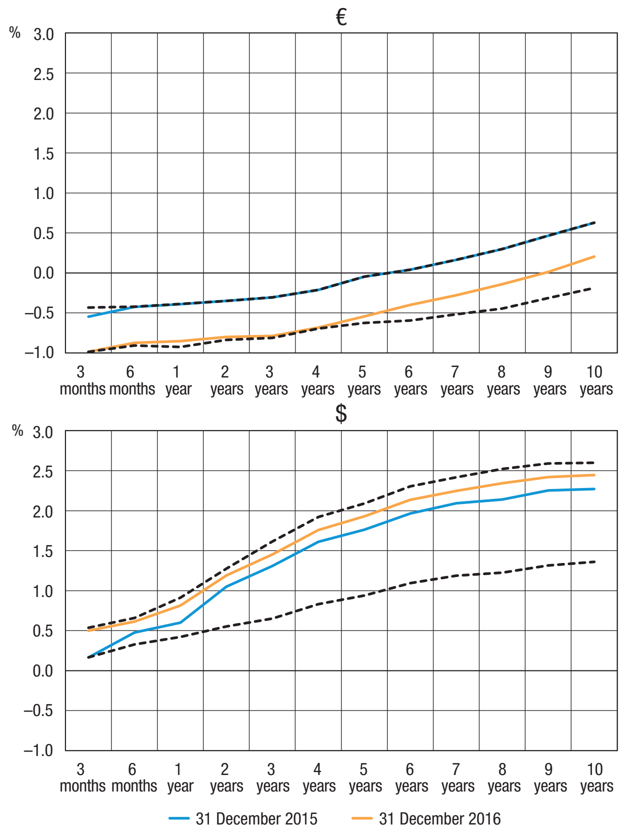
The British referendum which ended with unexpected majority of votes in favour of the exit of the UK from the European Union had a large impact on the European market and the global financial market in 2016. The result of the Brexit referendum, considered a significant systemic risk, led to greater demand for safer investments and a consequential fall in yields

Figure 11.4 Yields on euro government bonds of selected countries by years to maturity
as at 31 December 2016



Source: Bloomberg.

Figure 11.5 German and American yield curves as at 31 December 2015 and 31 December 2016 and their spread in 2016



Source: Bloomberg.

Table 11.4 Realised income and rates of return on the CNB foreign currency portfolios
in millions of original currency and %

Portfolio	Realised income	Annual rate of return					
	2016	2011	2012	2013	2014	2015	2016
Held-for-trading euro portfolio	–5.71	1.36%	0.30%	0.01%	0.42%	0.00%	–0.17%
Held-for-trading dollar portfolio	10.26	0.56%	0.35%	0.14%	0.24%	0.25%	0.68%
Euro investment portfolio	58.32	2.31%	2.31%	2.27%	2.06%	1.44%	1.10%
Dollar investment portfolio	19.32						1.75%
External manager (USD)	1.65					0.15%	0.82%

Source: CNB.

on developed countries' securities.

The yield curve on German government securities 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 of maturities up to five years stood at –0.79%.

The Fed decided to raise the range of its benchmark interest rate by 25 basis points, to 0.50% – 0.75%, in December, following acceleration in economic growth, rising inflationary pressures and as the labour market approached full employment.

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

Observing the key precept 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 to ensure an appropriate level of earnings in the forthcoming years. The most important strategic decision, the implementation of which started in the first half of 2016 was the decision to set up available-for-sale euro and dollar portfolios within the investment portfolio. The advantage of these portfolios is that they help maintain international reserves liquidity and achieve higher, more stable and predictable income.

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.

Despite negative rates of the euro component of the curve of maturity up to five years, 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%.

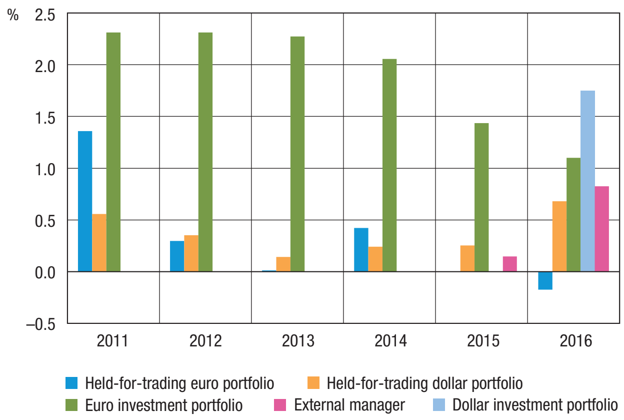
In 2016, the euro held-for-trading portfolio generated a rate of return of –0.17%, while the dollar held-for-trading portfolio generated a rate of return of 0.68%. The held-for-trading portfolios which account for approximately 45% of net reserves, are valued at fair market prices, have short average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

In 2016, the rate of return on the US dollar funds entrusted for management to an international financial institution was 0.82%. The funds entrusted to an external manager enabled additional diversification and knowledge-exchange in the field of investment management.

In 2016, net international reserves investments generated an income of EUR 80.83m.

Figure 11.6 Annual rates of return on the CNB foreign currency portfolios from 2011 to 2016

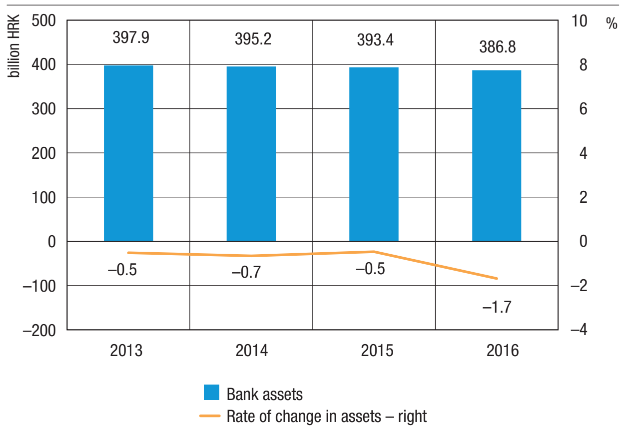


Source: CNB.

12 Business operations of credit institutions[9]

There were 31 credit institutions, 26 banks (one savings bank included) and five housing savings banks, operating in the Republic of Croatia at the end of 2016. The number had decreased by two from the end of 2015: at the beginning of July 2016, bankruptcy proceedings were opened against one bank[10], while in October one bank merged with its foreign parent bank which continued operating in the Republic of Croatia through a branch.[11] In addition to this branch, 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 direct provision of mutually recognised services in the territory of the Republic of Croatia.[12]

Figure 12.1 Bank assets



Source: CNB.

12.1 Banks

Bank assets decreased by 1.7% in 2016, continuing to trend down slightly for the fifth year in succession. This decrease was strongly impacted by the conversion of loans in Swiss francs into loans in euros[13], by exchange rate developments, the sale of irrecoverable claims and the exit of two banks from the system. Developments that started in 2015 continued, as reflected in poor lending and sustained bank deleveraging.

Loans granted[14] decreased by 1.1% (based on transactions[15]). In addition to 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. In the non-financial corporations sector, in 2016 banks upped their lending only to tourism and agriculture and professional, scientific and technical activities. New lending was primarily realised in kuna, with loans granted at fixed interest rates gaining in importance.

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 was a result of improvements in the economic environment, as reflected in better claims' collection and improved creditworthiness of clients, and in the resolution of non-performing loans, especially through the sale of claims. The CNB's progressive rules on the allocation of additional value adjustments provided a strong impetus to such selling. In the household sector, improvements in credit quality were also affected by the conversion of loans in Swiss francs into loans in euros, and by the change in credit risk assessment rules at one bank.[16]

The ageing of the portfolio, strengthened by the mentioned regulatory rules on the gradual increase in value adjustments for long-term delinquent placements, was responsible for the 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 the loans of risk category C (for which a 100% value adjustment was carried out), particularly in construction. It remained the riskiest activity, with the share of loans of risk categories B and C totalling as much as 65.7%.

9 This chapter shows breakdowns and data that are based on the same methodology applied in the compilation of the Banks Bulletin. Therefore, Notes on methodology from the Banks Bulletin, No. 29, (http://www.hnb.hr/en/analyses-and-publications/regular-publications/banks-bulletin) may be used to interpret data. The only exception are data relating to sectors that have been compiled in accordance with the ESA 2010 methodology (the Banks Bulletin, No. 29, draws on the ESA 1995 methodology). Data on the business operations of credit institutions for 2016 are preliminary unaudited data.

10 Bankruptcy proceedings were opened against Banka splitsko-dalmatinska d.d., Split, on 1 July 2016.

11 BKS Bank d.d., Rijeka, merged with BKS Bank AG, Klagenfurt on 1 October 2016. At the same time BKS Bank AG, main branch Rijeka, became operational.

12 The single passport system enables credit and financial institutions from the EU and contracting parties to the Agreement on the European Economic Area to provide mutually recognised services in other member states without additional authorisation requirements. The competent authorities of the home Member State are obliged to notify the competent authority of the host Member State. A list of institutions exercising the right of establishment and freedom to provide services in the Republic of Croatia is available on the CNB's website: https://www.hnb.hr/en/core-functions/supervision/list-of-credit-institutions.

13 The conversion of Swiss franc loans (and kuna loans indexed to the Swiss franc) to euro loans (and euro-indexed kuna loans) is regulated by the Act on Amendments to the Consumer Credit Act and the Act on Amendments to the Credit Institutions Act (OG 102/2015).

14 In gross amount, from the portfolio of loans and receivables.

15 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.

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

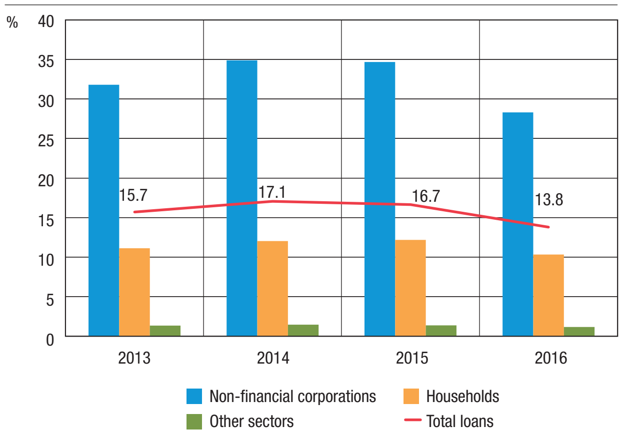
Although reduced noticeably from the end of 2015, the share of loans of risk categories B and C in the non-financial corporations sector remained relatively high (28.3%).

Conversions, predominantly pertaining to housing loans, started at the end of 2015, the majority being carried out in 2016. Partial write-offs of loan principals – HRK 5.0bn in 2016, and almost HRK 6.0bn in total during the two years – were charged to provisions made earlier. At the end of 2016, converted housing loans (in euros) accounted for almost a fifth of total housing loans. The share of kuna housing loans, which increased substantially during the year under review, was almost the same. The growth in their attractiveness was a result of the materialisation of the currency-induced credit risk for loans in Swiss francs over the previous years and the reaction of borrowers to it, while additional impetus came from the refinancing of converted loans by kuna loans (in the same or some other bank). Refinancing of converted housing loans, together with early cash repayments and reclassifications arising from improved creditworthiness (due to partial write-off of the principal and overpayments), contributed to improvement in the quality of total housing loans. The share of B and C risk category loans decreased from 9.8% at the end of 2015 to 8.2% of total housing loans at the end of 2016. The partial write-off of loans reduced the required value adjustments so 2016 registered income from cancelled expenses on value adjustments of housing loans to households. The effects of regulations regulating loans in Swiss francs were also visible in the movements of other items, such as the expenses of fixing the exchange rate of the Swiss franc for loan repayments[17] that banks had in 2015 and that were absent in 2016. One should also mention here the positive effects on interest income, considering that interest rates on housing loans in Swiss francs are limited to 3.23%.[18]

In 2016, the sale of irrecoverable claims intensified significantly, especially in the non-financial corporations sector. A total of HRK 6.0bn of balance sheet claims in risk categories B and C (gross amount) were sold, together with the 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. The most claims were purchased by enterprises specialised in collecting claims or companies established for the sole purpose of claims collection and management. Sales were realised at prices higher than the net carrying amount of claims, so banks generated an income of HRK 338.6m. This moderated previous losses – the value adjustments of the claims sold totalled HRK 4.5bn.

Bank deleveraging, especially to majority foreign owners, continued, and a large portion of foreign sources was substituted for 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 side, the growth of household deposits was relatively modest. This was a result of low interest rates on savings deposits, as well as of the tax on interest rates on savings deposits that caused households to turn to other forms of investments. Sources from foreign parents halved, which, together with the strong growth of their lending (reverse repo loans), contributed to a decline in net sources from majority foreign owners[19], to only 0.5% of assets. Borrowing with the CNB increased, as a reflection of 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. At the end of 2016, the liquidity coverage ratio (LCR)[20] totalled 188.0%, indicating that banks had at their disposal substantial surplus to cover liquidity needs under stress scenarios.

Figure 12.2 Share of bank partly recoverable and fully irrecoverable loans



Source: CNB.

After the losses of 2015, caused by loan conversion expenses, bank profitability improved in 2016 and the return on average assets (ROAA) and the return on average equity (ROAE) reached their highest level since 2008, totalling 1.6% and 9.6% respectively. Banks generated HRK 6.4bn in profit from continuing operations (before tax), while in 2015 they recorded a loss 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 conversion expenses, as well as expenses on loan portfolio losses (partly affected by conversions). A great impact on the result came from one-off revenues from the sale of equity holdings (especially the sale of shares of Visa Europe Ltd.[21]), irrecoverable claims, and dividends received.

17 In January 2015, the Government decided to fix the exchange rate to HRK 6.39 for one Swiss franc for instalments/annuities in that currency (including those indexed to that currency) maturing within one year period.

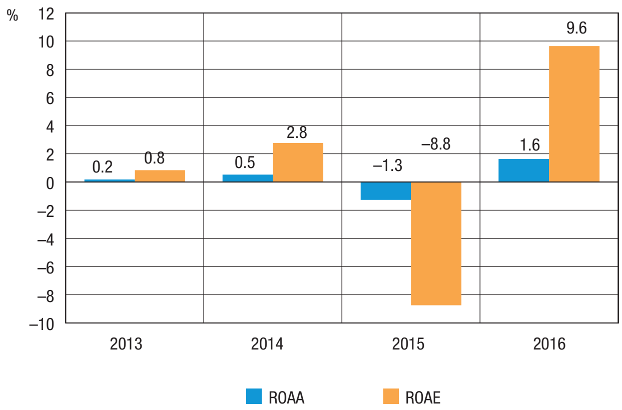
18 At the beginning of 2014, interest rates on housing loans indexed to the Swiss francs were limited to 3.23%. The restriction will remain in force until the exchange rate of the Swiss franc depreciates to a level below the appreciation of 20% that triggered the limitation of the interest rate level.

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

20 The LCR requires banks to hold highly liquid assets in the amount that ensures the coverage of liquidity needs during a 30-day stress period. The LCR is to amount to at least 100%, except during the transitional period: in 2016 credit institutions were obligated to maintain the LCR of 70%, this percentage increasing to 80% in 2017.

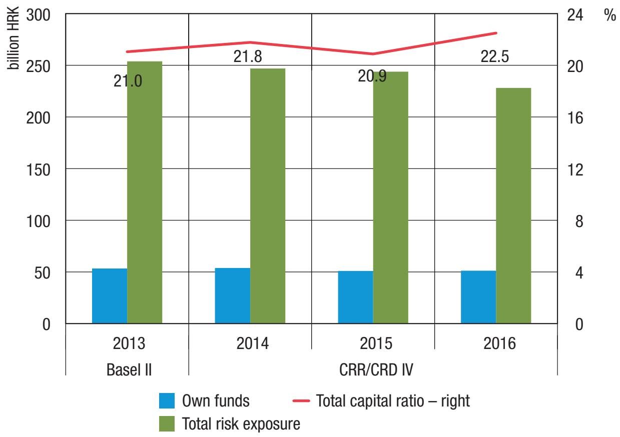
21 Visa Inc. (US) merged the European segment of its operations by taking over its daughter company Visa Europe Ltd. (United Kingdom), the global value of the transaction being estimated at EUR 18.4bn. The transaction includes the payment of a cash consideration to the

Figure 12.3 Bank return on average assets (ROAA) and return on average equity (ROAE)



Source: CNB.

Figure 12.4 Bank total capital ratio



Source: CNB.

The main source of income, interest income, decreased, as did income from fees and commissions. Modest lending activity and interest rate developments (including the effects of stricter limits on default and effective interest rates introduced in August 2015) kept limiting interest income, the decrease being slightly more dynamic than the year before. Banks compensated for weak lending by widening the interest spread, particularly on the basis of savings on interest expenses. This is a result of the growth in cheaper sources (such as deposits in transaction accounts) and deleveraging, and in particular, declining interest rates. The decrease in income from fees and commissions was partially attributable to the rules limiting the amount of interbank fees that were introduced in December 2015 and the related reduction of income from commission and fees deriving from credit cards.

The slow, but stable, years-long trend of improvement in the cost to income ratio continued. Better management of expenses, together with the income from the sale of shares of Visa Europe Ltd., is the main reason for similar values of ROAA in 2008 and 2016. The main sources of income, including net interest income, were lower, while expenses on value adjustments and provisions, although noticeably decreasing in 2016, continued to hold a higher level.

The sale of claims and conversion of loans limited the exposure to the credit and currency risks that had the greatest influence on the rise in the growth of the total capital ratio. It increased from 20.9% at the end of 2015 to its all-time high of 22.5% at the end of 2016. The average weight for credit risk continued its years-long decline, totalling 50.8%. The decrease in the average weight under the standardised approach was primarily a result of the fall in the category of exposures in default, which was affected by the sale of claims, as well as loan conversions and improvements in the creditworthiness of individual clients (getting out of default).

12.2 Housing savings banks

The assets of housing savings banks continued to increase. In 2016 they increased by 0.5%, their small share in the assets of all credit institutions rising 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. This result was under the key influence of a strong fall of profit in one housing savings bank. 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%.

shareholders of Visa Europe Ltd., of a consideration in the form of preferred shares of Visa Inc. and a deferred cash consideration within three years after the date on which the purchase was completed. Source: http://d1lge852tjjqow.cloudfront.net/CIK-0001403161/75d2207b-d58f-4008-a10d-d38b0da826df.pdf. Banks' receipts in 2016 arising from this transaction were estimated at some HRK 650m.

Table 12.1 Structure of bank assets

end of period, in million HRK and %

	Dec. 2014		Dec. 2015			Dec. 2016		
	Amount	Share	Amount	Share	Change	Amount	Share	Change
Money assets and deposits with the CNB	50,252.6	12.7	49,425.3	12.6	–1.6	56,135.0	14.5	13.6
Money assets	6,462.7	1.6	7,289.7	1.9	12.8	7,676.2	2.0	5.3
Deposits with the CNB	43,789.9	11.1	42,135.6	10.7	–3.8	48,458.8	12.5	15.0
Deposits with financial institutions	26,369.0	6.7	27,727.6	7.0	5.2	20,993.5	5.4	–24.3
MoF treasury bills and CNB bills	15,353.5	3.9	12,258.7	3.1	–20.2	8,783.9	2.3	–28.3
Securities	34,236.2	8.7	37,901.3	9.6	10.7	46,730.9	12.1	23.3
Derivative financial assets	1,357.0	0.3	2,431.1	0.6	79.2	2,665.8	0.7	9.7
Loans	253,132.3	64.0	246,949.2	62.8	–2.4	235,515.7	60.9	–4.6
Loans to financial institutions	5,735.2	1.5	5,002.3	1.3	–12.8	5,073.6	1.3	1.4
Loans to other clients	247,397.1	62.6	241,946.9	61.5	–2.2	230,442.1	59.6	–4.8
Investments in subsidiaries, associates and joint ventures	2,722.1	0.7	4,185.3	1.1	53.8	4,365.7	1.1	4.3
Foreclosed and repossessed assets	1,544.8	0.4	1,550.0	0.4	0.3	1,258.4	0.3	–18.8
Tangible assets (net of depreciation)	4,243.0	1.1	4,456.1	1.1	5.0	4,230.5	1.1	–5.1
Interest, fees and other assets	6,027.2	1.5	6,509.5	1.7	8.0	6,111.5	1.6	–6.1
Total assets	395,237.7	100.0	393,394.3	100.0	–0.5	386,790.8	100.0	–1.7

Source: CNB.

Table 12.2 Structure of bank liabilities and capital

end of period, in million HRK and %

	Dec. 2014		Dec. 2015			Dec. 2016		
	Amount	Share	Amount	Share	Change	Amount	Share	Change
Loans from financial institutions	641.6	0.2	622.4	0.2	–3.0	1,351.9	0.3	117.2
Short-term loans	602.5	0.2	611.2	0.2	1.4	463.5	0.1	–24.2
Long-term loans	39.1	0.0	11.2	0.0	–71.3	888.4	0.2	7,819.6
Deposits	286,075.4	72.4	294,214.6	74.8	2.8	293,570.6	75.9	–0.2
Transaction account deposits	67,556.2	17.1	76,631.9	19.5	13.4	101,116.7	26.1	32.0
Savings deposits	18,045.1	4.6	21,052.5	5.4	16.7	19,630.7	5.1	–6.8
Time deposits	200,474.1	50.7	196,530.2	50.0	–2.0	172,823.2	44.7	–12.1
Other loans	35,919.8	9.1	23,658.6	6.0	–34.1	17,555.5	4.5	–25.8
Short-term loans	5,632.7	1.4	2,109.5	0.5	–62.5	1,675.1	0.4	–20.6
Long-term loans	30,287.2	7.7	21,549.2	5.5	–28.9	15,880.4	4.1	–26.3
Derivative financial liabilities and other financial liabilities held for trading	1,180.5	0.3	2,339.2	0.6	98.2	2,269.8	0.6	–3.0
Debt securities issued	299.9	0.1	300.8	0.1	0.3	353.6	0.1	17.6
Short-term debt securities issued	0.0	0.0	0.8	0.0	–	0.0	0.0	0.0
Long-term debt securities issued	299.9	0.1	300.0	0.1	0.0	353.6	0.1	17.9
Subordinated instruments issued	2,050.0	0.5	2,724.0	0.7	32.9	2,659.3	0.7	–2.4
Hybrid instruments issued	2,319.4	0.6	2,198.4	0.6	–5.2	2,190.9	0.6	–0.3
Interest, fees and other liabilities	11,231.2	2.8	17,361.6	4.4	54.6	12,031.4	3.1	–30.7
Total liabilities	339,717.8	86.0	343,419.6	87.3	1.1	331,983.2	85.8	–3.3
Share capital	33,757.2	8.5	34,275.4	8.7	1.5	33,808.8	8.7	–1.4
Current year profit (loss)	1,534.6	0.4	–4,615.8	–1.2	–	5,051.5	1.3	–
Retained earnings (loss)	15,943.0	4.0	15,579.3	4.0	–2.3	11,228.1	2.9	–27.9
Legal reserves	1,046.0	0.3	1,035.2	0.3	–1.0	1,033.1	0.3	–0.2
Reserves provided for by the articles of association and other capital reserves	2,600.4	0.7	2,892.5	0.7	11.2	2,840.0	0.7	–1.8
Revaluation reserves	727.9	0.2	1,115.1	0.3	53.2	852.2	0.2	–23.6
Previous year profit (loss)	–89.1	0.0	–307.0	–0.1	244.4	–5.9	0.0	–98.1
Total capital	55,519.9	14.0	49,974.7	12.7	–10.0	54,807.6	14.2	9.7
Total liabilities and capital	395,237.7	100.0	393,394.3	100.0	–0.5	386,790.8	100.0	–1.7

Source: CNB.

Table 12.3 Bank income statement
in reference periods, in million HRK and %

	Amount		Change
	Jan. – Dec. 2015	Jan. – Dec. 2016	
Continuing operations			
Interest income	18,129.3	16,441.8	–9.3
Interest expenses	7,580.7	5,659.8	–25.3
Net interest income	10,548.6	10,782.0	2.2
Income from fees and commissions	4,614.3	4,505.8	–2.4
Expenses on fees and commissions	1,580.3	1,300.2	–17.7
Net income from fees and commissions	3,034.0	3,205.6	5.7
Income from equity investments	349.1	773.8	121.6
Gains (losses)	862.3	1,866.2	116.4
Other operating income	639.0	572.6	–10.4
Other operating expenses	1,051.9	1,216.2	15.6
Net other non-interest income	798.5	1,996.4	150.0
Total operating income	14,381.1	15,983.9	11.1
General administrative expenses and depreciation	7,438.6	7,165.6	–3.7
Net operating income before loss provisions	6,942.5	8,818.4	27.0
Expenses on value adjustments and provisions	11,973.5	2,662.3	–77.8
Other gains (losses)	–1.2	215.8	–
Profit (loss) from continuing operations, before taxes	**–5,032.2**	**6,371.8**	**–**
Income tax on continuing operations	–402.2	1,322.0	–
Profit (loss) from continuing operations, after taxes	–4,630.0	5,049.9	–
Discontinued operations			
Profit (loss) from discontinued operations, after taxes	14.2	1.6	–88.8
Current year profit (loss)	**–4,615.8**	**5,051.5**	**–**

Source: CNB.

Table 12.4 Classification of bank placements and assumed off-balance sheet liabilities by risk categories
end of period, in million HRK and %

Risk (sub) category	Dec. 2014			Dec. 2015			Dec. 2016		
	Placements and assumed off-balance sheet liabilities	Value adjustments and provisions	Coverage	Placements and assumed off-balance sheet liabilities	Value adjustments and provisions	Coverage	Placements and assumed off-balance sheet liabilities	Value adjustments and provisions	Coverage
A	365,613.1	3,363.4	0.9	362,550.9	3,348.0	0.9	365,048.9	3,343.2	0.9
B-1	15,728.9	2,364.5	15.0	12,528.5	1,836.8	14.7	8,456.4	1,189.5	14.1
B-2	19,774.4	9,768.0	49.4	18,363.9	9,484.3	51.6	12,221.0	6,521.3	53.4
B-3	5,559.4	4,615.6	83.0	8,008.0	6,578.8	82.2	7,973.1	6,552.0	82.2
C	10,022.5	10,020.4	100.0	10,453.1	10,453.9	100.0	10,663.8	10,665.4	100.0
Total	416,698.2	30,131.8	7.2	411,904.4	31,701.9	7.7	404,363.2	28,271.4	7.0

Source: CNB.

Table 12.5 Share of bank partly recoverable and fully irrecoverable loans in total loans
end of period, in million HRK and %

	Dec. 2014	Dec. 2015	Dec. 2016
	Share	Share	Share
General government	0.1	0.0	0.0
Non-financial corporations	34.9	34.7	28.3
Agriculture, forestry and fishing	17.3	16.9	13.1
Mining and quarrying	30.6	32.2	17.8
Manufacturing	32.2	34.5	25.0
Construction	64.0	67.2	65.7
Wholesale and retail trade; repair of motor vehicles and motorcycles	36.2	35.0	28.4
Transportation and storage	14.4	13.7	11.1
Accommodation and food service activities	20.3	19.9	15.6
Information and communication	49.4	46.5	52.3
Real estate activities	39.7	37.6	35.8
Professional, scientific and technical activities	38.8	38.3	27.1
Other activities	15.3	12.5	9.9
Households	12.0	12.2	10.3
Housing loans	8.8	9.8	8.2
Mortgage loans	32.7	33.5	30.1
Car loans	6.4	7.2	5.6
Credit card loans	4.1	3.8	3.2
Overdrafts	12.9	12.2	10.0
General-purpose cash loans	9.7	9.2	7.5
Other household loans	34.6	34.4	31.0
Other sectors	9.8	9.0	5.5
Total	17.1	16.7	13.8

Source: CNB.

Table 12.6 Own funds, risk exposure and capital ratios of banks

end of period, in million HRK and %

	Dec. 2014		Dec. 2015			Dec. 2016		
	Amount	Share	Amount	Share	Change	Amount	Share	Change
Own funds	**53,780.0**	**100.0**	**50,917.1**	**100.0**	**–5.3**	**51,297.5**	**100.0**	**0.7**
Tier 1 capital	50,931.0	94.7	46,586.3	91.5	–8.5	47,587.7	92.8	2.1
Common equity tier 1 capital	50,931.0	94.7	46,586.3	91.5	–8.5	47,587.7	92.8	2.1
Capital instruments eligible as common equity tier 1 capital	33,482.2	62.3	33,717.6	66.2	0.7	33,854.3	66.0	0.4
Retained earnings	16,707.9	31.1	11,820.6	23.2	–29.3	13,008.4	25.4	10.0
Other items	740.9	1.4	1,048.1	2.1	41.5	725.1	1.4	–30.8
Additional tier 1 capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tier 2 capital	2,849.0	5.3	4,330.9	8.5	52.0	3,709.7	7.2	–14.3
Total risk exposure amount	**246,959.3**	**100.0**	**243,830.0**	**100.0**	**–1.3**	**228,121.7**	**100.0**	**–6.4**
Risk weighted exposure amounts for credit, counterparty credit and dilution risks and free deliveries	218,615.5	88.5	211,793.3	86.9	–3.1	201,315.3	88.2	–4.9
Standardised approach	185,416.7	75.1	182,231.5	74.7	–1.7	173,764.8	76.2	–4.6
Central governments or central banks	2,843.2	1.2	3,736.4	1.5	31.4	4,163.9	1.8	11.4
Corporates	63,408.8	25.7	62,041.5	25.4	–2.2	64,440.9	28.2	3.9
Retail	61,537.1	24.9	60,349.7	24.8	–1.9	57,029.2	25.0	–5.5
Exposures in default	26,710.5	10.8	21,427.2	8.8	–19.8	15,088.3	6.6	–29.6
Other items	30,917.2	12.5	34,676.6	14.2	12.2	33,042.4	14.5	–4.7
Internal ratings based approach (IRB)	33,198.8	13.4	29,561.8	12.1	–11.0	27,550.6	12.1	–6.8
Settlement/delivery risks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Position, foreign exchange and commodities risks	4,193.1	1.7	8,550.8	3.5	103.9	4,411.0	1.9	–48.4
Operational risk	23,796.0	9.6	22,871.3	9.4	–3.9	22,070.6	9.7	–3.5
Credit valuation adjustment	354.7	0.1	614.7	0.3	73.3	324.7	0.1	–47.2
Common equity tier 1 capital ratio	**20.6**	**–**	**19.1**	**–**	**–7.4**	**20.9**	**–**	**9.2**
Tier 1 capital ratio	**20.6**	**–**	**19.1**	**–**	**–7.4**	**20.9**	**–**	**9.2**
Total capital ratio	**21.8**	**–**	**20.9**	**–**	**–4.1**	**22.5**	**–**	**7.7**

Source: CNB.

Table 12.7 Structure of housing savings bank assets

end of period, in million HRK and %

	Dec. 2014		Dec. 2015			Dec. 2016		
	Amount	Share	Amount	Share	Change	Amount	Share	Change
Money assets and deposits with the CNB	0.0	0.0	0.0	0.0	42.9	0.0	0.0	22.5
Money assets	0.0	0.0	0.0	0.0	42.9	0.0	0.0	22.5
Deposits with the CNB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deposits with financial institutions	434.1	5.6	563.9	7.3	29.9	518.4	6.6	–8.1
MoF treasury bills and CNB bills	350.8	4.5	162.4	2.1	–53.7	84.7	1.1	–47.8
Securities	2,481.2	31.9	2,706.7	34.8	9.1	2,876.0	36.8	6.3
Derivative financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loans	4,381.4	56.4	4,226.0	54.4	–3.5	4,223.2	54.0	–0.1
Loans to financial institutions	141.6	1.8	52.0	0.7	–63.3	37.2	0.5	–28.6
Loans to other clients	4,239.7	54.5	4,174.0	53.7	–1.5	4,186.0	53.6	0.3
Investments in subsidiaries, associates and joint ventures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreclosed and repossessed assets	0.2	0.0	1.4	0.0	783.8	1.9	0.0	39.8
Tangible assets (net of depreciation)	3.0	0.0	2.2	0.0	–28.7	1.9	0.0	–11.2
Interest, fees and other assets	124.4	1.6	109.6	1.4	–11.9	108.3	1.4	–1.2
Total assets	7,774.9	100.0	7,772.2	100.0	0.0	7,814.4	100.0	0.5

Source: CNB.

Table 12.8 Structure of housing savings bank liabilities and capital
end of period, in million HRK and %

	Dec. 2014		Dec. 2015			Dec. 2016		
	Amount	Share	Amount	Share	Change	Amount	Share	Change
Loans from financial institutions	60.5	0.8	42.0	0.5	–30.6	37.0	0.5	–11.9
Short-term loans	60.5	0.8	42.0	0.5	–30.6	37.0	0.5	–11.9
Long-term loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deposits	6,694.3	86.1	6,645.0	85.5	–0.7	6,621.9	84.7	–0.3
Transaction account deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Savings deposits	4.7	0.1	0.0	0.0	–99.4	0.0	0.0	–36.1
Time deposits	6,689.6	86.0	6,645.0	85.5	–0.7	6,621.8	84.7	–0.3
Other loans	95.8	1.2	95.4	1.2	–0.3	94.5	1.2	–1.0
Short-term loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long-term loans	95.8	1.2	95.4	1.2	–0.3	94.5	1.2	–1.0
Derivative financial liabilities and other financial liabilities held for trading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Short-term debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long-term debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subordinated instruments issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hybrid instruments issued	83.4	1.1	83.2	1.1	–0.2	82.7	1.1	–0.6
Interest, fees and other liabilities	124.9	1.6	129.7	1.7	3.9	140.6	1.8	8.4
Total liabilities	7,058.8	90.8	6,995.4	90.0	–0.9	6,976.7	89.3	–0.3
Share capital	487.9	6.3	487.9	6.3	0.0	487.9	6.2	0.0
Current year profit (loss)	58.9	0.8	47.5	0.6	–19.3	46.7	0.6	–1.8
Retained earnings (loss)	120.1	1.5	177.6	2.3	47.8	200.5	2.6	12.9
Legal reserves	9.0	0.1	10.5	0.1	16.3	11.6	0.1	10.1
Reserves provided for by the articles of association and other capital reserves	–8.0	–0.1	–10.7	–0.1	33.7	–17.9	–0.2	67.7
Revaluation reserves	48.1	0.6	64.0	0.8	32.9	108.9	1.4	70.2
Previous year profit (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total capital	716.1	9.2	776.8	10.0	8.5	837.7	10.7	7.8
Total liabilities and capital	7,774.9	100.0	7,772.2	100.0	0.0	7,814.4	100.0	0.5

Source: CNB.

Table 12.9 Housing savings bank income statement

in reference periods, in million HRK and %

	Amount		Change
	Jan. – Dec. 2015	Jan. – Dec. 2016	
Continuing operations			
Interest income	354.8	331.2	–6.7
Interest expenses	211.2	200.5	–5.0
Net interest income	143.7	130.6	–9.1
Income from fees and commissions	52.0	50.7	–2.5
Expenses on fees and commissions	6.2	5.7	–8.6
Net income from fees and commissions	45.8	45.0	–1.7
Income from equity investments	0.0	0.0	0.0
Gains (losses)	1.9	9.8	421.8
Other operating income	8.1	3.4	–58.2
Other operating expenses	31.0	22.0	–29.1
Net other non-interest income	–21.0	–8.8	–58.1
Total operating income	168.5	166.9	–1.0
General administrative expenses and depreciation	110.7	103.3	–6.7
Net operating income before loss provisions	57.8	63.6	10.0
Expenses on value adjustments and provisions	–1.5	7.5	–
Other gains (losses)	0.0	0.0	0.0
Profit (loss) from continuing operations, before taxes	**59.3**	**56.0**	**–5.4**
Income tax on continuing operations	11.7	9.3	–20.3
Profit (loss) from continuing operations, after taxes	47.5	46.7	–1.8
Discontinued operations			
Profit (loss) from discontinued operations, after taxes	0.0	0.0	–
Current year profit (loss)	**47.5**	**46.7**	**–1.8**

Source: CNB.

Table 12.10 Classification of housing savings bank placements and assumed off-balance sheet liabilities by risk categories

end of period, in million HRK and %

Risk category	Dec. 2014		Dec. 2015			Dec. 2016		
	Amount	Share	Amount	Share	Change	Amount	Share	Change
A	5,907.3	98.8	5,539.7	98.8	–6.2	5,547.5	98.7	0.1
B	67.1	1.1	58.3	1.0	–13.1	65.1	1.2	11.7
C	5.4	0.1	9.9	0.2	81.9	10.7	0.2	8.5
Total	5,979.7	100.0	5,607.8	100.0	–6.2	5,623.2	100.0	0.3

Source: CNB.

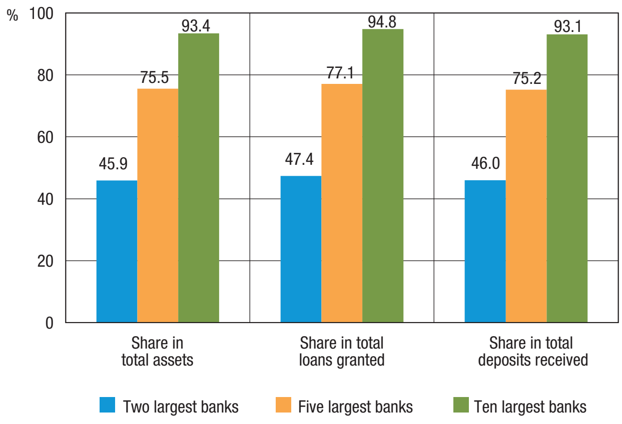
Table 12.11 Coverage of housing savings bank total placements and assumed off-balance sheet liabilities by total value adjustments and provisions

end of period, in million HRK and %

	Dec. 2014	Dec. 2015	Dec. 2016
Total value adjustments against placements and provisions for assumed off-balance sheet liabilities	69.1	68.3	75.9
Value adjustments and provisions	17.5	20.0	27.9
Collectively assessed value adjustments and provisions	51.5	48.4	48.1
Total placements and assumed off-balance sheet liabilities	5,979.7	5,607.8	5,623.2
Coverage	**1.2**	**1.2**	**1.4**

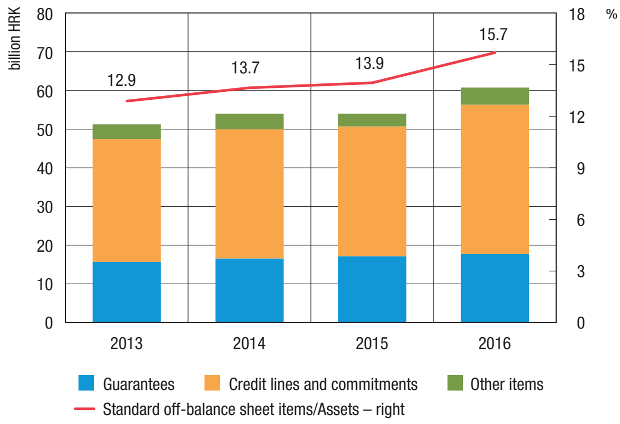
Source: CNB.

Figure 12.5 Shares of assets, loans and deposits of the largest banks in total assets, loans and deposits
as at 31 December 2016



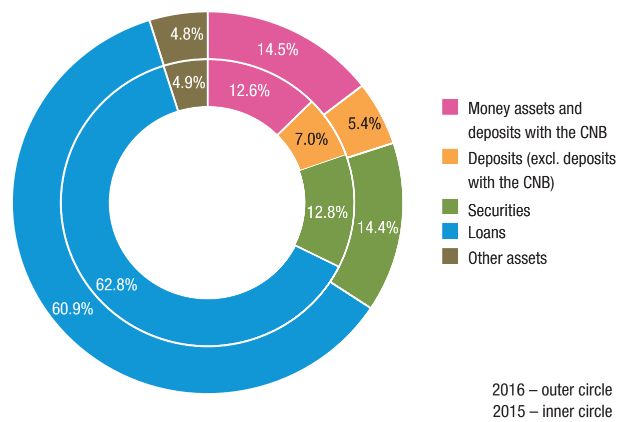
Source: CNB.

Figure 12.8 Bank standard off-balance sheet items



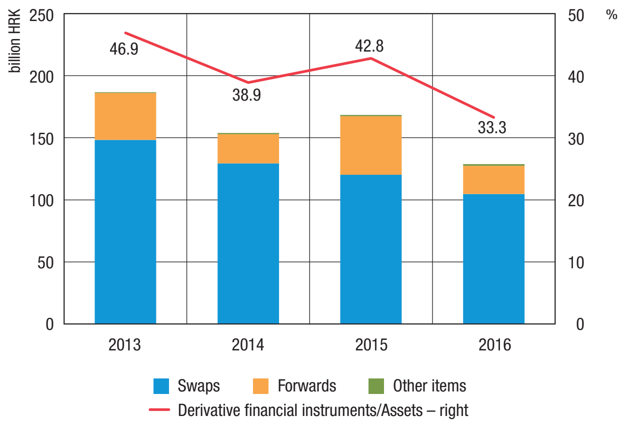
Source: CNB.

Figure 12.6 Structure of bank assets



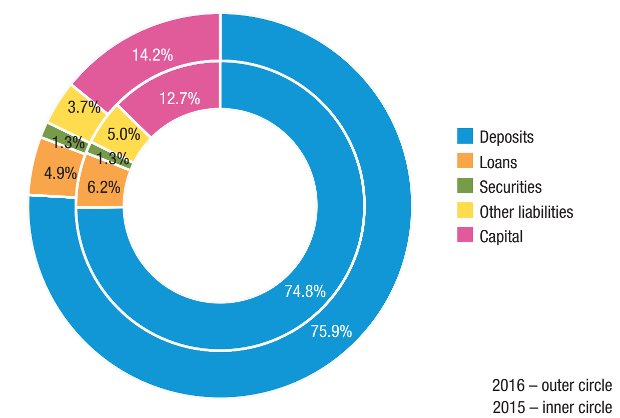
Source: CNB.

Figure 12.9 Bank derivative financial instruments (notional amount)



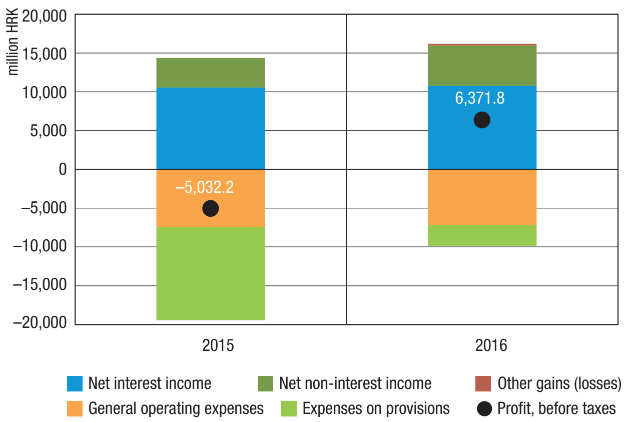
Source: CNB.

Figure 12.7 Structure of bank liabilities and capital



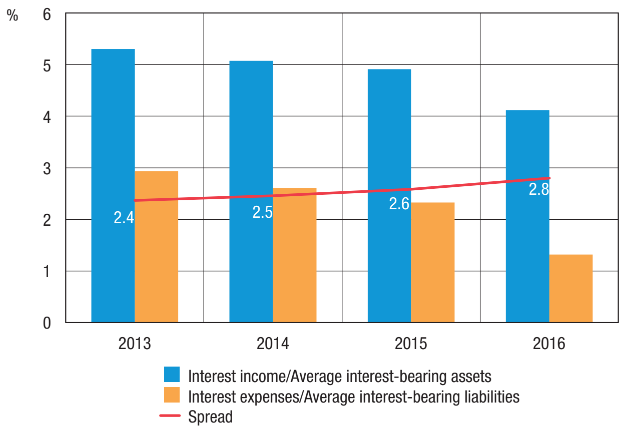
Source: CNB.

Figure 12.10 Bank profit from continuing operations
before taxes



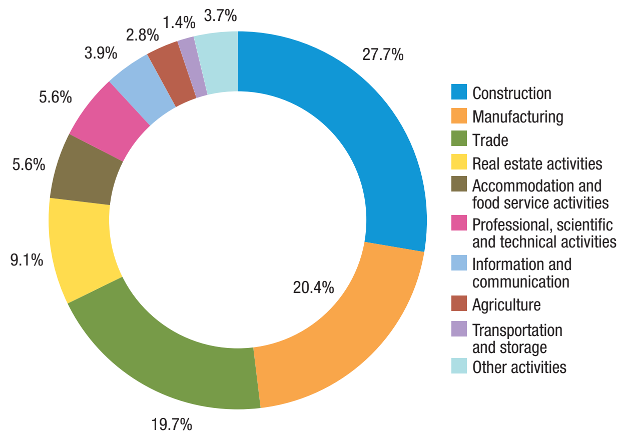
Source: CNB.

Figure 12.11 Income from interest-bearing assets and expenses on interest-bearing liabilities



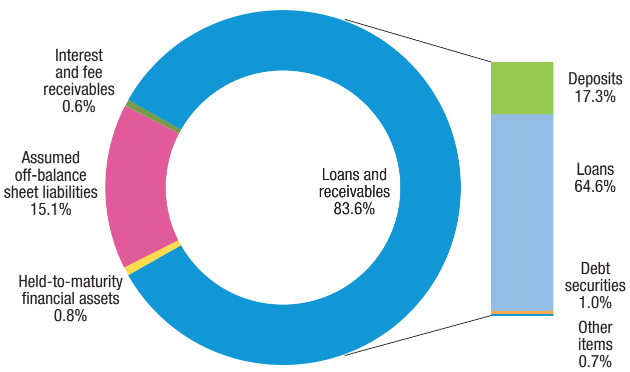
Source: CNB.

Figure 12.14 Structure of bank partly recoverable and fully irrecoverable loans to non-financial corporations by activities
as at 31 December 2016



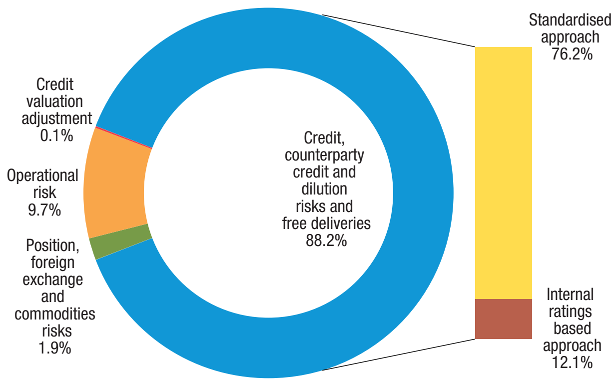
Source: CNB.

Figure 12.12 Structure of bank placements and assumed off-balance sheet liabilities
as at 31 December 2016



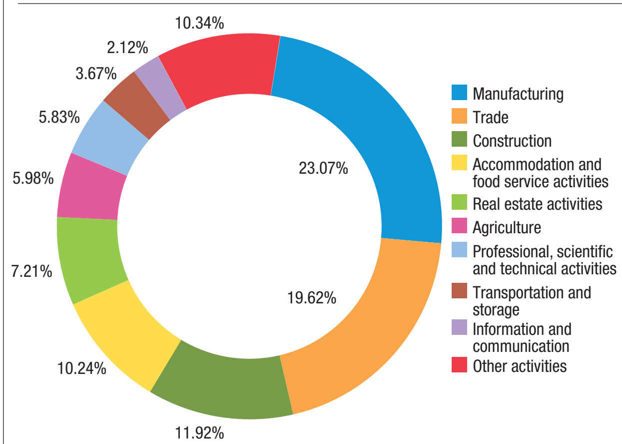
Source: CNB.

Figure 12.15 Structure of bank total risk exposure
as at 31 December 2016



Source: CNB.

Figure 12.13 Structure of bank loans to non-financial corporations by activities
as at 31 December 2016



Source: CNB.

Abbreviations and symbols

Abbreviations

bn	– billion
b.p.	– basis points
BEA	– U. S. Bureau of Economic Analysis
BOP	– balance of payments
c.i.f.	– cost, insurance and freight
CBRD	– Croatian Bank for Reconstruction and Development
CBS	– Central Bureau of Statistics
CEE	– Central and Eastern European
CEFTA	– Central European Free Trade Agreement
CES	– Croatian Employment Service
CHF	– Swiss franc
CHY	– Yuan Renminbi
CICR	– currency-induced credit risk
CIHI	– Croatian Institute for Health Insurance
CPF	– Croatian Privatisation Fund
CPI	– consumer price index
CPIA	– Croatian Pension Insurance Administration
CM	– Croatian Motorways
CNB	– Croatian National Bank
CR	– Croatian Roads
EBA	– European Banking Authority
ECB	– European Central Bank
EFTA	– European Free Trade Association
EMU	– Economic and Monetary Union
EU	– European Union
EUR	– euro
excl.	– excluding
f/c	– foreign currency
FDI	– foreign direct investment
Fed	– Federal Reserve System
FINA	– Financial Agency
f.o.b.	– free on board
GDP	– gross domestic product
GVA	– gross value added
HANFA	– Croatian Financial Services Supervisory Agency
HICP	– harmonised index of consumer prices
HRK	– kuna
incl.	– including
IMF	– International Monetary Fund
JPY	– Japanese yen
m	– million
MIGs	– main industrial groupings
MM	– monthly maturity
MoF	– Ministry of Finance
NCA	– National Classification of Activities
n.e.c.	– not elsewhere classified
NUIR	– net usable international reserves
OECD	– Organisation for Economic Co-Operation and Development
OG	– Official Gazette
R	– Republic
RAMP	– Reserves and Advisory Management Program
ROAA	– return on average assets
ROAE	– return on average equity
o/w	– of which
PPI	– producer price index
Q	– quarter
RR	– reserve requirement
SDR	– special drawing rights
SGP	– Stability and Growth Pact
SITC	– Standard International Trade Classification
USD	– US dollar
VAT	– value added tax
ZSE	– Zagreb Stock Exchange
ZMM	– Zagreb Money Market

Symbols

–	– no entry
....	– data not available
0	– value is less than 0.5 of the unit of measure being used
	– average
a, b, c,...	– indicates a note beneath the table and figure
*	– corrected data
()	– incomplete or insufficiently verified data

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