



**SEMI-ANNUAL INFORMATION 2019** 

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CROATIAN NATIONAL BANK Publishing Department Trg hrvatskih velikana 3 10000 Zagreb

Phone: +385 1 45 64 555 Contact phone: +385 1 45 65 006

Fax: +385 1 45 64 687

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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 First Half of 2019

2019



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## 1 Summary

Economic activity picked up in the first half of 2019, with household consumption and gross fixed capital formation making the strongest contribution to the 3.1% annual increase in real GDP. The strengthening of personal consumption was supported by continuing favourable developments in the labour market, the rise in household loans and the high level of consumer optimism. In the same period, the sharp uptick in capital investments largely reflected stronger investment activity of the general government. Government consumption and the rise in exports of goods and services also added to economic growth. Driven by an upsurge in domestic demand, imports grew more than exports, so that the negative contribution of net foreign demand increased.

Favourable developments in the labour market marked the first half of 2019. Employment went up steadily and was 2.3% higher than in the same period of 2018. The strongest contribution to employment growth came from construction, tourism-related service activities, business services and information and communication activities. Unemployment continued to decrease in early 2019, but the number of unemployed persons remained unchanged in the second quarter. The registered unemployment rate averaged 8% in the first half of the year. The first six months of 2019 were characterised by a steady increase in wages, with the average nominal gross wage being 3.8% higher than in the same period of 2018.

The consumer price inflation rate decelerated from 0.8% in December 2018 to 0.6% in June 2019. Having slowed down to 0.2% in January 2019, largely owing to the cut in the VAT rate on some food and pharmaceutical products and the drop in crude oil prices on the global market, inflation accelerated in the following months. It picked up to 0.6% in June, driven mostly by the rise in the annual growth rate of energy prices (refined petroleum products and gas) and processed food products. On the other hand, core inflation edged up from 1.0% in December 2018 to 1.1% in June 2019, primarily as a result of the spillover of higher prices of some agricultural products (e.g. milk and pork) in the EU market to domestic prices. Overall, imported inflationary pressures were subdued against the backdrop of low core inflation in the euro area and a mild fall in the average prices of crude oil in the global market in the first half of 2019, when compared to the 2018 average. Domestic inflationary pressures stemming from accelerated growth in domestic demand and rising unit labour costs gave only a slight upward push to prices in the first six months.

The surplus in the current and capital account was narrower in the first half of 2019 than in the same period of the previous year as a result of the continued widening of the goods trade deficit and, to a much smaller extent, of the worsening of the balance in the primary income account. Such unfavourable developments were only partly mitigated by the improved balance in the secondary income account and in the account of capital transactions. The financial account of the balance of payments was marked by net capital inflows resulting from an increase in net foreign debt liabilities and a slight increase in net equity investments.

By pursuing an expansionary monetary policy, the CNB has continued to support the exceptionally high levels of monetary system liquidity while maintaining at the same time a stable nominal exchange rate of the kuna against the euro. In such conditions, banks had no interest in the short-term kuna funds offered at regular weekly auctions. High liquidity also continued to support the trend of falling interest rates on loans of domestic credit institutions present for many years. At end-June 2019, annual growth in total placements to domestic sectors (excluding the government) stood at 3.6%, with placements to non-financial corporations falling by 1.0% due to several oneoff effects over the past year, while household placements increased by 6.7%, spurred mostly by the growth in general-purpose cash loans. To lessen the risks associated with the granting of general-purpose cash loans, in February the CNB issued a Recommendation on actions in granting non-housing consumer loans, recommending credit institutions to exercise caution when granting new general-purpose cash loans, particularly loans with longer maturities, and encouraging consumers to exercise prudence when borrowing.

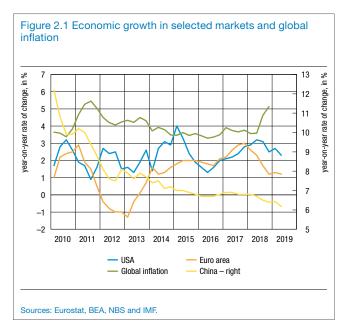
CNB's total international reserves increased by 14.0% from the end of 2018 to the end of June 2019, and net international reserves grew by 5.7% in the same period. The increase in international reserves in the first half of 2019 was brought about by the purchase of foreign exchange from banks to prevent the appreciation pressures on the kuna, the purchase from the MoF, a higher level of agreed repo transactions and foreign currency inflows to the MoF account. Although more than a half of government securities of euro area member states had negative yields, the annual rate of return on the entire euro portfolio was 0.31% in the first six months of 2019, while the annual rate of return on the dollar portfolio totalled 2.57%. The main objective was thus successfully achieved, i.e. liquidity and safety in international reserves management.

Bank assets and profitability trended up in the first half of 2019 and the capitalisation and liquidity of the system remained high, while the quality of credit risk exposure continued to improve. Total assets grew by 0.8%, mostly driven by growth in securities investments, followed by lending to households and the effect of regulatory changes in accounting for leases. Bank profits grew on account of larger non-interest income and smaller credit risk expenses. The recovery in profits in the first half of 2019 led to an increase in both indicators of return, with ROAA and ROAE growing to 1.9% and 11.3%, respectively. As the quality of the credit risk exposure continued to improve, the non-performing loans ratio came to 7.3% at the end of the first half of 2019. Notwithstanding an increase in risk exposure, total capital ratio stood at a high 22.9%.

Mostly favourable developments in public finance continued in the first half of 2019. In this period, the general government deficit (ESA 2010) was HRK 0.4bn, very similar to that recorded in the same period of the previous year. This reflected the significant annual growth in both budget revenues (7.4%) and expenditures (7.2%). Towards the end of June 2019, the general government debt stood at HRK 297.9bn, up by HRK 11.8bn from the end of 2018. The growth was primarily due to the pre-financing of a part of the liabilities that arise from foreign securities and fall due in the second half of 2019.

### 2 Global developments

The global economic slowdown, which began in 2018, continued in the first half of 2019, particularly in emerging market countries. The slowdown was particularly noteworthy in India and China, where the several-year trend of sluggish growth continued. As for developed countries, US economic growth picked up sharply early in the year but decelerated perceptibly by the beginning of summer. As for the euro area, while the first quarter data suggested that economic growth might become stable, the slowdown was seen throughout the rest of the period under review, largely due to unfavourable trends in the German economy. Despite the rise in the prices of energy, oil in particular, global inflationary pressures remained subdued owing to weaker global economic growth. Accommodative monetary policies, still prevailing in the majority of large economies, particularly due to the halting of the upward movement of the Fed key interest rate, provided for relatively favourable financing conditions.



The growth of the US economy, the world's largest, slowed down from 2.8% in the second half of 2018 to 2.5% in the first half of 2019, and had a somewhat altered structure. Personal consumption driven by the dynamic labour market with record low unemployment rates was again the main generator of economic activity. However, in contrast to the previous periods when gross fixed capital formation added strongly to the US GDP growth, the major contribution in the first six months of 2019 came from accumulation of finished goods inventories. As the deceleration of economic activity was accompanied by weaker inflationary pressures, the rise in consumer prices in the first half of 2019 stood at 1.6% in June, below the Fed target.

The slowdown in economic activity in the euro area persisted in the first six months of 2019. Economic growth slowed down further to 1.2% in the first half of 2019, from 1.4% in the second half of 2018. While this trend was widely spread and observed in most EU member states, particularly noteworthy was the slowdown in Germany, due to problems in its

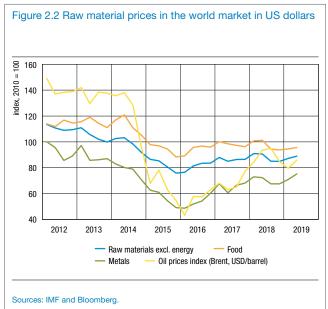
export-oriented manufacturing sector, followed by Italy and the Netherlands. Such adverse developments in the euro area were mostly due to the fall in industrial production driven by the weakening of foreign demand. However, the problems in the export-oriented manufacturing sector, particularly in Germany, were only slightly reflected in the labour market and the rest of the economy, i.e. the service sector, which again recorded robust growth.

#### 2.1 Croatia's main trading partners

Most of Croatia's major trading partners saw slower growth in the first half of 2019. As well as in Germany and Italy, where, as mentioned above, unfavourable developments present since the end of 2018 continued, slower growth was also seen in Slovenia and Austria. Nevertheless, both Slovenian and Austrian economic growth again outperformed the euro area average by a large margin. The countries of Southeastern Europe continued to be the most dynamic economies among Croatia's main trading partners, but their growth was also slower than in the same period of the previous year.

#### 2.2 Prices of raw materials

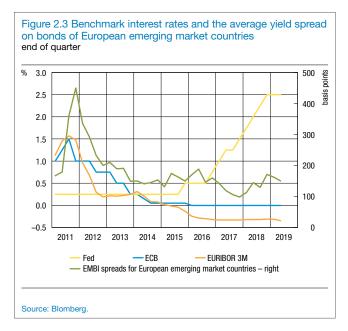
Global raw material prices grew in the first six months of 2019. As a result, the average price of a barrel of Brent crude oil stood at USD 63 in June, up by USD 7 or 11% from the end of 2018. The increase in crude oil prices in early 2019 was largely driven by the cuts in oil output agreed by OPEC countries and other major producers and the fall in oil output in Iran, Libya and Venezuela. The rise was also due to the US decision to terminate the exemption from sanctions for large importers of Iranian oil, such as China and India. On the other hand, the heightening of trade tensions between the USA and China and the expected global growth slowdown, with the



related slump in demand for oil, partly offset the price increase. Prices of raw materials excluding energy also grew in the first half of 2019. The sharpest increase was seen in metal prices (iron ore in particular), which may be associated with supply disruptions. Prices of some food products (pork) also went up, largely due to the decrease in supply of such products in China, triggered by the incidence of swine fever in that country.

#### 2.3 Financing conditions

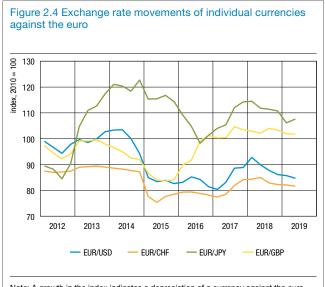
Having raised its benchmark interest rate on three occasions in 2018, the Fed changed its monetary policy stance and economic growth expectations in the first half of 2019 and left its interest rates unchanged. Given that the ECB did not change the benchmark interest rate in the observed period, the trend of divergence in the monetary policies of the US and the euro area came to halt.



Following a sharp deterioration throughout 2018, spurred by trade tensions and the peak of the economic crisis in Turkey, financing conditions for European emerging market countries, including Croatia, improved in the first half of 2019. The EMBI index for European emerging markets decreased by about 21 basis points in the reference period from the end of 2018. This was a result of the stabilisation in Turkey and the elimination of the risk of a further increase in US interest rates.

#### 2.4 Exchange rates

The tendency of the euro to weaken against the US dollar in the world foreign exchange market, present since the beginning of 2018, continued in the first half of 2019. At the end of June 2019, the exchange rate of the US dollar against the euro stood at EUR/USD 1.14, which is a decrease of 0.7% from the end of 2018. This was mostly due to favourable economic performance in the US, particularly in the first quarter, and lower tensions and the progress, as it seemed at that time, in trade negotiations with China. In the same period, the economic slowdown in the euro area and Brexit uncertainty and delay led to the weakening of the euro. On the other hand, the reversal of the US monetary policy stance only partly offset the strengthening of the dollar. The exchange rate of the Swiss franc against the euro was around 0.7% lower at end-June than at the end of 2018, standing at EUR/CHF 1.13.

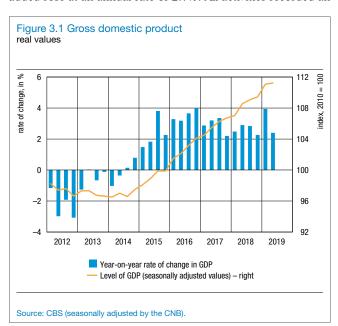


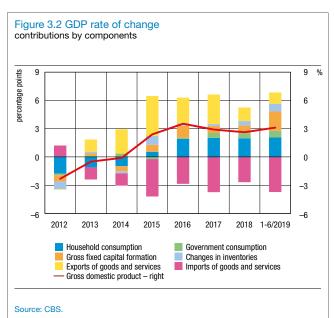
Note: A growth in the index indicates a depreciation of a currency against the euro. Source: Eurostat.

## 3 Aggregate supply and demand<sup>1</sup>

Economic growth picked up in the first half of 2019, with the real GDP growth rate going up to 3.1%, from 2.7% in the same period of 2018. The rise in personal consumption and the growth in investments made the largest individual contributions to economic growth on an annual basis. Investment growth was associated with larger than usual investments of the general government. As concerns foreign demand, economic growth was also boosted by the growth of exports of goods and services. The strengthening of domestic demand resulted in a faster growth in imports than in exports, so that the negative contribution of net foreign demand increased from the previous year.

GDP by the production approach showed that gross value added rose at an annual rate of 2.7%. All activities recorded an



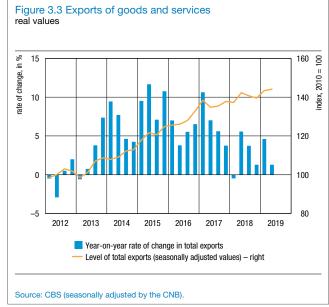


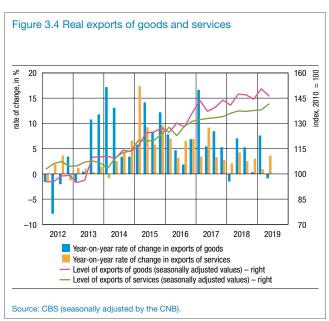
increase, with the annual growth being especially high in construction.

#### 3.1 Aggregate demand

Real exports of goods and services continued to increase in the first half of 2019, growing annually by 2.7%. The dynamics of the overall goods exports strengthened in the first three months of 2019 (4.6%) and slowed down in the second quarter (1.3%) as a result of unfavourable trends in goods exports.

The annual growth of goods exports picked up to 3.2% in the first half of 2019, from 2.8% in the same period of the previous year. Nominal data on the trade in goods broken down



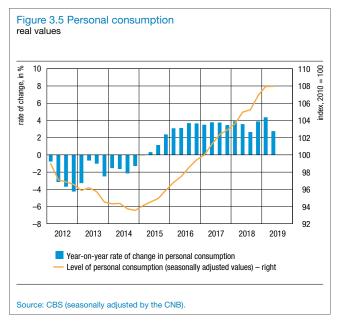


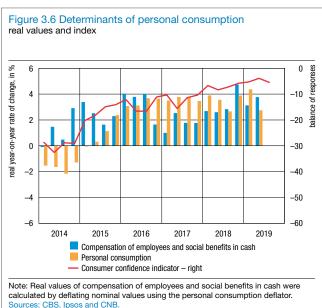
<sup>1</sup> Official CBS data on quarterly GDP available as at 13 November 2019 were used in the Semi-annual Information.

by main industrial groupings show that exports of all the main industrial groupings, excluding energy, trended up in the first half of 2019. Exports of services grew by 2.6% from the same period of 2018, picking up pace in the second quarter thanks to favourable developments in tourism.

Personal consumption steadily grew in the first six months of 2019 at a pace similar to that seen throughout 2018 (3.5%). The rise in household consumption was boosted by the growth in real disposable income driven by favourable trends in the labour market. Both employment and net wages continued to rise. An additional boost to personal consumption came from the further rise in consumer confidence, which in the second quarter of 2019 reached its highest level ever. In addition, household lending also increased. The quarterly dynamics shows that personal consumption lost pace from the beginning of 2019, first growing by 1.0% in the first three months, and then holding steady in the second quarter.

The increase in gross fixed capital formation intensified significantly in the first six months of 2019. Investment activity rose annually by 9.7%, much more than in the same period of

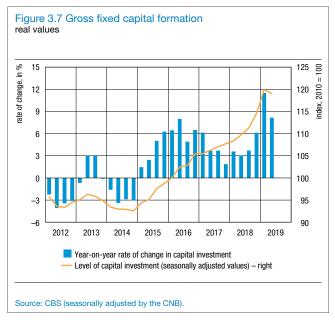


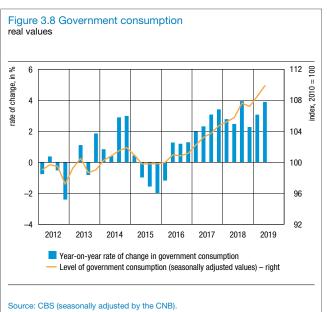


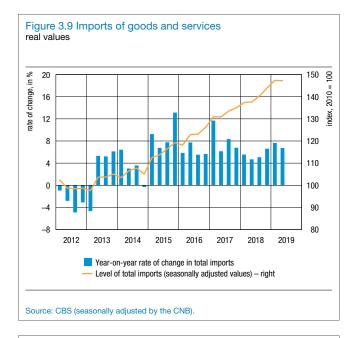
2018, when it grew by 3.3%. The pick-up in investment may be attributed to the rise in capital investment by the general government and the more vigorous use of EU funds. Furthermore, favourable trends are also suggested by the data on the increase in civil engineering works, which is associated with general government investments. Construction works on buildings also intensified in the first half of 2019, which implies that the private sector also added to the rise in overall capital investments. Along with personal consumption, the increase in investment activity contributed the most to real GDP growth in the first six months of 2019.

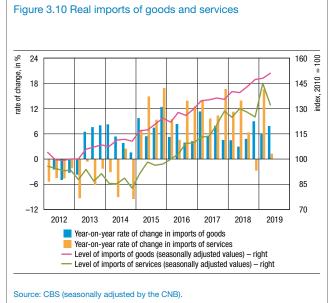
The annual growth of government consumption stood at 3.5% in the first half of 2019, also making a positive contribution to overall real GDP growth. Nominal data point to a considerable increase in general government expenditures on compensation of employees and social benefits in cash, which was coupled with the rise in the number of persons employed in the public sector.

Imports of goods and services grew by 7.2% in the first half of 2019 from the same period in 2018. The acceleration





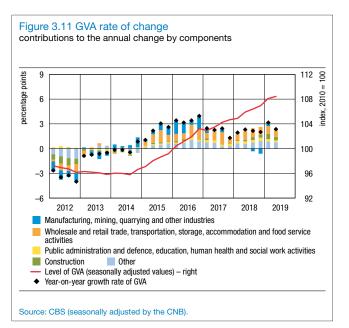




in goods imports on an annual level (5.1% in the first half of 2018) mostly reflects the stronger investment activity and personal consumption. Nominal data on the trade in goods show that on an annual basis imports grew in all the main industrial groupings, particularly imports of capital goods. Imports of services also recorded annual growth, of 8.4%, which is attributable to expanded tourist consumption of residents abroad. Imports growth outstripped exports growth in the first half of 2019, which increased the negative contribution of net foreign demand to total GDP growth (–2.5 percentage points vs. –1.2 percentage points in 2018).

#### 3.2 Aggregate supply

The increase in gross value added picked up to 2.7% on an annual basis from January to June 2019. The largest contribution to GVA growth came from retail trade, transportation and storage, accommodation and food service activities, driven by expansion of household consumption and favourable developments in tourism. GVA grew on an annual basis in all other activities as well.

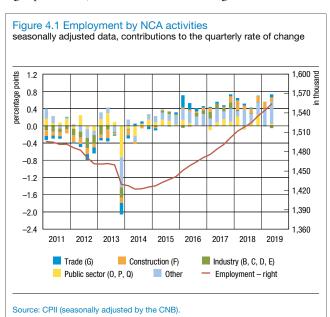


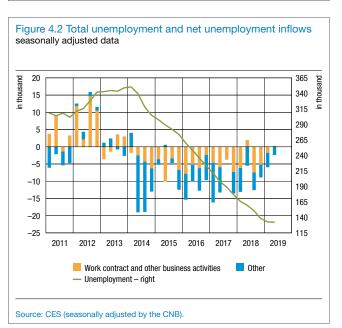
#### 4 Labour market

#### 4.1 Employment and unemployment

Employment steadily grew in the first half of 2019, continuing its upward trend. The strongest contribution to employment growth from the end of 2018 came from construction, tourism-related service activities, business services and information and communication activities. Employment grew by 2.3% from the same period of the previous year

Unemployment continued to decrease in the first three months of 2019, but the number of unemployed persons remained almost unchanged in the second quarter. However, the average number of unemployed persons was 4% lower in the first six months than at end-2018, according to seasonally adjusted data. The decrease was due more to intensified removal from the CES register because of non-compliance with legal provisions, cancellation from the register and failure to



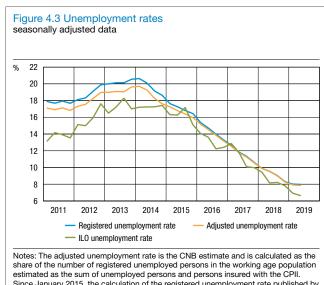


report regularly, than to new employment. The number of unemployed persons dropped by around 30 thousand in the first six months of 2019 from the same period of 2018.

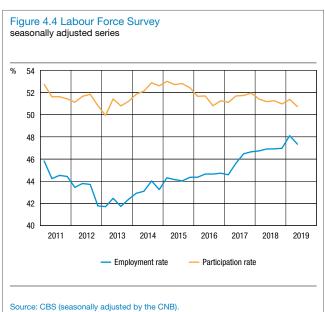
As a result, the registered unemployment rate went down from 8.3% at end-2018 to 8% in the first guarter of 2019 and then held steady in the second quarter. It was 1.8 percentage points lower in the first half of 2019 than in the same period of 2018.

A slightly sharper decrease in unemployment is suggested by the Labour Force Survey data, which show that the ILO unemployment rate (seasonally adjusted data) dropped to 6.8% in the first six months of 2019, from 7.8% in the last quarter of 2018. A comparison of the first half of the year with the same period of the previous year shows that the ILO unemployment rate fell by 2.1 percentage points.

The participation rate held nearly steady at 51% in the first



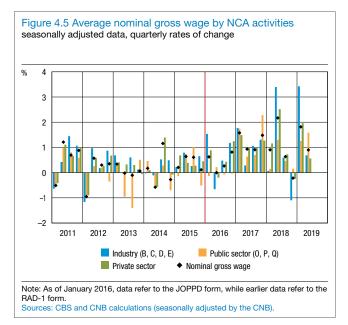
Since January 2015, the calculation of the registered unemployment rate published by the CBS has been made using the data on employed persons from the JOPPD for Sources: CBS and CES (seasonally adjusted by the CNB)



six months of 2019, but dropped slightly on an annual level as the annual decrease in unemployment outpaced the increase in employment.

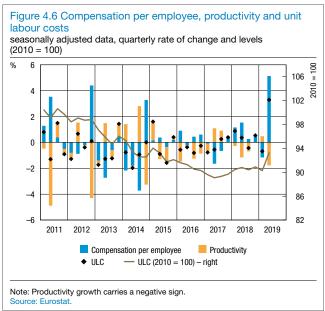
#### 4.2 Wages and unit labour costs

After a brief interruption in late 2018, the upward trend in wages was resumed in the first half of 2019. The nominal gross wage was on average 2.3% higher than at end-2018, with private and public sector wages growing at almost the same pace. Wage growth was much more pronounced in the first than in



the second quarter due to the sharp increase in wages in industry early in the year. Real wages grew at a pace similar to that of nominal wages in the first half of 2019. Nominal gross wages went up 3.8% and real wages grew by 3.2% from the same period of the previous year.

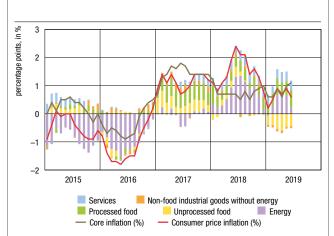
According to the national accounts data, compensation per employee decreased at the beginning of 2019, but grew sharply in the second quarter. Coupled with the fall in labour productivity in the second quarter, such movements led to a significant increase in unit labour costs, as evident in the average growth of this indicator in the first six months. Unit labour costs also grew on an annual basis.



#### 5 Inflation

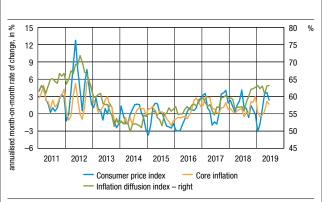
The annual consumer price inflation rate decelerated from 0.8% in December 2018 to 0.6% in June 2019. Responding to a cut in the VAT rate on certain products and a fall in crude oil prices on the global market towards the end of 2018, consumer price inflation dropped to 0.2% in January 2019. It picked up in the following months, largely due to the increase in the annual growth rate of energy prices (refined petroleum products and gas) and processed food. The prices of crude oil on the global market rose sharply in the first four months of 2019 and then dropped, contributing strongly to domestic inflation volatility. As regards other imported inflationary pressures, the prices of some agricultural products (e.g. milk and pork) went up in the EU market due to increased demand on the global market and these developments started gradually to spill over to the domestic producer and consumer prices of these products. By contrast, low core inflation in the euro area had a





Notes: Core inflation does not include agricultural product prices, energy prices and administered prices. Processed food products include alcoholic beverages and tobacco. Sources: CBS and CNB calculations.

Figure 5.2 Indicators of current inflation trends



Notes: The month-on-month rate of change is calculated based on 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

dampening effect on inflation in Croatia. Domestic inflationary pressures stemming from a faster increase in domestic demand and growing unit labour costs in the first six months gave an upward push to industrial producer prices in the domestic market (excluding energy).

Broken down by components, overall consumer price inflation decelerated slightly in the first half of 2019 mainly as a result of the fall in the annual rate of change in the prices of unprocessed food products and, to a smaller extent, industrial products (pharmaceuticals). The contribution of unprocessed food to the overall inflation edged down from -0.1 percentage point in December to -0.4 percentage points in June, mainly due to the decline in the prices of fruit and vegetables. The developments in consumer price inflation were strongly influenced by tax changes at the beginning of 2019, as analysed in detail in Box 1 Estimation of the impact of the VAT rate cut for certain products on short-term consumer price movements.

Core inflation accelerated slightly from 1.0% in December to 1.1% in June, mostly as a result of the rise in the annual growth rate of processed food prices.

The annual rate of change in industrial producer prices (excluding energy) grew from -0.3% in December to 1.0% in June. To a large extent this was due to the growth in the prices of consumer goods. Inflationary pressures from the production process were partly driven by the rise in unit labour costs.

The implicit deflator of GDP fell slightly from 1.5% in the fourth quarter of 2018 to 1.4% in the second quarter of 2019. By contrast, the implicit deflators of imports and exports of goods and services grew in the first half of 2019. The growth in the deflator for goods and services exports was more pronounced, which points to an improvement in trade conditions.

The annual rate of inflation in the euro area measured by the harmonised index of consumer prices slowed down from 1.5% in December 2018 to 1.3% in June 2019. This was mostly due to energy prices, whose annual growth rate fell from 5.5% in December to 1.7% in June. The euro area also recorded a fall in the contribution of unprocessed food products to

Figure 5.3 Deflator of GDP and its individual components 12 rate of change 9 6 year-on-year -3 2011 2012 2013 2014 2015 2016 2018 2019 2017 Deflator of exports of goods and services - Deflator of imports of goods and services - Deflator of personal consumption

Source: CBS

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

Sources: CBS and Eurostat.

	6/18	9/18	12/18	3/19	6/19	
Consumer price index and its components						
Total index	2.4	1.4	0.8	0.9	0.6	
Energy	7.9	5.3	0.9	4.0	1.4	
Unprocessed food	3.8	-0.1	-0.6	-5.7	-4.7	
Processed food	1.5	0.9	1.9	2.6	2.6	
Non-food industrial goods without energy	0.5	-0.3	0.1	-0.4	-0.3	
Services	1.0	1.4	1.1	1.2	1.3	
Other price indicators						
Core inflation	0.7	0.5	1.0	0.9	1.1	
Index of industrial producer prices on the domestic market	3.4	3.4	0.5	2.3	0.4	
Index of industrial producer prices on the domestic market (excl. energy)	-0.1	-0.2	-0.3	0.1	1.0	
Harmonised index of consumer prices	2.2	1.6	1.0	1.1	0.5	
Harmonised index of consumer prices at constant tax rates	2.1	1.5	0.8	1.7	1.1	

annual inflation. By contrast, the annual growth in the prices of services and processed food accelerated slightly in the first half of the year. Core inflation (which excludes the prices of energy, food, alcoholic beverages and tobacco) picked up in the euro area, from 0.9% in December to 1.1% in June, spurred mostly by the faster annual growth of services prices, especially the prices of transport services, hotel and restaurant services and

Figure 5.4 Indicators of price developments in Croatia and the euro area rate of change, year-on-year 2 2011 2019 2012 2013 2014 2015 2016 2017 2018 Croatia - HICP — Euro area – HICP Croatia – HICP excl. energy, food, alcoholic beverages and tobacco Euro area – HICP excl. energy, food, alcoholic beverages and tobacco Source: Furostat

package holidays.

Croatia's annual inflation rate measured by the HICP went down from 1.0% in December 2018 to 0.5% in June 2019. This was mainly a result of the fall in the annual rate of change in the prices of unprocessed food products and industrial nonfood products excluding energy (mostly due to the impact of the VAT rate cut). Croatia's overall inflation was much lower (by 0.8 percentage points) than euro area inflation in June 2019, mainly due to the much smaller contribution of unprocessed food and services to overall inflation in Croatia than in the euro area. Core inflation (measured by the HICP) slowed down in Croatia, from 1.0% in December 2018 to 0.5% in June, i.e. 0.6 percentage points lower than in the euro area.

# Box 1 Estimation of the impact of the VAT rate cut for certain products on short-term consumer price movements

The findings of the analysis using a detailed database of product prices show that the estimated pass-through of tax changes to consumer prices was significant for most products, but not full, and that it mostly took place in January 2019. Furthermore, results suggest that there was also a certain spillover of reduced VAT rates to those food products to which the tax changes did not apply, although such a spillover was lower in intensity. The total direct effect of the VAT rate cut in the period from December 2018 to February 2019 is estimated to be –0.6 percentage points, of which –0.5 percentage points refers to food products. As a result, the pass-through of tax changes to this group of products was around 50%.

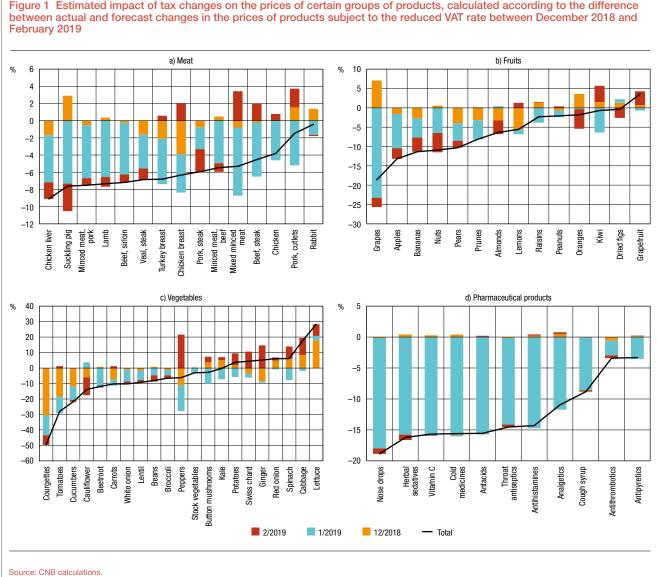
In January 2019, the value added tax (VAT) rate was reduced

for certain food products<sup>2</sup> and napkins for babies from 25% to 13% and for over-the-counter drugs from 25% to 5%. Domestic experience and experiences of other countries<sup>3</sup> suggest that the pass-through of the VAT rate change to consumer prices is, as a rule, not full, and that the price change driven by tax changes does not appear only in the month in which tax changes take effect. Furthermore, research findings suggest that the pass-through of tax changes to prices is lower in cases in which tax is reduced instead of increased.<sup>4</sup> Had the lowered VAT rates been transferred to consumer prices in full, the prices of food products covered by the legislative change would have dropped by 9.6% and the prices of over-the-counter drugs would have fallen by 16%. However, the actual pass-through is most often not full

<sup>2</sup> Fresh or chilled meat, sausages, fish, crayfish, vegetables, roots and tubers, including dry leguminous vegetables, fresh and dried fruits and nuts, eggs and napkins for babies.

<sup>3</sup> See, for example, Price and volume effects of VAT increase on January 2007, Monthly report, Deutsche Bundesbank, April 2008; Impact of the VAT rate increase in January 2012 on inflation, Quarterly Report on Inflation, Box 3-2, Magyar Nemzeti Bank, March 2012; Impact of the rise in VAT rates on inflation, Macroeconomic Developments and Projections, Box 6.1, Banka Slovenije, October 2013.

<sup>4</sup> See, inter alia, Benkovskis, K., and L. Fadejeva (2014): The effect of VAT rate on inflation in Latvia: evidence from CPI microdata, Applied Economics, Vol. 46, No. 21, pp. 2520-2533.

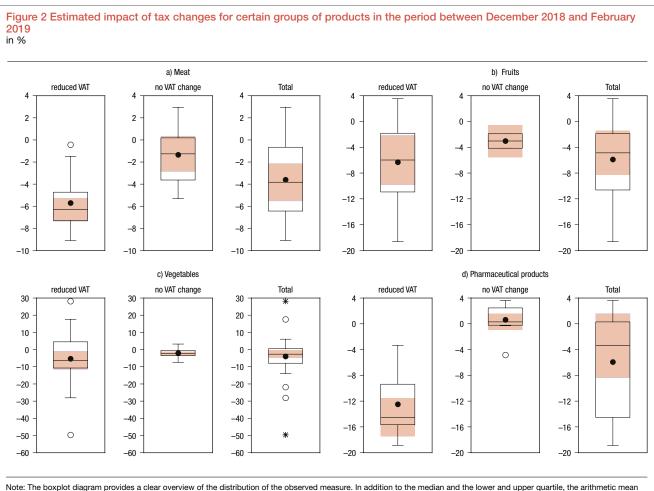


and needs to be estimated. There are several reasons that may explain the partial spillover of tax changes to consumer prices. The intensity of the VAT rate cut pass-through to prices depends on the degree of competition in the market. Some retailers will reduce prices only partially so as to increase profits as long as they think that such a practice will not result in the loss of their market share. Among other things, the relatively strong increase in personal consumption is a factor that may affect the reduced pass-through of VAT rate cuts to consumer prices, since retailers tend to be less motivated to let reduced tax rates spill over to product price cuts. Moreover, agricultural product prices are not only monitored in shops, but also on farmers' markets, and because many family farms are not included in the VAT system, it is questionable whether they have the option of reducing prices.

The main difficulty in analysing the impact of tax changes on prices lies in the fact that price movements at the time the tax changes took effect were also under the influence of numerous other factors such as seasonal fluctuations and changes in import prices. In practice, it is very difficult to separate the effect of such usual generators of price changes from those caused by tax changes alone. Furthermore, certain retail chains reduced prices as early as in December 2018, i.e. before the tax changes entered into force, additionally blurring the impact of changes on inflation.

Considering the facts mentioned above, the pass-through of tax changes to prices in Croatia is analysed using the detailed database of the average prices of all products used by the Croatian Bureau of Statistics to create the consumer price index. The analysis of inflation on a disaggregated level is useful for gaining a better understanding of the formation of consumer prices, the monitoring of which is an important task of the central bank in the context of its primary objective, which is to support low and stable inflation. In the micro approach to the estimation of the impact of the VAT rate cut on prices, a univariate statistical model (ARIMA (0,1,1)(0,1,1))5 was developed for each of the 128 products from the group of products to which tax changes apply based on the data from September 2013 to November 2018, after which, using the model, a forecast of prices of particular

The aforementioned model is also known as the airline model and is frequently used as a part of seasonal adjustment procedures (TRAMO/ SEATS and X-13 ARIMA-SEATS), as it proved to be a good benchmark model for modelling series with a pronounced seasonal component.



(indicated by a dot) and atypical values are shown. Shaded areas indicate limits of median reliability that are quite wide due to a small number of products.

Source: CNB calculations.

products was made for the following three-month period.<sup>6</sup> The month preceding the month in which the tax changes took effect was also included in the analysis as some retailers lowered prices as early as in December 2018. The forecast prices represent anticipated prices in the hypothetical scenario assuming that no tax changes occurred. The difference between the actual and the forecast price of a particular product represents the estimation of the impact of the VAT rate cut on the price of the product.

Results are shown as the difference between the actual and the forecast change in the price of a particular product in the period between November 2018 and February 2019<sup>7</sup> (Figure 1, Total), whereby the total difference broken down by monthly contributions is shown. Negative values in Figure 1 reflect cases

wherein actual price changes in the observed period were lower than the forecast price changes. Results obtained<sup>8</sup> show that the pass-through of tax changes to consumer prices was significant, but not full for most of the products. In addition, it is evident that the effect of VAT reduction on prices varied significantly across analysed products and categories, and that the largest part of the pass-through occurred in January. The median of the estimated impact of VAT reduction on the prices in the category "Meat" was -6.3%<sup>9</sup>, in "Fruits" -6%, in "Vegetables" -6.2%, in "Fish" -2.7%<sup>10</sup>, in "Eggs" -12.1%<sup>11</sup>, in "Napkins" -5.3% and in "Over-the-counter drugs" -14.5%.

The credibility of the findings may be tested by comparing the change in the prices of products for which the VAT rate was

- 6 A calculation was made in which actual prices in corresponding product categories in the EU were controlled for in the airline model; however, this had no effect on the results, which proves that the aforementioned price adjustment is not a result of a price change in the external market.
- 7 Even though tax change can be estimated in the longer term, the specified period was chosen because the model used to forecast prices is more suitable for short-term forecasts.
- 8 Since analysis findings largely depend on forecast quality, the same calculation was carried out using an alternative forecast method to test the robustness of the conclusions. If, instead of using airline models, product prices over the analysed period are forecast using the actual average inter-monthly rate in the relevant month obtained from the available database, the findings change only slightly.
- 9 Since the weights for this level of disaggregation do not exist (there is no weight for, say, suckling pig), the average impact is shown as a median for all products in a particular group, whereby a rough estimate of the total pass-through of tax change to a group of products is obtained.
- 10 The movements in the prices of fish at the time the tax changes took effect were significantly influenced by other factors (such as the small oily fish close season).
- 11 A pass-through exceeding 100% was calculated for eggs. It is possible that eggs were included in some promotional activity over the observed period, resulting in a drop in prices more substantial than what would have been anticipated on account of VAT reduction alone.

cut with those from the "control group" of products for which the rate remained the same. The diagram in Figure 2 clearly shows that the difference between actual and forecast rates of change in prices was significantly higher for products included in the tax change, suggesting that reduced VAT rates did pass through onto product prices. In most categories, the pass-through was significant, but not full. In addition, Figure 2 suggests that, as a result of the VAT rate cut, the prices for groups of products for which the VAT rate remained the same were also reduced, but significantly less than the prices of products to which the tax change applied. There are two possible explanations for such developments. First, there is probably a certain effect of price change spillover between the two groups of products. For instance, it is reasonable to expect that the reduction of VAT on fresh pork would be reflected in the prices of bacon. Secondly, against the backdrop of vigorous competition, prices of food products for which the VAT rate was not cut may be lowered as well in order to attract customers.

The pass-through of the VAT rate cut to overall consumer price inflation has been analysed on the basis of data released by the CBS in relation to which it was possible to estimate weights for products with reduced VAT rates in the overall consumer price index (CPI). As a result, the impact of tax changes on inflation may be expressed in percentage points. In the approach to the estimation of the impact of VAT rate cut on a higher aggregation level, a univariate ARIMA model was estimated for particular CPI components to which tax changes apply, in a similar way as in the micro approach. The aforementioned model was used as a basis for the forecast of the price index movement in individual product groups. When interpreting analysis results, it is important to bear in mind that they refer only to the direct impact of VAT reduction on the changes in the prices of products subject to tax changes. The contribution of the impact of VAT reduction was calculated by multiplying the difference

Table 1 Difference between the actual and the forecast contribution of individual groups of products (subject to the reduced VAT rate) to the monthly CPI rate of change

#### percentage points

	Estimated o	Takel			
	December 2018	January 2019	February 2019	Total	
Meat	-0.02	-0.15	-0.05	-0.22	
Fish	0.01	-0.01	0.01	0.02	
Eggs	-0.03	-0.04	-0.02	-0.09	
Fruits	-0.01	-0.09	-0.08	-0.18	
Vegetables	-0.01	-0.13	0.10	-0.04	
Pharmaceutical products	0.00	-0.06	0.00	-0.06	
Total (CPI)	-0.05	-0.48	-0.05	-0.58	

Note: The elementary aggregate comprising napkins contains more than a single product, but there is no special weight for napkins, which is why they were excluded from calculations.

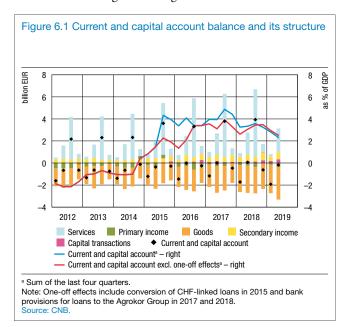
Source: CNB calculations.

between the actual and the forecast change in the price index of a particular product group with the estimated share of products subject to lower VAT rates. Accordingly, the total direct impact of VAT reduction in the period between December 2018 and February 2019 is estimated at –0.58 percentage points (Table 1), of which –0.52 percentage points refer to food products<sup>12</sup>, which means that the pass-through of tax changes to this group of products was around 50%. The most significant estimated contributions to the impact of the VAT rate cut to the overall CPI came from the categories "Meat" and "Fruits". Furthermore, the analysis has shown that the largest part (around 83%) of the total estimated pass-through of tax changes to consumer prices occurred in January 2019.

<sup>12</sup> The share of food products subject to a lower VAT rate in the CPI basket was estimated at around 10% in 2019, while the share of pharmaceutical products was estimated at around 1%.

## 6 Current and capital account

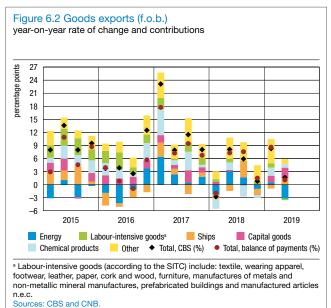
The current and capital account balance<sup>13</sup> deteriorated notably in the first half of 2019, mainly due to the widening of the foreign trade deficit. The deficit in the primary income account also increased, though to a much lesser extent, whereas net exports of services decreased slightly. On the other hand, unfavourable developments in the current and capital account were mitigated by the growing positive balance in the secondary income account and in the account of capital transactions. It can be seen from the cumulative values recorded over the past year that the surplus in the current and capital account at end-June stood at 2.3% of GDP, which was 0.9 percentage points lower than in the whole of 2018, largely due to the deterioration in the balance of foreign trade in goods.



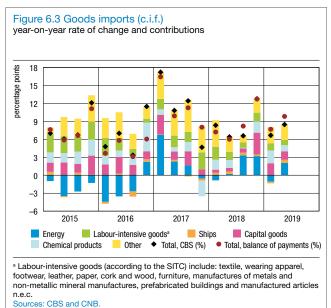
#### 6.1 Foreign trade and competitiveness

Foreign trade developments in the first six months of 2019 were marked by a noticeably larger deficit than in the same period of the previous year, as a result of a faster growth in imports than in exports. The annual growth rate of goods exports according to the balance of payments data was 5.6%, up from 3.5% in the same period of 2018. The increase in goods imports picked up to 8.8% in the same period, from 6.6% in the first half of 2018. The cumulative values recorded over the past year show that the goods trade deficit stood at 19.5% of GDP at end-June, which was 0.8 percentage points more than in the whole of 2018.

CBS data<sup>14</sup> show that the annual increase in goods exports in the first half of 2019 was mostly driven by greater exports of road vehicles (to Germany), followed by capital goods



(primarily electrical machinery, apparatus and appliances to the United Arab Emirates and Germany, and power generating machinery and equipment to Turkey and Canada) as well as medical and pharmaceutical products (to the USA) and other chemical products. In addition, an increase was also seen in exports of food products (particularly cereals and cereal preparations) and metal industry products. By contrast, export performance was adversely affected by the slump in energy exports (particularly oil and refined petroleum products), as well as the decrease in the exports of scientific and control instruments.



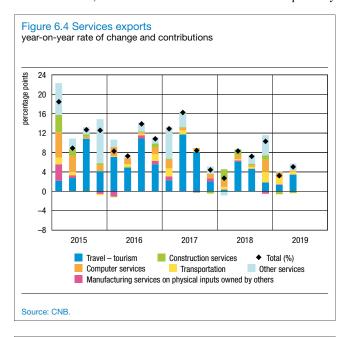
<sup>13</sup> Historical data from 2000 on have been revised at the time of publication of the balance of payment data for the second quarter of 2019.

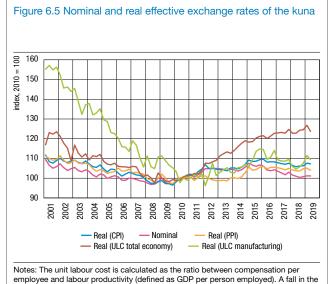
The effects of the revision of balance of payments data are explained in detail at: https://www.hnb.hr/-/hnb-revidirao-statistiku-odnosa-s-inozemstvom

<sup>14</sup> For more information on the differences in the scope of the trade in goods according to the balance of payments and CBS data see Box 3 Foreign trade developments according to the balance of payments data, Macroprudential Developments and Outlook No. 2, July 2017.

The annual increase in goods imports in the first half of 2019 was driven by stronger imports of medical and pharmaceutical products (from Korea and Israel), and other chemical products, followed by road vehicles (from Slovenia and Hungary) and capital goods (notably general industrial machinery, machinery specialised for particular industries and electrical machinery, apparatus and appliances) from Germany, Italy and Slovenia. An increase was also seen in imports of food products, metal industry products and energy (natural and manufactured gas and electricity). Imports growth was cushioned by the fall in the imports of oil and refined petroleum products and scientific and control instruments.

Net exports of services were slightly lower in the first half of 2019 than in the same period of 2018, as expenditure growth outstripped the increase in revenues. The noticeably larger tourist spending of residents abroad reflects residents' increased propensity to travel abroad amid relatively favourable domestic economic developments and growing income, as well as increased emigration flows following Croatia's accession to the EU, which resulted in increased consumption by





index indicates an effective appreciation of the kuna.

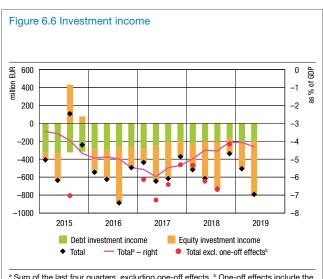
temporary seasonal and cross-border workers abroad and in frequent visits of residents to family and friends abroad. Revenues from tourism consumption of non-residents were upped by 4.9% from the same period in 2018, spurred by the growth in tourist arrivals of foreign guests. CBS data show that the number of arrivals and nights stayed by tourists in commercial accommodation facilities rose by 7.1% and 3.1% respectively, mostly thanks to visitors from Germany and Slovenia. Increases in revenues from travel services and expenditures on travel services were the same in absolute terms so that net exports of services held steady at last year's level. By contrast, a deterioration was recorded in the balance in the trade of other services, financial services in particular. The cumulative values recorded over the past year reveal that the surplus in the international trade in services decreased from 17.9% of GDP in 2018 as a whole to 17.5% at end-June 2019.

The indicators of price and cost competitiveness of Croatian goods exports remained almost unchanged in the first half of 2019, but showed diverse trends. The real effective kuna exchange rates deflated by consumer prices and unit labour costs at the level of manufacturing industry continued to depreciate slightly, whereas the real effective kuna exchange rates deflated by producer prices and unit labour costs for the economy as a whole appreciated mildly, thus alleviating the depreciation seen in the second half of 2018.

#### 6.2 Income and transactions with the EU

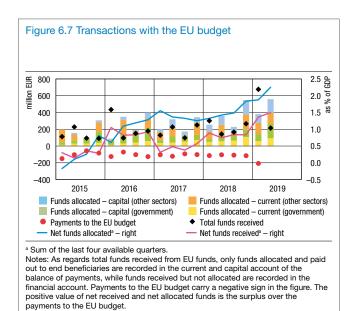
The negative balance of income from equity and debt investment was larger in the first half of 2019 than in the same period of the previous year as a result of the growth in net expenditures on equity investments spurred by higher profits of domestic enterprises owned by non-residents (mostly in the pharmaceutical industry) and lower profits of foreign enterprises in resident ownership. Net interest expenditures on debt investments edged down in the same period.

Net revenues arising from transactions with the EU budget rose sharply in the first six months of 2019 thanks to the greater use of EU funds than in the same period of 2018, though payments to the EU budget also grew as a result of an earlier

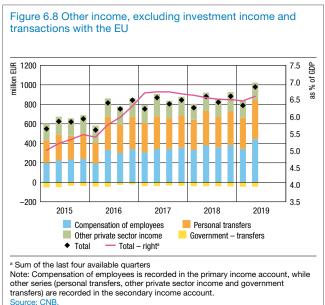


<sup>&</sup>lt;sup>a</sup> Sum of the last four quarters, excluding one-off effects. <sup>b</sup> One-off effects include the conversion of CHF-linked loans in 2015 and bank provisions for loans to the Agrokor Group in 2017 and 2018.

Sources: CNB and Mol



payment of a somewhat larger portion of the annual contribution. With regard to the use of EU funds, the amount of allocated capital funds showed the largest increase (notably as regards the government, but also other sectors), with a slightly lower growth also being observed in the amount of allocated current funds. The surplus of EU funds utilised over the payments to the EU budget, reported as the sum of the last



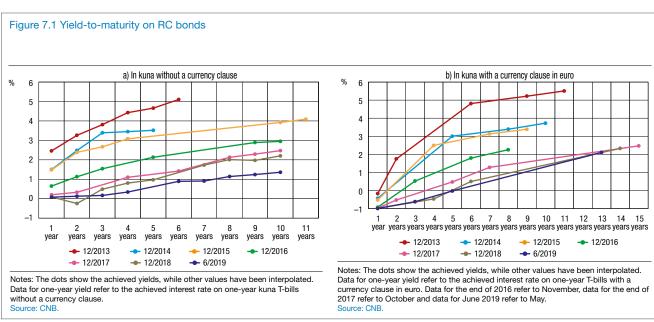
four quarters, increased from 1.8% of GDP in 2018 to 2.3% of GDP at the end of June 2019. Net inflow of other income, which excludes income from equity and debt investment and transactions with the EU budget, also went up owing to the growth in revenues from compensation of persons temporarily employed abroad and, to a smaller extent, the increase in revenues from personal transfers from abroad.

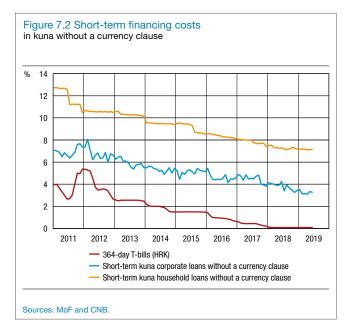
## 7 Private sector financing

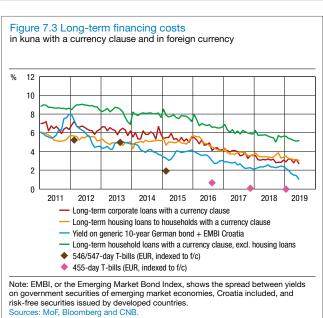
The several-year trend of improved financing conditions of domestic sectors continued in the first half of 2019. The yield curve for kuna bonds without a currency clause also points to more favourable government financing conditions in that period (Figure 7.1a), having dropped considerably in June 2019 from the end of 2018, while the yield curve for kuna bonds with a currency clause in euro remained virtually unchanged (Figure 7.1b). The interest rate on short-term government borrowing through the issue of one-year kuna T-bills in the domestic market dropped from 0.09% in December 2018 to 0.08% in April 2019, remaining at that level through to the end of June. The interest rate on one-year euro T-bills held steady at 0.00%, a level first recorded in May 2018. At the end of January 2019, the government issued T bills of EUR 1.05bn with a maturity of 455 days at an interest rate of 0.00% to partly refinance the EUR 1.5bn worth of maturing T-bills issued in

November 2017 at the interest rate of 0.1%. The remaining part of the maturing T-bills was refinanced by the domestic issue of the three-year bond in the amount of EUR 500m with a yield of 0.66%. In early February, the government issued the second tranche of the ten-year kuna bond worth HRK 5.0bn with a yield of 2.41% in the domestic capital market, while in mid-June it issued a ten-year euro bond worth EUR 1.5bn with a yield of 1.32% in the international market with a view to refinancing the dollar bond maturing in November.

The government's average costs of borrowing in the foreign market, estimated by the sum of the EMBI index for Croatia and the yield on the German government bond, decreased notably from 2.4% at the end of 2018 to 1.1% in late June 2019 (Figure 7.3), with the decline in the EMBI for Croatia contributing to the trend by 0.8 percentage points. The CDS spread saw a decrease in the first six months of 2019, falling from 96







basis points at the end of 2018 to 81 basis points at the end of June. As regards credit rating agencies' perception of Croatia's risk, in the first half of the year, two agencies, Standard & Poor's and Fitch, upgraded Croatia's credit rating from BB+ to BBB-, putting the country's rating back into investment category after a several-year long period. In addition, at the end of April, Moody's changed Croatia's outlook from stable to positive, maintaining the rating two grades below investment category, at Ba2, unchanged from March 2016.

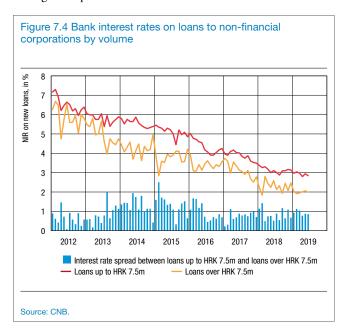
rate financing costs in the first half of 2019 were also reflected in the decrease in interest rates relative to loan amount (Figure 7.4). Interest rates on loans above HRK 7.5m were lower and more volatile, since such loans are used by a smaller number of large companies with more collateral and better access to

The costs of corporate financing continued to fall. The interest rate on short-term kuna loans without a currency clause was 0.2 percentage points lower this June than in late 2018 (Figure 7.2), and the interest rate on long-term corporate loans with a currency clause dropped by 0.4 percentage points in that period (Figure 7.3). The favourable movements of corpoalternative financing.

Household financing costs also continued their downward trend. The interest rate on long-term loans with a currency clause, excluding housing loans, was 0.5 percentage points lower in June than at the end of 2018 (Figure 7.3), while costs of financing associated with long-term housing loans with a currency clause dropped by 0.3 percentage points. At the same time, the interest rate on short-term kuna loans without a currency clause remained almost unchanged after the considerable decline seen in the previous years (Figure 7.2).

In addition to the exceptionally high financial market liquidity, the ongoing decrease in interest rates on loans to the private sector was also due to the further decline in the costs of funding of the Croatian banking system, with EURIBOR going deeper into negative territory (Figure 2.3) and the national reference rate (NRR)<sup>15</sup> continuously decreasing (Figure 7.5).

As regards interest rate structure, at the end of June 2019, the most widespread type of household loans were loans with a fixed-to-maturity interest rate (39.1%), followed by loans linked to the NRR and EURIBOR (Figure 7.6a). Furthermore,



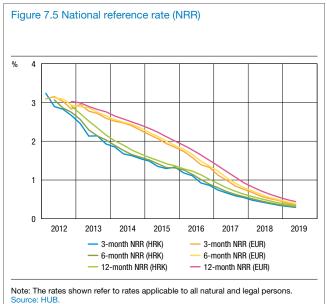


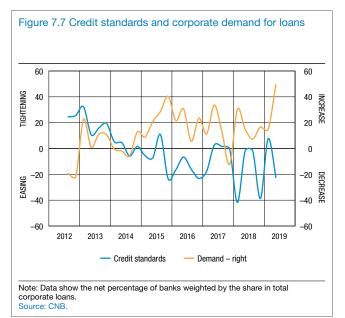
Figure 7.6 Structure of interest rates a) Household loans b) Corporate loans 130 90 풒 120 80 billion 110 70 100 39.5% 90 60 50 70 20.8% 60 40 6.4% 50 30 40 30 20 3.6% 20 10 10 0 Kuna Euro Total Furo Total Kuna **EURIBOR** EURIBOR Variable administered NRR Variable administered T-bills Fixed to maturity Fixed to maturity Other variable T-bills Other variable

Notes: Percentages show shares in total household loans. Loans currently undergoing initial interest rate fixing are included in a category in accordance with the releva parameter that will be applicable following the expiry of the fixing period.

Notes: Percentages show shares in total corporate loans. On account of its small share the amount of corporate loans tied to the NRR is included in the category "Other variable". Loans currently undergoing initial interest rate fixing are included in a category in accordance with the relevant parameter that will be applicable following the expiry of the fixing period.

16.4% of household loans are loans with interest rates fixed over a period of time shorter than loan maturity, two thirds of which are loans with interest rates fixed over a period longer than three years. Loans with interest rates fixed to maturity prevail in corporate loans as well (39.5%), followed by loans linked to EURIBOR, in line with the currency structure in which the euro accounts for the largest share (Figure 7.6b). Compared with the end of 2017, shares of interest rates fixed to maturity increased the most, by 5.3 percentage points in household loans and 7.3 percentage points in corporate loans.

The results of the bank lending survey also point to supportive financial conditions in the second quarter of 2019. After having tightened slightly in the first quarter, credit standards on loans to enterprises resumed a several-year trend of mostly favourable developments (Figure 7.7). The easing of

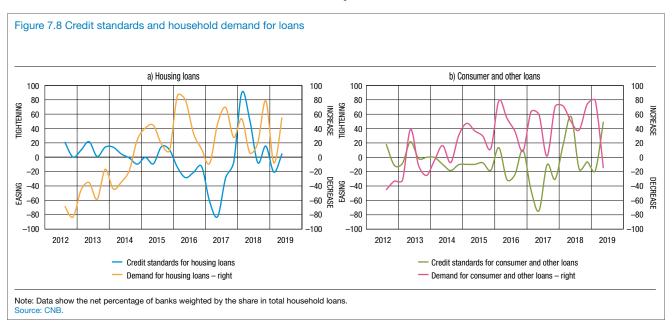


credit standards in the second quarter was primarily supported by positive expectations regarding overall economic trends, competition among banks and abundant bank liquidity. Demand for corporate loans continued to grow, particularly in the second quarter, due to larger demand from small and medium-sized enterprises. The most significant factors driving the demand for loans upwards were the same as in the previous years, including corporate needs for financing investments and inventories and working capital.

Credit standards for household loans eased in early 2019 but tightened in the second quarter, in particular for consumer loans (Figure 7.8). On the other hand, trends in demand for household loans varied. After dipping early in the year, the demand for housing loans continued its upward trend, driven by housing market prospects and consumer confidence. The upward trend in demand for consumer and other loans present for several years came to a halt in the second quarter of 2019, largely due to smaller consumption of durable consumer goods.

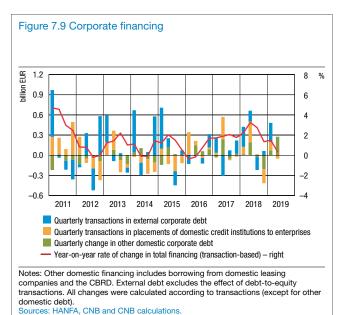
The annual growth rate of total debt of non-financial corporations<sup>16</sup> stood at 0.4% at end-June 2019 (transaction-based), much less than in the same period of the previous year (Figure 7.9). Total debt grew on account of borrowing by public enterprises in the domestic and foreign markets, while debt of private enterprises was mildly reduced. Developments in private enterprises' domestic financing were influenced by the activation of government guarantees for loans to shipyards and the reduction of claims on the Agrokor Group, also associated with the operational implementation of the settlement.

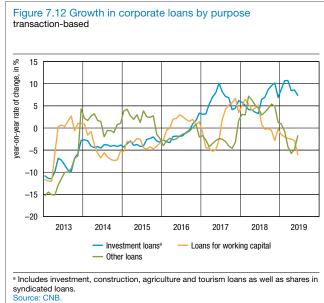
Domestic credit institutions' placements to non-financial corporations rose by HRK 0.5bn (0.6%) in the first six months of 2019, which was almost entirely due to the rise in the first quarter (transaction-based, Figure 7.10). On an annual basis, the rate of change in corporate placements dropped to -1.0% in late June. The negative annual rate of change in corporate placements was due to the above-mentioned one-off effects in

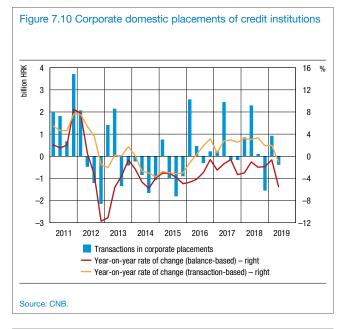


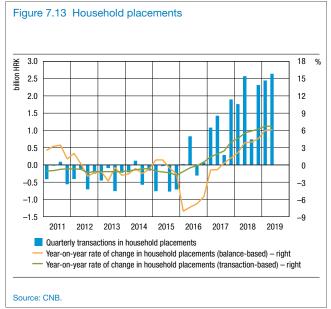
<sup>15</sup> The national reference rate (NRR) is the average interest rate paid on deposits by the banking sector. It is used as one of the benchmark interest rates for determining the level of the variable component of the variable interest rate on loans, in accordance with Article 11a of the Credit Consumer Act (pursuant to the Act on Amendments to the Consumer Credit Act, OG 143/2013).

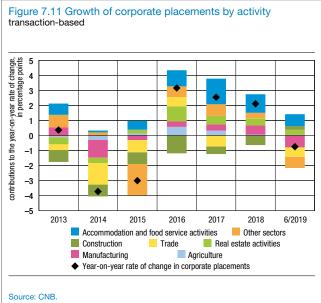
<sup>16</sup> Non-financial corporations do not include public enterprises included in the general government sector.

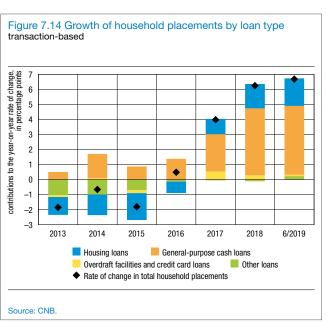












the past year. Accordingly, the annual decrease in corporate placements calculated on the basis of nominal values deepened to -5.5%, a consequence not only of the aforementioned factors but also of the sale of non-performing loans.

Broken down by activities, companies engaged in accommodation and food service activities continued to provide the largest positive contribution to the annual growth of placements in June 2019, though it was somewhat smaller than in the previous years (Figure 7.11). Moreover, after a several-year long deleveraging trend, construction witnessed a moderate growth in placements. In contrast to the past several years, manufacturing provided a negative contribution to the growth in placements, which was partly due to the activation of government guarantees for loans to specific shipyards. Observing corporate loans by purpose, the fall in placements on an annual basis was brought about by the annual drop in the loans for working capital and other loans, while the annual growth in investment loans stood at 7.4% at the end of June (Figure 7.12).

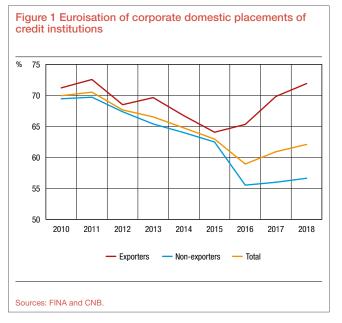
The annual growth in household placements continued to

accelerate slightly, reaching 6.7% in June 2019 (transactionbased, Figure 7.13). The increase in household lending was still driven by lower financing costs, growth in employment and rising consumer confidence. As regards the structure of loans, general-purpose cash loans continued to make the biggest contribution to the annual increase in household placements (Figure 7.14), though their annual growth decelerated slightly from March, to 12.2% in June (transaction-based). Among other factors, the recent slowdown was also prompted by the Recommendation on actions in granting non-housing consumer loans in which the CNB recommends that credit institutions apply more cautious conditions when granting new generalpurpose cash loans, particularly those with longer maturities, while consumers are encouraged to be prudent when borrowing. Household placements grew not only from general-purpose cash loans but also because of the sharp annual increase in housing loans, which reached 4.2% at end-June (transaction

#### Box 2 Developments in kuna and foreign currency corporate placements from 2011 to 2018

The euroisation of total placements of domestic credit institutions to non-financial corporations was trending downwards until 2016 and then started to trend upwards due to foreign currency borrowing of exporting enterprises, primarily manufacturing enterprises and accommodation and food service activities.

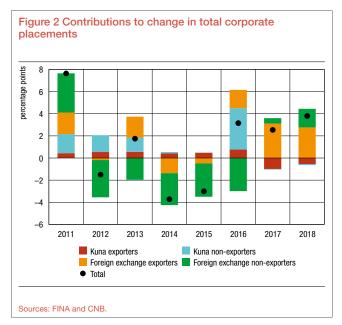
The currency structure of the banks' balance sheets changed steadily in favour of the domestic currency in the present

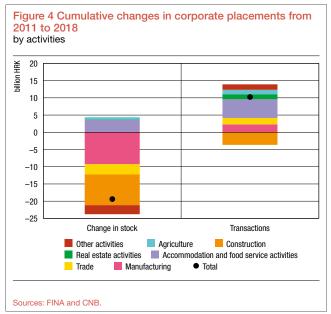


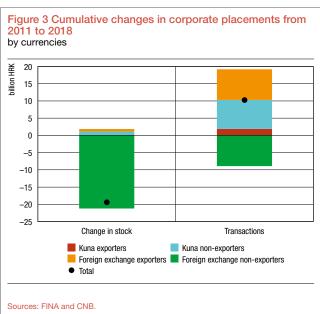
decade. According to the latest available data, the share of kuna placements to all sectors, except government, grew from just a little over one fourth early in the decade to almost one half of all placements. The causes of such movements had been analysed in more detail by the CNB.17 The long-lasting trend of growth in kuna and a decline in foreign currency<sup>18</sup> placements of domestic credit institutions to non-financial corporations came to a halt in 2017 and 2018 when considerable borrowing in foreign currency and a small decline in kuna placements were observed. This change in the trend may be attributed to several factors. The main generator of these developments was the rise in loans to exporting enterprises, which borrow more in foreign currency, while borrowing of non-exporters held steady due to increased sale and write-off of loans. In addition, exporting enterprises, primarily manufacturing enterprises and accommodation and food service activities, increased tendency towards euro borrowing.

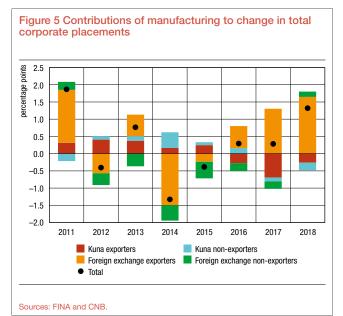
From 2011 to 2016, non-exporters accounted for the bulk of the growth in kuna placements and an almost equal level of foreign currency deleveraging. By contrast, exporters'<sup>19</sup> foreign currency financing mostly increased, particularly in 2017 and 2018 (Figure 2).<sup>20</sup> In addition, there is also significant difference between the balance-based change and the transaction-based change in placements, which mainly arises from the sale of partly and fully irrecoverable loans and from reclassifications. Almost the entire fall in the stock is accounted for by the decline in foreign currency placements to non-exporters (Figure 3). In other words, sold non-performing loans mostly involve loans to non-exporters.

- 17 Igor Ljubaj and Suzana Petrović: A Note on Kuna Lending, Croatian National Bank, Zagreb, 2016.
- 18 Foreign currency financing includes placements in kuna with a currency clause and placements in a foreign currency.
- 19 Exporters are enterprises with a minimum exports to total operating revenue of 10% in an individual year, based on data provided by FINA. For exporter status in 2018, data for 2017 were used, since FINA data for 2018 are currently unavailable. The exporter category in individual years includes 52 enterprises whose data on exports provided by FINA were either considered unrealistically low or equalled zero. A large majority of these enterprises belong to the accommodation and food service activities. The share of exports of exporting enterprises, which held bank placements in an individual year, in total exports of all enterprises amounted to an average of two-thirds.
- 20 Unless otherwise specified, the figures show rates of change and contributions based on transactions. The rate of growth of total placements in 2018 shown in Figure 1 excludes the effect of activation of government guarantees for loans to shipyards and is therefore higher than the growth rate shown in Figure 7.11.









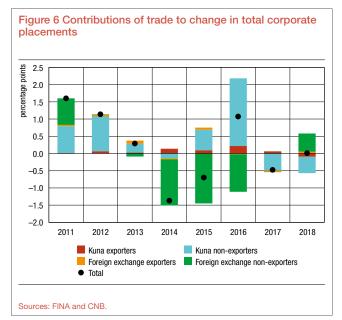
Until 2015, the shares of foreign currency placement were trending downwards steadily, with no significant difference between exporters and non-exporters (Figure 1). However, in 2016 the euroisation of placements to exporters started trending upwards and at the end of 2018 was almost equal to that at the end of 2010. By contrast, the euroisation of placements to non-exporters declined by almost 13 percentage points from the end of 2010. If the share of foreign exchange debt in GDP is observed, their foreign exchange exposure fell even more – the share of foreign currency placements of non-exporters almost halved over the eight-year period and stood at 8.4 of GDP at the end of 2018, in contrast with that of exporters which fell only slightly, to 5.9% of GDP.

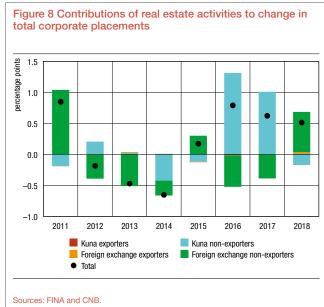
Cumulative changes by individual activities<sup>21</sup> suggest that the largest fall in the stock was seen in manufacturing and construction, which recorded the fastest sale of placements (Figure 4). Deleveraging was recorded only in construction (based on transactions), while the fastest growth was recorded in accommodation and food service activities.

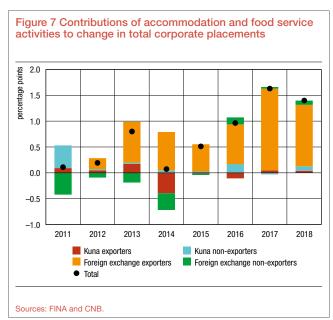
As regards the annual developments in placements on the level of individual activities, towards the end of 2018, placements to manufacturing were the most widely represented and accounted for almost 22% of total corporate placements, as was the case in most of the preceding years. The fact that credit activity focuses on this activity shows a clear export orientation since most changes in financing, irrespective of whether it is debt growth or deleveraging, involve exporters (Figure 5). Until 2015, foreign currency lending to exporters in manufacturing was volatile, cumulatively recording a small fall, in contrast with a steady rise in kuna financing. However, foreign currency placements to exporters started trending upwards in 2016 accompanied by a simultaneous kuna deleveraging that was particularly pronounced in 2017.

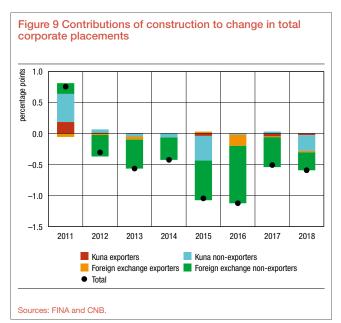
Towards the end of 2018, as in most previous years, the share

<sup>21</sup> Activities refer to one letter codes for NCEA 2007 areas, with the names of individual activities being abbreviated so that, for instance, "Trade" refers to activity "G – Wholesale and retail trade and repair of motor vehicles and motorcycles".









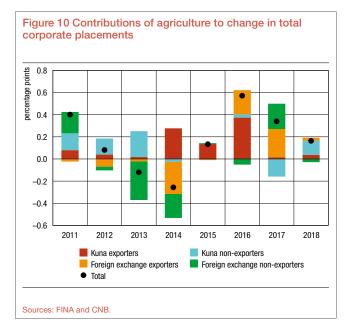
of placements to trade in total corporate placements was almost equal to the share of manufacturing, making trade the second most widely represented activity. However, in contrast with manufacturing, the dynamics of the credit activity of trade involves almost exclusively non-exporters<sup>22</sup> (Figure 6). Kuna placements of non-exporters grew at a record rate in 2016 but kept falling in the following two years, influenced, among other things, by the crisis in the Agrokor Group. Foreign currency placements to non-exporters mainly fell, particularly from 2014 and 2016, and after many years of deleveraging, did not grow until 2018.

Of all activities, only those of accommodation and food service recorded a growth in placements in all the years observed (Figure 7). Such developments were driven by a very fast recovery in tourist demand, in 2010 the number of nights spent in Croatia by foreign tourists exceeding that of the pre-crisis

2008. Since consumption by foreigners in Croatia is considered exports of services, most of the credit activity in this activity involves exporters. In accordance with the importance of foreign demand, exporters increased foreign currency financing in all the years except during the 2011 stagnation, particularly in the last two years of the observed period. Thus, the total transactions of foreign currency placements of exporters stood at HRK 2.5bn in 2017 and 2018, accounting for almost 44% of the transaction growth of total corporate placements during that period. Fast lending to this activity, accompanied by considerable sales of bank placements in other activities, led to a growth in the share in total corporate placements. This share reached 12% at the end of 2018, having almost doubled from the end of 2010, and thus became the third most widely represented activity in the stock of placements of credit institutions.

<sup>22</sup> Although Figure 6 shows only enterprises in trade activities with placements from domestic credit institutions, official data probably underestimate the export component of trade. It is difficult for enterprises in that activity to determine the share of their operations that involves non-residents, which is very important in Croatia because of the large consumption by foreign tourists. By contrast, exports of goods are much more easily captured in hotels and camps (exports of services) and in particular in manufacturing (exports of goods).

Figure 11 Contributions of other activities to change in total



corporate placements points percentage 2 n -1 -2 -32011 2012 2013 2014 2015 2016 2017 2018 Kuna exporters Kuna non-exporters Foreign exchange exporters Foreign exchange non-exporters Total Sources: FINA and CNB.

The share of credit activities of exporters in real estate activities is unsurprisingly negligible (Figure 8). After three years of deleveraging, the growth of placements to this activity continued into 2015, with an especially fast increase in kuna financing taking place in 2016 and 2017, mainly as a result of the borrowing of one large municipal company.

The investment crunch that followed the global economic crisis was particularly hard on the construction activity, in which the amount of non-performing loans reached the highest levels ever in comparison with other activities. Because of the sale of non-performing placements and deleveraging, the stock of placements to construction more than halved from the end of 2010 and stood at HRK 7.2bn at the end of 2018. If only changes based on transactions are taken into account, this activity has been deleveraging since 2012 (Figure 9). In the same way as in the real estate activity, credit activity involves mainly non-exporters, which reflects the poor tradability of goods and services in this activity. As regards the currency structure, deleveraging mainly involved foreign currency financing as a result

of the predominantly foreign currency borrowing in the previous years and limited new borrowing.

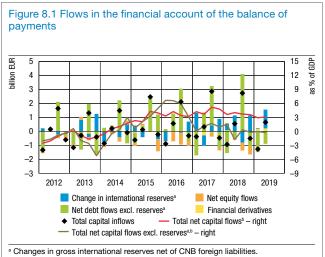
In contrast with the previous activities in which most changes in placements referred either to exporters or to non-exporters, in agriculture, both types of enterprises were widely represented (Figure 10). A considerable share of exporters in transactions has been recorded since 2014 when the increase in kuna and a decrease in foreign currency placements to these enterprises were almost equal while in the following years they increased both types of financing.

Another thirteen activities accounted for approximately 23% of total corporate placements at the end of 2018. Taking account of the diversity of the activities that make up this group, developments in placements were relatively volatile, while the bulk of credit activity involved non-exporters (Figure 11). After a small cumulative decline until 2015, the following three years recorded a growth in placements to other activities, in particular to professional, scientific and technical activities.

## 8 Foreign capital flows

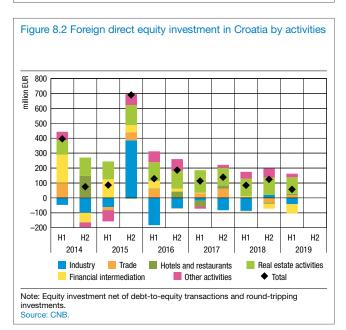
The financial account of the balance of payments<sup>23</sup> saw a net capital inflow of EUR 0.6bn in the first half of 2019, up by EUR 0.2bn from the same period of the previous year. However, if the changes in gross international reserves and CNB liabilities are excluded, net foreign financial liabilities of domestic sectors recorded significant growth (of EUR 2.0bn), almost equal to the worsening of the net foreign position in the same period of 2018. The bulk of net capital inflows was related to the rise in net debt liabilities, with only a marginal increase in net equity investments.

In the first half of 2019, the net inflow of equity investments stood at only EUR 0.1bn as the liabilities of domestic



Sum of the previous four quarters.

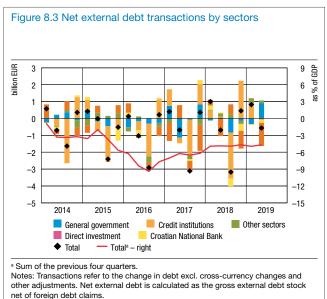
Notes: Net flows mean the difference between changes in assets and liabilities. Equity flows comprise changes in foreign direct equity investments, reinvested earnings and portfolio equity investment. Positive value means net capital outflow abroad.



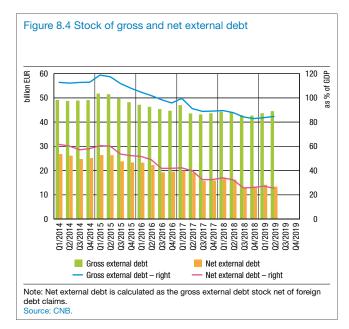
sectors grew just slightly more than their foreign assets. The largest contribution to assets growth came from investments in foreign shares and equity holdings. On the other hand, the growth in liabilities was largely due to foreign direct equity investments, which were mostly related to debt-to-equity transactions. If those transactions are excluded, the inflow of equity investments remained modest and was primarily seen in the real estate sector. At the same time, reinvested earnings on the liabilities side were notably smaller than in the same period of the previous year, due to the negative reinvested earnings of banks, which paid out substantial dividends, whereas reinvested earnings of non-financial corporations in foreign ownership

The strong net inflows of debt capital in the first half of 2019, of EUR 2.3bn (change in international reserves and CNB liabilities excluded) were the result of both a decline in domestic sectors' foreign assets and an increase in their foreign liabilities. Unfavourable developments were driven by non-financial corporations, credit institutions and the general government, which in June borrowed on the international market by issuing EUR 1.5bn worth of bonds with a view to refinancing the dollar bond maturing in November. A portion of the funds raised by the bond issue was sold by the government to the CNB, while the rest was deposited with the central bank, which was the main factor behind the improvement in the central bank's net external position (of EUR 1.4bn).

As regards relative indicators of external debt, gross external debt increased while net external debt decreased in the first six months of 2019. At end-June 2019, the gross external debt stock stood at EUR 44.6bn (84.7% of GDP), up by 1.8 percentage points from the end of 2018. However, the parallel increase in foreign debt claims was equal to the rise in liabilities, which, along with nominal GDP growth, led to a further

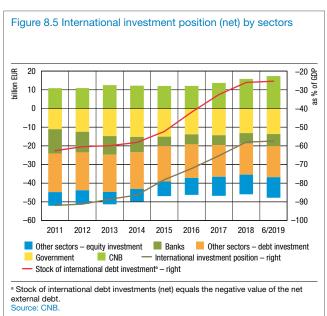


<sup>23</sup> Historical data from 2000 on have been revised at the time of publication of the balance of payment data for the second quarter of 2019. The effects of the revision of balance of payments data are explained in detail at: https://www.hnb.hr/-/hnb-revidirao-statistiku-odnosa-sinozemstvom.



improvement of the relative indicator of net external debt. By the end of June 2019, net external debt came to EUR 13.4bn or 25.4% of GDP, a decrease of 0.6 percentage points from the end of the previous year.

The net international investment position also improved



slightly, standing at -57.5% of GDP at the end of June 2019 compared with -58.0% of GDP at the end of 2018. This is primarily linked to the favourable effect of nominal GDP growth, while in absolute terms, the net international investment position deteriorated.

## 9 Monetary policy

The CNB continued to support high monetary system liquidity and maintain the relatively stable kuna/euro exchange rate. In the first half of 2019, the CNB purchased a net total of EUR 663.2m (Figure 9.1), thus creating HRK 4.9bn of reserve money (M0). The CNB purchased a net total of EUR 450.3m from credit institutions and EUR 212.9m from the Ministry of Finance. In early February, the CNB purchased a total of EUR 450.3m from banks, after selling EUR 463.4m to the Ministry of Finance on the same day to refinance a portion of EUR 1.5bn worth of T- bills with a maturity of 455 days. Later on, when the government issued a ten-year euro bond in the international market in mid-June the CNB purchased EUR 660.0m from the Ministry of Finance.

As regards kuna operations, the CNB continued to conduct regular weekly repo auctions at a fixed repo rate of 0.3%. However, due to the low interest, in the conditions of very

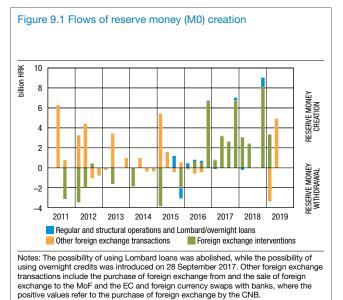


Figure 9.2 Bank liquidity and overnight interbank interest rate % 3.0 35 풒 30 2.5 25 20 20 1.5 1.0 15 0.5 10 5 -0.5 2011 2012 2013 2014 2015 2016 2017 Overnight interbank interest rate Liquidity surplus (incl. overnight deposits with the CNB) - right Source: CNB

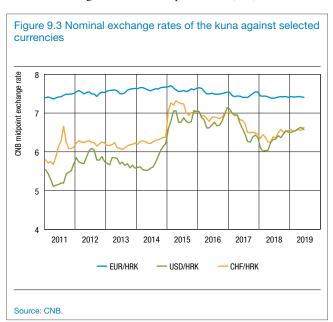
large kuna liquidity surpluses shown by banks, the central bank did not place any funds through this instrument of monetary policy in the first half of 2019. In the same period, no additional funds were created by structural operations, so that their balance at the end of June equalled that at the end of 2018 (HRK 2.0bn).

The surplus kuna liquidity in the system remained at a very high level, and at the end of June 2019 reached HRK 29.4bn (Figure 9.2). The consequence of high liquidity was a very modest turnover in the domestic interbank overnight market. Thus, in April 2019, after eight months of inactivity, there was turnover at which the average interest rate for the first time dropped into negative territory and stood at –0.24%. A turnover at the interbank interest rate of 0.30% was also recorded in May, while no trading took place in June. The average interest rate is calculated from a small number of transactions and accordingly does not mirror the market situation well. Thus, in April, it was a reflection of three transactions, while in May, only two transactions were made.

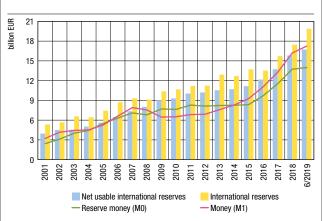
The kuna/euro exchange rate stood at EUR/HRK 7.39 at the end of June 2019, edging up from EUR/HRK 7.38 in mid-2018 (Figure 9.3). The average exchange rate of the kuna against the euro in the first half of 2019 stood at EUR/HRK 7.42, and was the same as the average exchange rate in the first half of 2018. On the other hand, in the first six months of 2019, the kuna weakened slightly against the US dollar and the Swiss franc, reflecting the weakening of the euro against the two currencies on global financial markets.

Gross international reserves stood at EUR 19.9bn at the end of June (Figure 9.4), up by EUR 2.4bn (14.0%) from the end of 2018. The growth in gross reserves in that period was mostly due to a higher level of agreed repo transactions, the increase in the government's foreign currency deposit and the net purchase of foreign exchange. Net usable reserves went up EUR 0.9bn (5.7%) in the same period, reaching EUR 16.7bn at the end of June.

The annual growth of total liquid assets (M4) slowed down



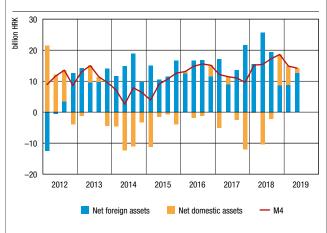




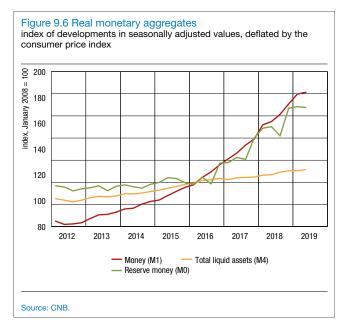
Note: Net usable international reserves are defined as international reserves net of the CNB foreign liabilities, reserve requirements in f/c, government foreign currency deposits and off-balance sheet liabilities (swaps).

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

absolute change in the last 12 months



Note: Absolute changes excluding the exchange rate effect.



in the first six months of 2019 (Figure 9.5), as a result of the deceleration of the annual increase in net domestic assets, while the dynamics of net foreign assets added to the growth in M4.

If real monetary aggregates are observed, their several-year upward trend continued in the first six months of 2019, albeit at a slower pace (Figure 9.6). In addition, the annual rise in the real value of reserve money (M0), after a considerable increase at the end of 2018, slowed down to 10.2% at the end of June.

#### 10 Public finance

According to the data on the execution of the consolidated general government budget (ESA, 2010), the first half of 2019 saw a budget surplus of HRK 0.2bn, which is a slight improvement from the same period last year, when a deficit of HRK 0.1bn was recorded. Broken down by quarters, the first quarter saw a deficit of HRK 2.2bn, while a surplus of HRK 2.5bn was recorded in the second quarter.

As regards the revenue side of the budget (ESA 2010), total revenues were noticeably larger (by 7.5%) in the first half of 2019 than in the same period of 2018. Indirect taxes made the strongest positive contribution to annual growth, the slightly slower growth relative to the growth rate seen in 2018 probably reflecting tax legislation changes in the fields of VAT and excise duties. Other revenues also provided a strong boost to the rise in total revenues. The dynamics of this category, which includes subsidies, income from equity and other current



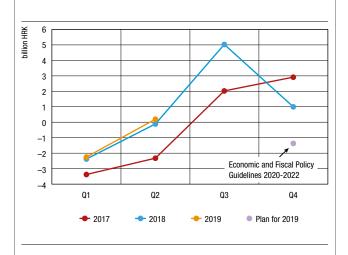
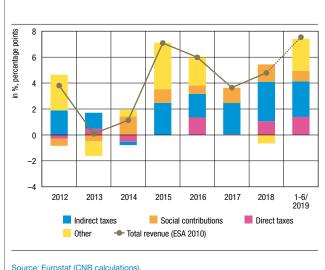


Figure 10.2 Consolidated general government revenue ESA 2010, year-on-year rate of change and contributions

Sources: Eurostat and MoF (CNB calculations)

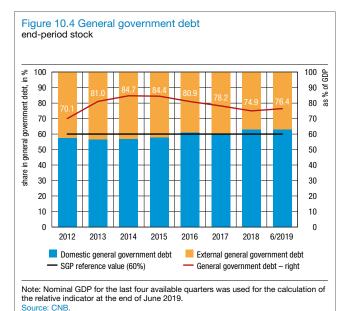


transfers, probably reflects the increased use of EU funds, as well as the base effect of the poorer performance in the same period of the previous year. Direct taxes also rose, driven by positive economic trends and the favourable labour market situation. Social contributions were also supported by favourable movements in employment and wages, whereas changes to the social contributions system had the opposite effect: the obligation to pay contributions for employment and health protection at work (1.7% and 0.5%, respectively, of gross wage) was abolished as of 1 January 2019, while the health insurance contribution was raised from 15% to 16.5%,

The expenditure side of the consolidated general government budget (ESA 2010) also saw a significant increase (of 7.2%) in the first half of 2019 from the same period of the previous year. Broken down by categories, the strongest boost to expenditure growth came from the rise in other expenditures, also probably reflecting bigger withdrawals of EU funds as well as larger payments to the EU budget in the first half of 2019. Like other revenues, this category too was influenced by the base effect. A noteworthy growth rate was recorded not only by other expenditures but also by general government investment, the rise in total expenditures being thus equally attributable to investments and to employee compensations, intermediary consumption and social benefits. By contrast, interest expenditures dropped slightly from the same period of the previous vear due to further favourable conditions on the financial market, whereas the decrease in expenditures for subsidies may be attributed to differences in the payment dynamics across the

Consolidated general government debt totalled HRK 298.0bn at the end of June 2019, an increase of about HRK 11.9bn from the end of 2018, notwithstanding the favourable impact of the appreciation of the exchange rate of the kuna versus the euro in the observed period. This is primarily attributable to the issue of foreign bonds worth EUR 1.5bn in June, with the government using favourable conditions in financial markets to raise the funds needed for the repayment of foreign

Figure 10.3 Consolidated general government expenditure ESA 2010, year-on-year rate of change and contributions 10 percentage 2012 2013 2014 2015 2016 2018 2019 Social benefits Interest Compensation of employees Investment Intermediate consumption Subsidies Total expenditure (ESA 2010) Other Source: Eurostat (CNB calculations)



bonds of the same amount maturing in November. The public debt level was also impacted by the reclassification of a larger number of statistical units (mostly port authorities, in the period up to April 2001) into the general government sector. Securities were issued under favourable conditions in both the domestic and international financial markets in the first half of 2019. This was also supported by the achieved fiscal consolidation, which reduced the risk perception of the domestic economy.

# 11 International reserves management

The strong upward trend in international reserves, present from 2017, continued in the first half of 2019. In strategic and tactical terms, international reserves management adhered to the same principles as in the previous periods, with special efforts put in to adjust the structure of net reserves to a prolonged period of low and negative interest rates in the financial market and to the inflows and maturities in the net reserves portfolios in the best possible way, all in line with the objectives of reserves management. The primary objective of international reserves management remained the same: to ensure a high level of liquidity and safety of international reserves and generate adequate levels of earnings.

The Council of the CNB formulates the strategy and policy for international reserves management and specifies the guidelines, criteria and limits on risk exposures. In accordance with the objectives set by the Council of the CNB, the International Reserves Commission develops international reserves investment strategies and adopts tactical decisions taking into account market conditions and the primary objective of international reserves management.

The CNB manages international reserves in two ways: in line with its own guidelines and in accordance with the obligations assumed, depending on the way in which international reserves are formed. The component of international reserves acquired through 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 (hereinafter referred to as 'net reserves').

The other component of the reserves, formed on the basis of deposits of the MoF, 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 obligations assumed.

# 11.1 Structure of and developments in international reserves

International reserves of the CNB stood at EUR 19,880.8m as at 30 June 2019, up by EUR 2,442.1m or 14.0% from the end of 2018 when they stood at EUR 17,438.8m. Over the same period, net reserves rose by EUR 904.4m, or 5.7%, from EUR 15,820.0m to EUR 16,724.4m.

The increase in international reserves in the first half of 2019 was brought about by the purchase of foreign exchange from banks to prevent the appreciation pressures on the kuna and the purchase from the MoF, a higher level of agreed repo transactions and foreign currency inflows to the MoF account.

Securities of governments and government institutions, reverse repo agreements and deposits with central banks accounted for the largest share in the structure of international reserves investment at the end of the first half of 2019.

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.

In its management of international reserves, the CNB is governed primarily by the principle of safety and applies restrictions on investments in individual financial institutions and countries and individual instruments, which serves to diversify credit risk. At the end of June 2019, around one half of the CNB international reserves were invested in countries, banks and institutions in the two highest credit rating categories or invested in the BIS and the IMF or in foreign cash in the CNB vault.

In the first half of 2019, the currency structure of international reserves changed slightly in favour of the US dollar, which was due to the higher balance of US dollar funds in the MoF account and a higher level of agreed repo transactions in US dollars at the end of the first half of the year. The share of the euro stood at 80.5% at the end of the first half of

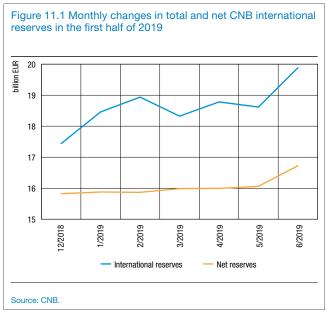
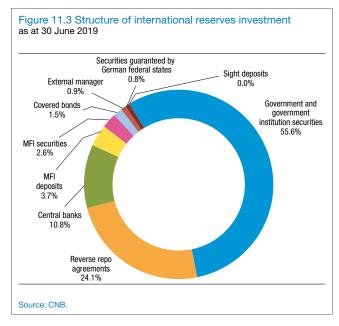
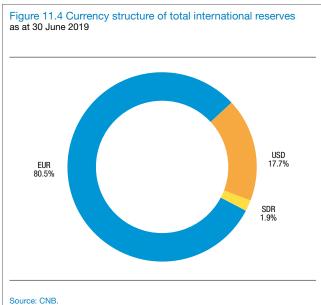


Figure 11.2 Foreign exchange interventions of the CNB with the banks, the EC and the MoF in net amounts 2,000 1.500 1.000 500 0 -500 -1,000 Interventions with banks – net Interventions with the MoF – net Interventions with the EC - net \* Total Note: Positive values refer to the purchase and negative to the sale of foreign exchange by the CNB.





2019, down from 85.1% at end-2018. Over the same period, the share of the US dollar increased from 12.7% at the end of 2018 to 17.7%. The share of SDRs in international reserves dropped slightly from 2.1% to 1.9%.

# 11.2 Financial markets and international reserves management results in the first half of 2019

The first half of 2019 witnessed a reversal of the expected trend of the ongoing normalisation of monetary policies against the backdrop of heightened concerns regarding the slowdown in global economic growth and subdued inflation. Volatility in the financial markets was mostly driven by the frequent trade tensions (particularly between the USA and China) and uncertainty surrounding their potential unfavourable impact on global trade flows. Uncertainty in Europe was further exacerbated by political tensions surrounding the Italy's fiscal position, European parliamentary elections, and the Brexit process,

which was postponed for end-October 2019.

The European Central Bank kept its interest rates unchanged, but strengthened its accommodative rhetoric and lengthened the horizon for maintaining low interest rates. Yields on almost all issued European government securities decreased in the first half of 2019, so that more than a half of government securities of euro area member states had negative yields. The yield curve for German bonds for all maturities up to twenty years was in negative territory at the end of June.

The Fed interrupted the cycle of raising its benchmark interest rates and announced looser monetary policy in the future. US yields dropped sharply across the entire curve in the first half of 2019, by around 60 basis points on average. The curve became inverted, i.e. the yield on 10-year bonds dropped below the yield on three-month T-bills.

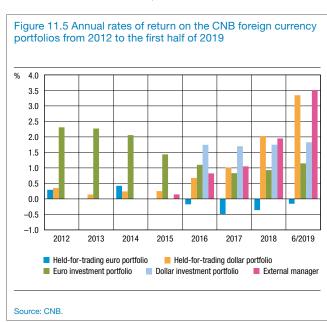
International reserves managed by the CNB in line with its own guidelines comprise the held-for-trading portfolios, the investment portfolios, the funds entrusted to an external manager and foreign cash in the vault.

In the first six months of 2019, net international reserves investments generated an income of EUR 48.7m or HRK 361.4m.

Despite the negative rates of the euro yield curve, in the first half of 2019, the rate of return on the entire euro portfolio of net reserves was 0.31% on an annual basis, while the rate of return on the entire dollar portfolio totalled 2.57% on an annual basis. If held-for-trading and investment portfolios are observed separately, the euro held-for-trading portfolio generated an annual rate of return of –0.16%, while the dollar held-for-trading portfolio generated an annual rate of return of 3.35% in the first half of 2019. In the first six months of 2019, the euro-denominated investment portfolio yielded a return of 1.15%, while the dollar-denominated investment portfolio yielded a return of 1.83%, both at an annual level.

The held-for-trading portfolios, which account for approximately 59% of net reserves, have short average maturities and are used as a source of liquidity. Investment portfolios, which account for approximately 37% of net reserves, have a longer average maturity and serve as a source of more stable long-term income.

In the first half of 2019, the annual rate of return on the



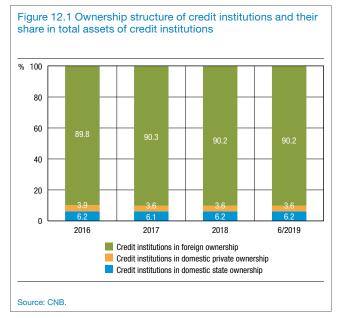
US dollar funds entrusted for management to an international financial institution was 3.51%. The entrusting of funds to an international financial institution enabled additional

diversification as well as knowledge-exchange in the field of investment management.

## 12 Business operations of credit institutions

The slight downward trend in the number of credit institutions present since 2010 continued in the first half of 2019. The number of credit institutions was reduced by one after the merger of Jadranska banka d.d. with Hrvatska poštanska banka d.d., so that at the end of June 2019, 20 banks and four housing savings banks were operating in the Republic of Croatia. In addition, there was one branch of an EU credit institution operating in the country, while almost 190 institutions from the EU (and the EEA) notified the CNB of the direct provision of mutually recognised services in the territory of the Republic of Croatia.<sup>24</sup>

The reduction in the number of credit institutions raises the indicators of banking system concentration. This was evident in the upward trend in the Herfindahl-Hirschman Index (HHI) for assets, present for many years, which accelerated strongly in 2018 and even further in the first half of 2019, reaching 1,638. Although higher, its value continued to indicate only a moderate concentration in the market. Credit institutions in foreign ownership continued to dominate the banking system, accounting for 90.2% of total assets of credit institutions. The same share was accounted for by the assets of O-SII banks<sup>25</sup>, whereas assets of other banks accounted for 8.5% of total assets of credit institutions. The housing savings banks accounted for the remaining 1.4% of total assets.

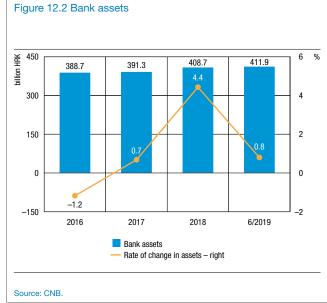


#### 12.1 Banks

At the end of the first half of 2019, bank assets amounted to HRK 411.9bn, an increase of HRK 3.2bn or 0.8% relative to the end of 2018 (Figure 12.2).<sup>26</sup> The increase was mostly

driven by bigger investments in securities, with a sharp growth being recorded in investments in domestic central government securities, i.e. RC bonds and T-bills of the Ministry of Finance. The share of securities in the asset structure thus rose to 14.9%. The importance of those investments, in addition to other highly liquid items, was reflected in constantly high levels of the liquidity coverage ratio, LCR, (165.0% at the end of the first half of 2019, Figure 12.3). In line with the usual seasonal developments associated with the preparation for the tourist season, funds in the settlement accounts with the CNB partly spilled over to cash accounts, while deposits with foreign financial institutions shrank.

The share of the key bank asset item, that of net loans, dropped to 57.9%, the lowest level recorded in the past fifteen years. This was the outcome of major changes in other significant forms of assets, in particular securities, and the weak increase in loans granted. Their share went up by only 0.5% from the end of 2018, as a result of noticeable opposite developments in particular sectors. The strongest impact on the total change was made by the ongoing increase in lending to households, particularly through general-purpose cash loans. Growing steadily for several years, these loans amounted to one fifth of total bank loans, so that at the end of the first half of 2019 their share in total loans came close to that of housing loans, the most widely represented. To mitigate potential risks associated with excessive growth in non-housing loans to consumers, the CNB issued recommendations to credit institutions, 27 instructing them to impose stricter conditions for long-term general-purpose cash loans and establish records of collateral data and other data on loans. In addition, credit institutions were advised of the CNB's supervisory expectations regarding



<sup>24</sup> Updated information on credit institutions operating in the territory of the Republic of Croatia may be found here.

<sup>25</sup> Other systemically important (O-SII) credit institutions are credit institutions the failure or malfunction of which could lead to systemic risk in the Republic of Croatia. Information on the last review of other systemically important credit institutions may be found here.

<sup>26</sup> More information on the business operations of credit institutions may be found here.

<sup>27</sup> Recommendation on actions in granting non-housing consumer loans

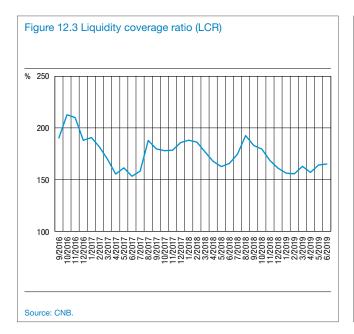


Figure 12.4 Share of non-performing loans in total bank loans % 30 25 20 15 8.8 10 7.6 2016 2017 2018 6/2019 Non-financial corporations Households Other sectors Source: CNB

appropriate inclusion of risks arising from such loans into the internal capital adequacy assessment process (ICAAP). The rise in loans to non-financial corporations was mostly spurred by the continued upward trend in loans to entities engaged in accommodation and food service activities. Loans to other sectors decreased, particularly loans to the central government. Loans in kuna steadily trended up, driven particularly by general-purpose cash loans to households. The share of the kuna component in total household loans rose to 54.9%.

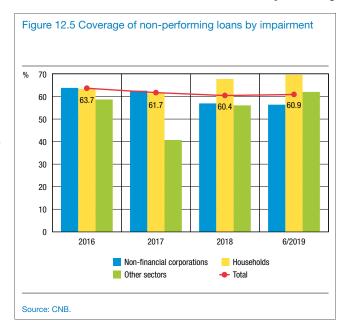
The increase in bank assets was partly a result of regulatory changes. In particular, 1 January 2019 marked the beginning of the application of International Financial Reporting Standard 16 – Leases, which changed the treatment of operating leases in lessees' books. An analysis of its initial impact showed that banks' tangible assets associated with leases grew by HRK 1.3bn, with lease liabilities also increasing by the same amount.

The quality of exposure to credit risk improved.<sup>28</sup> This mostly refers to the quality of total exposure, where the non-performing exposures ratio dropped from 7.1% at the end of 2018 to 6.2% at the end of the first half of 2019.<sup>29</sup> The fall was due to the reduction of non-performing exposures, mainly influenced by the implementation of the Agrokor Group settlement.

A slightly smaller improvement was seen in the loan portfolio quality, where the non-performing loans ratio (NPLR) went down from 7.6% to 7.3% (Figure 12.4).<sup>30</sup> The movements in this indicator were largely influenced by the fall in non-performing loans to the non-financial corporate sector, where the NPLR stood at 18.8%. Manufacturing accounted for the largest share of non-performing loans to the

non-financial corporate sector. The NPLR for the household sector shrank to 6.5%; a smaller contribution both to overall movements and to the decrease in non-performing exposures in both sectors came from the sale of claims, which amounted to HRK 0.5bn in the first half of 2019. The total amount of sold claims was much smaller than in the previous years, when such activities were a key tool in the process of reducing non-performing exposures.

The downward trend in losses on non-performing



<sup>28</sup> As of June 2019, the methodology for monitoring the quality of the credit risk exposure is based on the indicators defined at the EU level and applied by the European Banking Authority and the European Central Bank. These indicators are computed based on data contained in the reports defined in Commission Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 (FINREP). The former methodology for monitoring the quality of the credit risk exposure was based on the national regulation on the classification of exposures. A series of indicators shown in Figures 12.4 and 12.5 has been revised in line with the amended methodology.

<sup>29</sup> Non-performing exposures are those that satisfy any of the following criteria: a) material exposures which are more than 90 days past due; b) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due.

<sup>30</sup> In analysis of the quality of the credit risk exposure, the term "loans" is used for the category of financial assets/instruments "Loans and advances", which includes debt instruments other than securities that are not held for trading.

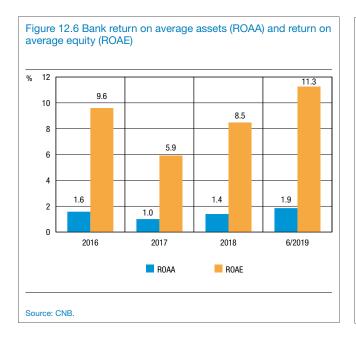


Figure 12.7 Key indicators of bank capitalisation 25 23.8 23.1 22.9 22.9 22.3 21.9 21.3 20 15 12.5 12.0 12.1 12.0 2016 2017 2018 6/2019 Total capital ratio Common equity tier 1 capital ratio Leverage ratio Source: CNB

exposures (i.e. coverage of non-performing loans by impairment) came to a halt (Figure 12.5). The coverage indicator grew to a high 60.9% as a result of its increase in the household sector.

Total received deposits decreased marginally (0.4%) from the end of 2018, but notable trends in their maturity structure were largely the outcome of the further transformation of household time deposits into transaction account deposits. Low interest rates on time deposits definitely added to such movements. As the years-long downward trend in the share of time deposits in total bank deposits continued, this share fell to a historical low of 40.3% at the end of the first half of 2019. As a result, the share of deposits in transaction accounts continued to grow and reached 54.2%, which changed the currency structure of total deposits, with kuna deposits coming to 45.1%.

In the first half of 2019, bank profits (before tax) were HRK 3.8bn, growing by 10.0% from the same period of 2018. With the rise in profits, return on average assets (ROAA) and return on average equity (ROAE) also increased, to 1.9% and 11.3%, respectively (Figure 12.6). Bank profits grew on account of larger non-interest income, mostly income from dividends, and lower expenses on impairment and provisions. The main source of bank earnings, interest income, continued to decrease on the basis of almost all types of financial assets, but the key factor was the fall in interest income on loans. Such movements continued to reflect the effect of the base period (i.e. the first half of 2018), when the road sector was refinanced under favourable terms. An increase was seen only in interest income from general-purpose cash loans to households, which reached almost one third of total interest income on loans, much more than their share in the loan portfolio. Thanks to further savings on expenses on funding, which were attributable to changes in the deposit structure and the fall in interest rates, banks managed to make a slightly larger net interest income (0.5%), with a minor contribution to profits also coming from growth in net income from fees and commissions (2.2%). Total net income of banks therefore grew, while stagnation in general operating expenses allowed an improvement in bank cost effectiveness. The cost-to-income ratio (CIR), shrank to 46.8%, mostly under the influence of leading banks, the same as for return indicators.

Profits made in the first half of 2019 and the rise in accumulated other comprehensive income almost offset dividend payments, which included the bulk of last year's profits as well as a portion of retained earnings. The rise in accumulated other comprehensive income was related to the structure of the securities portfolio, which is dominated by the portfolio of financial assets measured through other comprehensive income, mostly comprising Republic of Croatia bonds. The improvement in the credit rating of the Republic of Croatia and the associated increase in bond prices provided a boost to this income as well as to own funds, which rose by 1.7%. Nevertheless, the relatively stronger increase in total risk exposure (2.4%), with the largest share being associated with credit risk, pushed down the total capital ratio, to 22.9% (Figure 12.7). Notwithstanding the decrease, this ratio, coupled with unutilised own funds amounting to 30.0% of own funds and the leverage ratio of 12.0% (several times higher than the notional minimum), continued to confirm the high capitalisation of the banking system.<sup>31</sup> The average credit risk weight edged up to 49.4% due to the rise in exposures weighted by higher risk weights.

#### 12.2 Housing savings banks

The assets of housing savings banks increased by 3.6% in the first half of 2019, the highest growth being recorded in housing loans, 5.1%. The deposits of housing savings bank depositors rose by only 1.8%, which may be attributed to further cuts in state incentives.<sup>32</sup> The characteristically good quality of loans improved marginally owing to the reduction in the

<sup>31</sup> Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 imposes the new leverage ratio requirement of 3%, with exemptions applied for certain business models and lines of business, which is calculated as the ratio between tier 1 capital and the total exposure measure of an institution. The Regulation applies from 28 June 2021, with some provisions to come into force at an earlier or later stage.

non-performing loan ratio to 1.3%. The profits of housing savings banks grew noticeably from the same period of 2018 (50.9%), almost entirely due to the mentioned upgrade of Croatia's credit rating and the associated increase in the prices of Croatian bonds in which housing savings banks invest their liquidity surpluses. ROAA and ROAE therefore recovered,

standing at 0.4% and 4.1% respectively. Cost efficiency also improved mildly, although the substantial share of total net income of housing savings banks remained burdened by general operating expenses, as illustrated by the CIR indicator of 80.1%. Total capital ratio increased to a high 25.2%.

<sup>32</sup> Under the Decision on the amount of state incentives for housing savings in 2019, a limit is set on state incentives, at 1.2%, or a maximum of HRK 60 per saver (OG 4/2019). For the sake of comparison, when housing savings were first introduced in 1998 state incentives were set at 25%, or a maximum of HRK 1,250.

# 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

CDS – credit default swaps

CEE – Central and Eastern European

CEFTA - Central European Free Trade Agreement

CES – Croatian Employment Service

CHF - Swiss franc

CHIF - Croatian Health Insurance Fund

CHY - Yuan Renminbi

CICR – currency-induced credit risk
CPF – Croatian Privatisation Fund
CPI – consumer price index

CPII - Croatian Pension Insurance Institute

CM – Croatian Motorways CNB – Croatian National Bank

CR - Croatian Roads

EBA – European Banking Authority
 ECB – European Central Bank
 EEA – European Economic Area
 EFTA – European Free Trade Association
 EMU – Economic and Monetary Union

EU – European Union

EUR – euro
excl. – excluding
f/c – foreign currency

FDI – foreign direct investment
Fed – Federal Reserve System
FINA – Financial Agency
f.o.b. – free on board

GDP – gross domestic product GVA – gross value added

HANFA - Croatian Financial Services Supervisory Agency

HICP - harmonised index of consumer prices

HRK – kuna

HUB - Croatian Banking Association

incl. - including

IMF – International Monetary Fund

JPY – Japanese yen m – million

MIGs – main industrial groupings MM – monthly maturity MoF – Ministry of Finance

NBS – National Bureau of Statistics of China NCA – National Classification of Activities

n.e.c. – not elsewhere classified

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

SE – South-East

SGP - Stability and Growth Pact

SITC - Standard International Trade Classification

USD – US dollar
VAT – value added tax
ZSE – Zagreb Stock Exchange
ZMM – Zagreb Money Market

### **Symbols**

– no entry

.... – data not available

0 – value is less than 0.5 of the unit of measure being

used

– average

a, b, c,... – indicates a note beneath the table and figure

corrected data

() - incomplete or insufficiently verified data

