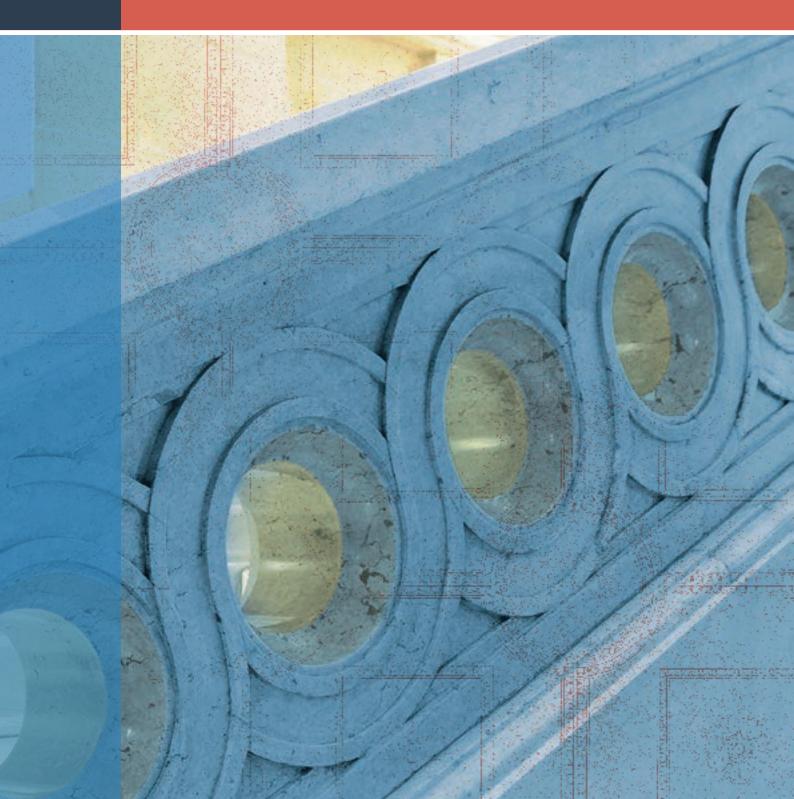


# Macroeconomic Developments and Outlook

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#### 1 Introduction

Having grown steadily in the first half of 2016, Croatia's economic activity accelerated further in the summer. The positive trends were primarily supported by strong tourism performance and the acceleration of recovery in personal consumption. Positive labour market trends notwithstanding, concerns have been raised over a gradual decline in the labour force, partly caused by the outflow of working age population, which has a diminishing effect on long-term growth potentials. The annual consumer price decline decelerated substantially in September and October from August, to a large extent due to energy price trends. Favourable fiscal developments continued, with the result that the general government deficit contracted significantly compared with the first ten months in 2015 and public debt remained almost unaltered from the end of 2015.

Pursuing an expansionary monetary policy, the CNB continued to support the recovery of the domestic economy, started already in late 2014, and to maintain the stability of the kuna to euro exchange rate. In the Croatian monetary system, a stable exchange rate is a prerequisite for the preservation of financial stability and an anchor for expectations of future price trends. Structural repo operations, introduced by the CNB in early 2016, provide banks with long-term kuna liquidity, thus facilitating a long-term decrease in interest rates and stimulating lending in kuna. At the four structural reverse repo auctions held so far, the central bank placed a total of close to HRK 1bn for a period of four years, reducing the interest rate at the last two

auctions from 1.8% to 1.4%. The interest rate for regular weekly reverse repo operations was cut from 0.5% to 0.3% in mid-September and the amount of funds placed increased from the previous part of the year. Due to high liquidity in the financial market, banks' lending and deposit rates decreased further. This, together with positive business and household expectations of future economic trends and improved credit standards, boosted loan demand and placement growth. Placements to households recorded a positive growth rate for the first time after several years of deleveraging in this sector.

As favourable developments continued early in the fourth quarter of 2016 (industrial production and retail trade turnover increased and most confidence indicators improved) real activity is expected to grow at an annual rate of 2.6% in the last three months of the year. GDP could increase annually by 2.8% in 2016 and accelerate to 3.0% in 2017. Foreign demand could again be the biggest contributor to growth in domestic activity. Gross fixed capital formation is also expected to rise, partly due to a better use of EU funds and continuation of investment in the tourism sector. Due to the positive effects of the tax reform on net household disposable income, personal consumption will continue to grow and remain a significant contributor to overall GDP growth. The risks to the realisation of projected GDP growth rates are balanced. The assumed growth rate of tourist services exports in 2017 could prove to be underestimated if trends recorded in the last two years continue and the tax reform

Table 1.1 Summary table of projected macroeconomic measures

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
National accounts (real rate of change, in %)			'	<u> </u>						
GDP	2.1	-7.4	-1.7	-0.3	-2.2	-1.1	-0.5	1.6	2.8	3.0
Personal consumption	1.2	-7.5	-1.5	0.3	-3.0	-1.9	-1.6	1.2	3.1	3.3
Government consumption	-0.7	2.1	-1.6	-0.3	-1.0	0.3	-0.8	-0.3	1.4	1.0
Gross fixed capital formation	9.2	-14.4	-15.2	-2.7	-3.3	1.4	-2.8	1.6	4.1	6.8
Exports of goods and services	0.8	-14.1	6.2	2.2	-0.1	3.1	7.6	10.0	6.1	5.5
Imports of goods and services	4.0	-20.4	-2.5	2.5	-3.0	3.1	4.5	9.4	6.5	7.4
Labour market										
Number of employed persons (average rate of change, in %)	2.3	-2.1	-4.2	-1.1	-1.2	-1.5	-2.0	0.7	1.8	1.5
Registered unemployment rate	13.2	14.9	17.4	17.8	18.9	20.2	19.6	17.0	15.0	14.4
ILO unemployment rate	8.5	9.2	11.6	13.7	15.9	17.3	17.3	16.3	14.3	13.9
Prices										
Consumer price index (average rate of change, in %)	6.1	2.4	1.1	2.3	3.4	2.2	-0.2	-0.5	-1.2	1.6
Consumer price index (rate of change, end of period, in %)	2.9	1.9	1.8	2.1	4.7	0.3	-0.5	-0.6	0.1	1.6
External sector										
Current account balance (as % of GDP)	-8.8	-5.1	-1.1	-0.7	-0.1	1.0	2.1	5.1	2.8	2.0
Current and capital account balance (as % of GDP)	-8.7	-5.0	-1.0	-0.6	0.1	1.1	2.3	5.8	3.8	3.1
Gross external debt (as % of GDP)	84.3	101.1	104.2	103.7	103.0	105.3	107.9	103.4	93.8	87.5
Monetary developments (rate of change, in %)										
Total liquid assets – M4	4.1	-1.0	1.9	5.6	3.6	4.0	3.2	5.1	4.8	4.1
Total liquid assets – M4 <sup>a</sup>	3.8	-0.8	0.7	4.6	3.9	3.6	2.4	5.0	5.2	4.0
Credit institution placements to the private sector	10.7	-0.6	4.7	4.8	-5.9	-0.5	-1.6	-2.9	-4.0	-1.3
Credit institution placements to the private sector <sup>b</sup>	8.7	-0.3	2.3	3.5	-1.2	1.0	-1.5	-2.2	1.4	2.6

<sup>&</sup>lt;sup>a</sup> Exchange rate effects excluded.

b Rates of change are calculated on the basis of transaction data (see Annex 1 Introduction of data on transactions in monetary developments analysis in the CNB Bulletin No. 221). Note: The estimates for 2016 and projections for 2017 are derived from data available until 8 December 2016.

Sources: CBS, MoF and CNB.

could make a stronger impact on household consumption if a smaller part of the increased income is channelled to savings deposits. The main negative risks are related to external effects, such as a stronger than expected effect of the Brexit vote on economic trends in Croatia's foreign trade partners and a possible re-escalation of the refuge crisis.

The average annual consumer price inflation rate for 2016 is estimated at –1.2%, with the greatest negative contribution to inflation coming from energy. Crude oil prices are expected to increase slightly towards the end of the year and, aided by the base period effect, to lead to a gradual increase in overall inflation. The average annual consumer price inflation rate could rise to 1.6% in 2017, primarily as a result of rising imported inflationary pressures, including an expected increase in the prices of crude oil and other raw materials, the acceleration of the euro area inflation rate and the strengthening of the US dollar against the euro (and, in turn, against the kuna), as well as because of changes in the indirect tax system.

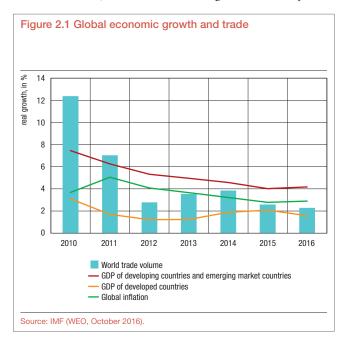
In 2016, fiscal policy was marked by the continued narrowing of the deficit, caused to a large extent by the cyclical upturn. The deficit in 2016 could thus fall well below 2.7% of GDP on an annual basis, the figure required under the excessive deficit procedure (EDP). The projected general government debt dynamics suggest that the debt criterion could also be met and that Croatia could exit the corrective arm of the Stability and Growth Pact in 2017. However, the structural deficit will probably deepen in 2017.

Given a relatively low expected inflation rate and the still relatively slow recovery in lending to the private sector, monetary policy will remain expansionary. The stability of the kuna to euro exchange rate will also continue to be maintained. Domestic interest rates will remain low on the back of surplus kuna liquidity of the monetary system, supported by the CNB's structural and regular repo operations, which should be reflected in placement growth and favourably influence overall economic developments.

## 2 Global developments

Global economic growth, which, according to first estimates, may stand at 3.1% in 2016, has slowed down to its lowest level since the financial crisis. The slowdown was primarily associated with developed countries, while the long-standing downward trend in economic activity of developing and emerging market countries came to a halt in the current year. The weakening of investment spending in many countries, mainly China and exporters of raw materials, contributed to a slowdown in world trade as well. Throughout 2016, financial markets displayed increased volatility, particularly after the UK vote to leave the European Union at end-June and following the US presidential elections in November. The prices of oil and other raw materials saw a slight recovery in 2016, putting an end to a slowdown in inflation at the global level.

The growth in developing and emerging market countries stabilised in 2016 mostly owing to the easing of the crisis in Russia and Brazil, while the restructuring and the consequential



slowdown of the Chinese economy continued at the expected pace. Growth remains slow in exporters of crude oil and other raw materials, but is supported by the mild recovery of prices of raw materials.

The slowdown in the economic growth of developed countries in 2016 was most prominent in the USA, which saw the slowest growth in the five-year period, brought about by the sharp drop in investments and a stagnation in exports. In many other developed countries, accumulated imbalances and structural deficiencies also hamper potentials for economic growth. Thus, the dynamics of growth in the euro area slowed down in 2016 compared to 2015 in spite of economic policy incentives. Even though increased employment and low inflation secured the increase in disposable income and strengthened personal consumption, weak investment activity and slow growth in exports continue to hinder economic growth.

#### Croatia's main trading partners

Economic trends in Croatia's major trading partners were relatively favourable in 2016, with Germany at the forefront. In addition to stable personal consumption, the largest contribution to the growth of the German economy came from exports, i.e. mostly exports to other euro area members, which offset the relatively weak demand from the global market. Italy continued to record below-average growth, mainly as a result of the weaknesses in the banking sector and a lack of investments. Austria saw more favourable economic developments than in 2015, while the Slovenian economy continued its stable growth, principally thanks to exports, whereas domestic demand subsided slightly.

Regional trading partners mostly saw positive changes in 2016. Estimated growth stands at 3.0% for Bosnia and Herzegovina, similarly to the year before. According to projections, economic growth in Serbia may reach the same level, which would significantly exceed earlier expectations.

#### Prices, exchange rates and financing conditions

After stabilising in the third quarter of 2016, the price of crude oil in the last quarter was heavily affected by expectations

associated with a possible agreement of OPEC member countries on production restrictions. After a decision to reduce daily output was reached at the meeting of OPEC country leaders held on 30 November 2016, for the first time since 2008, the price of a barrel of Brent crude oil soared by over 15% in less than two days, reaching USD 53 per barrel. In November and October, prices of raw materials excluding energy also rose at a faster pace than in the previous quarter. Prices of coal and iron ore climbed the most, primarily owing to an increase in global demand, but also due to the decrease in supply from mines in China resulting from the government's production curbs. Prices of agricultural raw materials recovered as well, while the rise in the prices of coffee and tea offset the fall in the prices of cereals and oil seeds.

The divergent trends in the monetary policies of the US and the euro area continued in 2016. The ECB cut its key interest rate from 0.05% to zero in March and expanded its programme of unconventional monetary policy measures. On the other hand, the Fed raised its benchmark interest rate by 25 basis points in December after a long period of delay.

The divergent movements in the exchange rate of the euro against other important world currencies also continued. After strengthening in the first half of the year, the euro depreciated against the US dollar in the second half of 2016. The trend was particularly prominent after the US presidential elections in early November, when the exchange rate of the euro against the US dollar sank to its lowest level in 2016, EUR/USD 1.05, by the end of the month. In addition to the increased chances that the Fed would further raise its key interest rate at its last meeting in December, the trend was also affected by the expectation of a possible shift in US economic policy. At the same time, an increase in risk aversion and a rise in political risks in the euro area in October and November caused the Swiss franc to strengthen against the euro. As for the exchange rate of the pound sterling against the euro, it was not until November that it started to recover from a severe loss in value recorded after the UK referendum on EU membership.

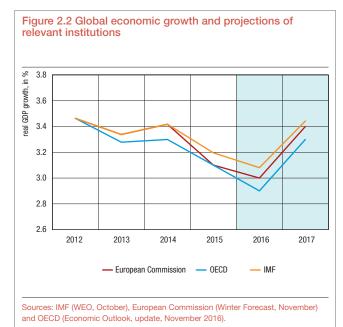
Financing conditions for European emerging market countries, including Croatia, mostly improved in 2016. The only exceptions were short periods immediately following the UK referendum in June and the US presidential elections in November. The US elections in particular had a relatively strong effect on risk perception, particularly with regard to emerging markets. The trend was evident in the increase of the EMBI index for European emerging markets, including Croatia, which increased by around 30 basis points.

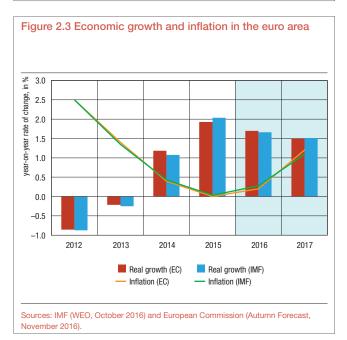
#### Projected developments

After the estimated 3.1% in 2016, the IMF expects global economic growth to accelerate and reach 3.4% in 2017. Developing and emerging market countries are expected to remain the main generators of global growth, while developed countries will continue to grow relatively slowly due to the weak growth in labour productivity and other restrictions.

Among major developed markets, the greatest uncertainty is associated with the United Kingdom, whose growth may halve in 2017 as a result of Brexit. On the other hand, the economic growth of the US should gradually pick up again after a temporary slowdown in the current year, provided that personal consumption and investment activities continue to grow.

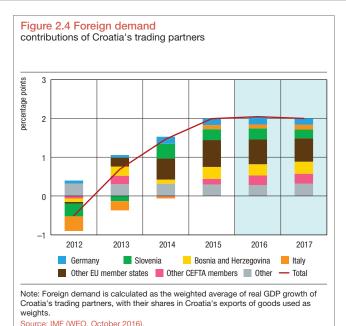
The euro area is expected to see a continuation of moderate economic growth in the year to come. The growth will, as before, predominantly be based on personal consumption spurred by an increase in disposable income, although the expected rise of inflation may begin to weaken the purchasing power





of households. In some countries of the euro area, investment activity has been burdened with poor prospects of long-term growth and high corporate debt for a while now, with the recent increase of uncertainty following Brexit and an increase in political instability further aggravating the situation. It is only in the medium term that the investment activity may see a significant recovery, after the majority of projects covered by the Investment Plan for Europe are realised. The export sector will also provide a limited contribution to growth, bearing in mind the subdued global demand. Inflation in the euro area is expected to rise significantly in the upcoming period as the negative contribution of prices of energy begins to subside and domestic consumption begins to strengthen gradually.

The increase in foreign demand of Croatia's major trading partners is expected to stabilise after accelerating over the previous years (Figure 2.4). The outlook for Italy is less optimistic than for other euro area partners, primarily due to the weaknesses of the financial sector and political instability. On the other hand, forecasts for the German economy are relatively favourable. In addition to stable personal consumption and a recovery of investments, economic growth is expected to be

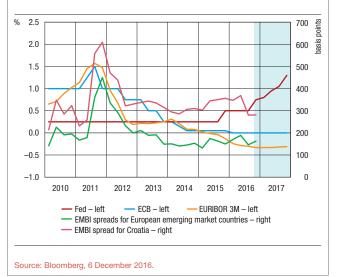


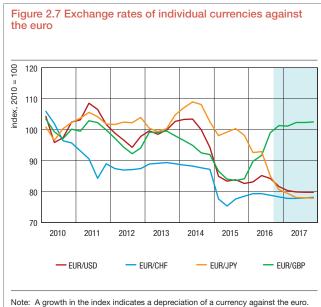
100 160 2010 =140 index, 120 100 80 60 40 2017 2010 2011 2012 2013 2014 2015 - Raw materials excl. energy - Food products Oil price index (Brent, USD/barrel) Metals Sources: IMF (August 2016) and prices of oil: Bloomberg (Brent crude oil futures, 6

Figure 2.5 Prices of raw materials on the international market

Figure 2.6 Benchmark interest rates and the average yield spread on bonds of European emerging market countries end of period

December 2016)





spurred further by the export sector which proved to be considerably resistant to global trade slowdown. Expectations are predominantly positive for countries in the region as well, which may strengthen mutual foreign trade.

In spite of a relatively positive outlook, it is worth noting that global growth is exposed to ever more prominent negative risks. In addition to prolonged uncertainty related to Brexit and the risks deriving from weak global demand, a possible shift in US economic policy, particularly regarding foreign trade and fiscal policy, is another source of concern. An increased tendency towards protectionism may slow down global trade, while fiscal incentives and the related tightening of monetary policy, along with increased risk aversion, could lead to a significant deterioration of global financing conditions. This may affect emerging market countries the most, particularly those with accumulated imbalances and large needs for financing. On the other hand, if implemented, the announced fiscal incentives could, in the short term, impart additional momentum to the US economy.

As regards price developments, the most recent market expectations point to a further moderate increase of crude oil prices by the end of the current year and in the rest of the projection period. The average price of Brent crude oil may reach USD 56 per barrel in 2017, compared to USD 53 per barrel in early December 2016. However, crude oil prices will be strongly affected by the uncertainty regarding the implementation of the agreement of OPEC countries and Russia on production cuts and the possible increase in production from new technologies in the US. As regards the prices of other raw materials, the upcoming period will likely see a slight increase in the prices of agricultural raw materials and food products and a somewhat sharper increase in metal prices.

At its meeting in December 2016, the Fed envisaged a further, possibly sharper increase of its benchmark interest rate in 2017. The Fed's more restrictive monetary policy reflects the somewhat improved expectations regarding the economic dynamics in the US, which may receive additional momentum from the announced expansionary fiscal policy. As for the ECB, key interest rates will remain at current or lower levels over a longer period of time. The bond purchase programme due to end in March 2017 has been extended to the end of the year, although reduced in volume (EUR 60bn instead of EUR 80bn per month).

EUR/USD and EUR/CHF exchange rate forecasts are based

on Foreign Exchange Consensus Forecasts from December. The US dollar is expected to appreciate slightly against the euro in 2017, reaching EUR/USD 1.06, after which the euro is likely to

recover. The exchange rate of the Swiss franc against the euro could reach EUR/CHF 1.08 in 2017, only slightly lower than in

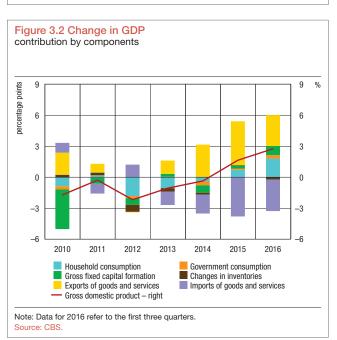
## 3 Aggregate demand and supply

Economic activity intensified substantially in the third quarter of 2016, growing by 1.7% at the quarterly level. Accelerated growth is mainly attributable to favourable trends in tourism, as reflected in the surge in exports of services. Household and government consumption also picked up, while exports of goods and investment activity weakened.

The annual rate of change in real GDP stood at 2.9% in the

third quarter, primarily as a result of a significant growth in exports of services, which led to a positive contribution of net foreign demand in the observed period. At the same time, the

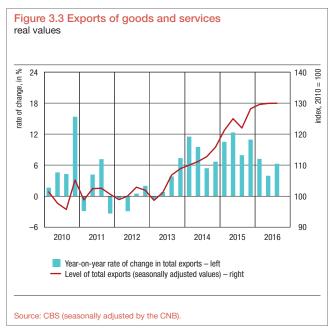
Figure 3.1 Gross domestic product real values 106 rate of change, 3 2010 2 103 1 0 100 -1 -2 97 -3 2010 2012 2013 2016 Year-on-year rate of growth of GDP - left Level of GDP (seasonally adjusted values) - right Note: Data for the fourth quarter of 2016 is the estimate derived using the CNB's Monthly indicator of real economic activity, on the basis of data published until 5 December 2016. Source: CBS (seasonally adjusted by the CNB)

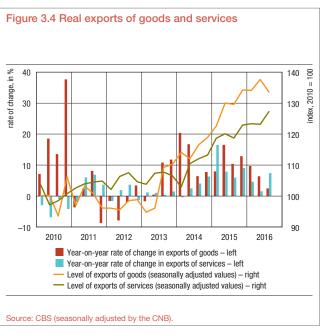


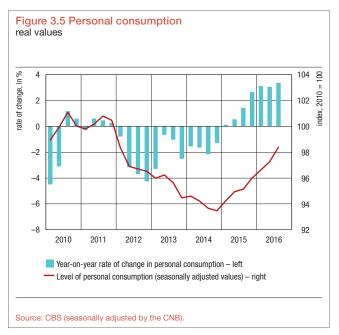
production side of GDP calculation shows that gross value added grew by 2.7% annually, which can be attributed to an increase in all activities.

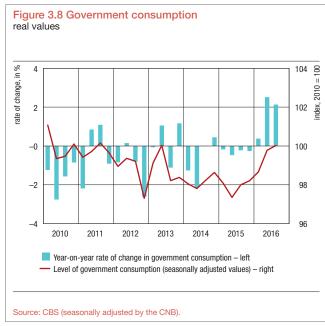
#### Aggregate demand

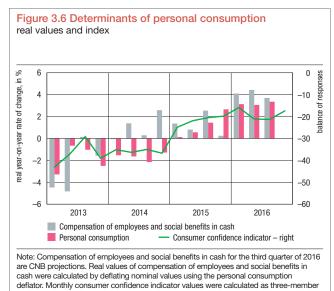
Real exports of goods and services in the third quarter remained at the level reached in the previous quarter, resulting in a third consecutive quarter that had a noticeable decline in the quarterly dynamics of total exports. Such developments were reflected in the annual rate of growth in exports of goods and





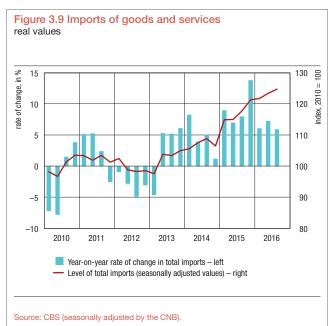


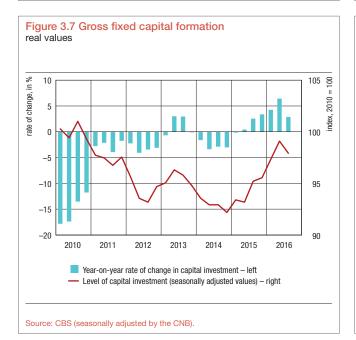


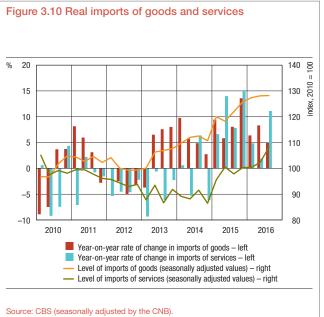


averages of monthly data. The most recent data for the calculation of consumer

confidence refers to November 2016. Sources: CBS, Ipsos and CNB.







services which, although still high in the third quarter (6.3%), was only a little more than half of the average rate of growth in 2015.

The stagnation of total exports in the third quarter was exclusively due to the drop in the exports of goods, while the rise in exports of services may be associated with extremely favourable results in tourism, as evidenced by the available data on the trends in revenues from tourism in the balance of payments, as well as the number of overnight stays and arrivals of foreign tourists. As regards unfavourable developments in exports of goods, nominal data on the trade in goods broken down by main industrial groupings from July and August show that the exports of capital goods dropped significantly on the quarterly basis, with exports of intermediate goods in decline as well.

Personal consumption continued to grow in the third quarter for the seventh consecutive quarter, increasing annually by 3.4% and resulting in the highest annual rate of growth since 2008. Favourable trends reflect the continued recovery of the labour market and, most likely, the increased inflow of funds from the provision of tourist services. Furthermore, the decline in consumer confidence came to a halt in the third quarter, with the consumer confidence indicator still standing relatively high and improving in October and November primarily owing to the improved economic and financial outlook for the next 12 months.

Gross fixed capital formation dropped in the third quarter of 2016 relative to the previous quarter after four quarters of continuous growth. Its annual rate of growth thus slowed down from 6.5% in the second quarter to 2.9%, partly as a result of a base effect. Weakened investment activity at quarterly level may partly be associated with the political instability relating to the early elections, which led to a delay of investments, particularly those of the general government, as reflected in the decline in civil engineering works. Furthermore, a drop in investments may also be a result of the finalisation of investment projects related to tourism in the first half of the year.

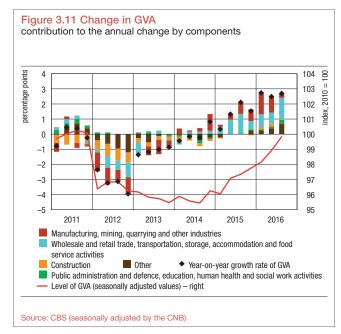
The upward trend in government consumption that began in mid-2015 continued during the third quarter, partly as a result of an increase in the number of civil servants and government employees. Due to a base effect, the annual rate of growth decelerated slightly from 2.5% in the second quarter of 2016 to 2.1%.

The rise in total domestic demand caused imports of goods and services to increase as well, resulting in an annual growth of 6.0%. Observed at quarterly level, the increase in imports of goods and services was mainly a result of an increase in imports of services, which, compared to the previous quarter, grew by almost 6%, mostly owing to the imports of travel services. At the same time, real imports of goods remained the same as in the previous quarter. Nominal data on trade in goods show that the stagnation in imports of goods originates from a steep fall in imports in September, as opposed to July and August, when imports of goods rose markedly.

#### Aggregate supply

The rise in gross value added intensified further in the third quarter of 2016, increasing by 0.9% from the previous quarter. All components of GVA increased in the observed period except manufacturing and construction. The most significant increase was seen in trade, transportation and tourism, which may be associated with extremely favourable developments in tourism and the continued increase in household purchasing power. Observed at the annual level, gross value added grew by 2.7% in the third quarter of 2016.

Available monthly data point to a continuation of favourable economic trends in the fourth quarter of 2016. Real retail trade turnover in October 2016 was 1.3% higher than the average of



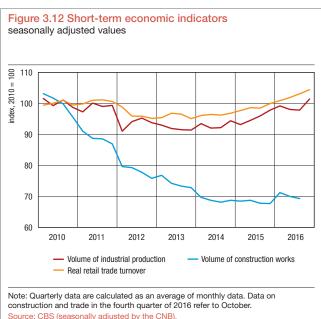


Figure 3.13 Business confidence indicators standardised seasonally adjusted values, three-member moving averages 130 120 110 100 2010 2011 2012 2013 2014 Construction business confidence indicator Industry business confidence indicator Trade business confidence indicator Services business confidence indicator Long-run average = 100 Sources: Ipsos and CNB (seasonally adjusted by the CNB)

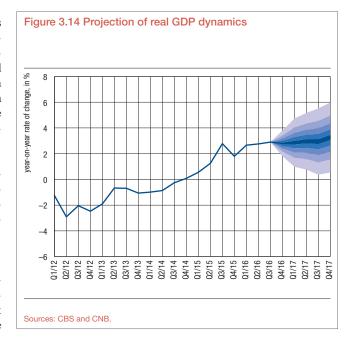
the preceding quarter. In addition, industrial production was 3.7% up in October on the second quarter of 2016, primarily due to an increase in the production of energy. Among other components of MIGs, the production of capital goods and durable consumer goods grew as well. Nevertheless, based on currently available data, the GDP nowcasting model points to a slight drop in real GDP in the fourth quarter of 2016 from the previous quarter due to the extremely fast pace at which economic activity grew in the third quarter of the current year.

Available data on business expectations (seasonally adjusted) point to a further increase of confidence in construction, industry and service activities in the fourth quarter of 2016. Regarding expectations in trade activities, business confidence deteriorated in October and November primarily due to poorer expectations related to sales in the following quarter.

#### Projected developments

High growth rates of exports of goods and services, strengthened investment activity and a marked increase in personal consumption may result in an annual real GDP growth of 2.8% at the level of the whole of 2016. Growth is expected to accelerate slightly (to 3.0%) in 2017, driven by the effect of the tax reform on personal consumption and investment. Observed individually, exports of goods and services may continue to contribute the most to total GDP growth, although domestic demand is expected to increase significantly as well.

The estimate of real growth in 2016 was upgraded by 0.5 percentage points from the forecast made in June, when a rise of 2.3% was projected. The change was predominantly prompted by extremely favourable results from mid-2016, which were significantly better than had been expected, particularly with regard to the rise in investments in the second quarter and the exports of goods and services and personal and government consumption in the third quarter. Among the components of domestic demand, gross fixed capital formation is expected to see the most substantial increase in 2016. Investment activity has seen the highest annual growth since 2008 in the second quarter, primarily owing to extremely favourable developments in the private sector, after which it slowed down in the following quarter. As a result, gross fixed capital formation may grow by 4.1% at the level of the whole of 2016. After outstanding results in the first three quarters of 2016, personal consumption is expected to rise further at a similar pace. The fall in consumer confidence that began in early 2016 came to a halt in September; consumer optimism was much higher than it was in the middle of the year. Furthermore, favourable labour market developments, particularly the further decline in the unemployment rate and the continued growth in net wages, are expected to continue throughout the fourth quarter, which may lead to an increase in household consumption of 3.1% at the level of the whole of 2016. The rise in government consumption exceeded expectations in the first three quarters of 2016, mainly as a result of an increase in compensations to employees. Consequently, this component of aggregate demand may grow faster than earlier expected and increase by 1.4% at the level of the whole of 2016, contributing positively to GDP growth. The annual growth in exports of goods and services may intensify further in the last quarter, causing the increase of total exports to stand at 6.1% at the level of 2016 as a whole. Total exports may thus contribute the most to real GDP growth this year as well. The expected continued rise in domestic demand and exports of goods and services may result in a further increase of total imports, which may grow by 6.5% in 2016. The contribution of net foreign demand to total economic growth in 2016 may therefore be slightly negative (-0.1 percentage point, in contrast to 2015, when it



was positive, standing at 0.5 percentage points).

As economic activity may intensify in 2017, real GDP growth is expected to reach 3.0% (as opposed to the June projection of 2.5%). Personal consumption is projected to intensify slightly with an increase of 3.3%, thus again providing a substantial positive contribution to total economic growth. A growth of household consumption faster than in 2016 is primarily expected as a result of changes in the income tax system, which may have a favourable effect on net household disposable income. Investment activity may also accelerate, partly as a result of changes in the corporate income tax system and partly due to a larger increase in other components of domestic demand, which may cause its positive contribution to economic growth to rise significantly compared to 2016. On the other hand, the increase in government consumption may slow down in 2017 as the number of civil servants and government employees is expected to stagnate on the annual level. As regards foreign demand, the rise in exports of goods and services may continue to provide the most substantial positive contribution to GDP growth. Finally, imports of goods and services are expected to increase further as a consequence of a rise in domestic demand, as well as of the continued growth in the exports of goods and services, bearing in mind the import dependence of exports. Therefore, the negative contribution of net foreign demand to economic growth might increase significantly in 2017 (to -0.7 percentage points).

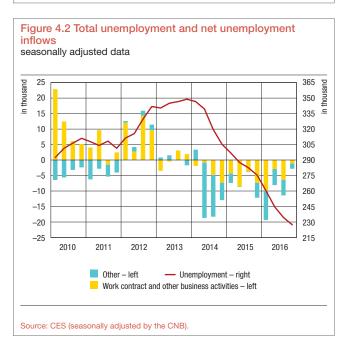
The risks associated with the central projected value per year are balanced. The main positive risks are related to potentially stronger positive effects of income tax changes, which may lead to a higher tendency of households towards consumption than previously expected. In that case, the rise in personal consumption may be higher and the positive contribution of household consumption to economic growth more prominent than shown in the current projection. In addition, withdrawal of EU funds might be higher in the projected period, which ultimately may have a more favourable effect on economic growth than currently projected. On the other hand, the main negative risks are related to external effects such as a stronger effect of Brexit on economic trends in Croatia's foreign trade partners than currently expected. Finally, a possible re-escalation of the refugee crisis may result in problems at the borders, producing negative effects on the exports of goods. Moreover, the refugee crisis may have an unfavourable effect on tourism and cause the exports of services crucial for Croatia's economic growth to shrink.

#### 4 Labour market

#### Employment and unemployment

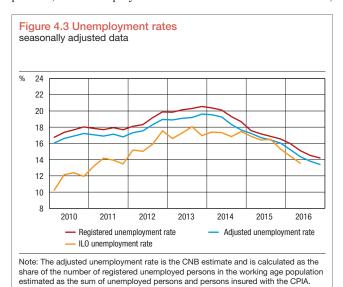
The growth in the number of employed persons slowed down in the middle of the year to intensify again early in the fourth quarter of 2016. Employment increased by 0.5% in October and November relative to the summer months, with the growth rate coming closer to the level from the beginning of the year. In the reference period, employment largely grew on the back of private sector service activities, while the contribution of industry and the public sector increased in the fourth quarter (Figure 4.1). Unemployment continued decreasing in the third quarter of 2016, if at a slower pace than in the first half of the year. The number of unemployed persons went down by 4.2% from the previous quarter, as compared to the average decrease of –5.7%

Figure 4.1 Employment by NCA activities seasonally adjusted data, contributions to the quarterly rate of change 0.8 1,545 😭 0.4 0.0 -0.4 1,440 1,405 -1.21,370 -1.61.335 -2.0-2.41,300 2011 2013 2015 Public sector (0, P, Q) Other Industry (B, C, D, E) Construction (F) Trade (G) Employment - right Note: Data for the fourth quarter of 2016 refer to October and November. Source: CPIA (seasonally adjusted by the CNB)



in the first half of the year. The decrease in the number of unemployed persons was more due to 'newly employed' than 'other reasons' (removal from the register because of non-compliance with the legal provisions, cancellations and failure to report regularly). The number of unemployed persons declined further early in the fourth quarter, to 3% in October from the previous quarter average (Figure 4.2). The decrease in the number of unemployed persons is to some extent correlated with the accelerated trend of emigration of the working age population to developed EU countries, as indicated by the annual CBS data and the data of foreign statistical offices.¹

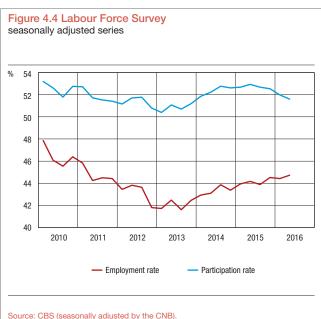
Due to the continued decline in the number of unemployed persons, the unemployment rate continued to trend down,



Since January 2015, the calculation of the registered unemployed rate published by the CBS has been made using the data on employed persons from the JOPPD form.

Sources: CBS, CES and CNB calculations (seasonally adjusted by the CNB)

Data for the fourth quarter of 2016 refer to October.



<sup>1</sup> The official CBS data show that almost 30,000 Croatian citizens (about 0.7% of total population) emigrated from the country in 2015, as much as three times more than in 2008. However, it is possible that the number of emigrants is underestimated by the official statistics data for they include only those persons who had had a new place of residence for a period of more than one year and reported this to the Ministry of the Interior. Hence, for example, according to the official data of the CBS 12,000 Croatian citizens emigrated to Germany in 2015, while the official data of the German statistical office show that the number of persons with Croatian citizenship increased by about 35,000 in 2015 from 2014.

Table 4.1 Projection of labour market indicators for 2016 and 2017

year-on-year rate of change

	2012	2013	2014	2015	2016	2017
Number of employed persons	-1.2	-1.5	-2.0	0.7	1.8	1.5
Unemployment rate (ILO)	15.9	17.3	17.3	16.3	14.3	13.9
Average nominal gross wage	1.0	0.8	0.2	1.3	1.8	1.9
ULC	-1.3	-2.3	-2.4	-0.5	0.9	0.4
Productivity	1.4	1.7	-3.1	0.1	1.0	1.4

Note: The year-on-year rate of change of the average gross wage until 2015 refers to data from the RAD-1 monthly survey, and from January 2016 to data from the JOPPD form.

Sources: CBS, Eurostat, CPIA and the CNB projection.

reaching 14.5% in the third quarter (from 15.1% in the previous quarter). The same trend persisted also at the beginning of the fourth quarter, with the unemployment rate dropping to 14.2% according to seasonally adjusted data (Figure 4.4). The registered unemployment rate is calculated on the basis of CBS data on the number of employed persons obtained from the JOPPD form and not on the basis of the above described data on the number of persons insured with the CPIA. Should the unemployment rate be calculated on the basis of the CPIA data, it would amount to 13.4% in October. Moreover, the latest available data show a fall in the ILO unemployment rate, to 13.6% in the second quarter from 14.4% in the first quarter of 2016 (Figure 4.3).

Favourable developments in the labour market are also confirmed by the Labour Force Survey data. Unemployment fell markedly in the second quarter of 2016, accompanied by a concurrent mild increase in employment. In line with these developments and against the background of a modest decrease in the working age population, the participation rate trended down slightly (from 52.0% to 51.6%), while the employment rate increased (Figure 4.4).

#### Wages and unit labour costs

Financial labour market indicators were slightly less favourable in the third quarter of 2016 than previously in the year. As a result, the quarterly average wage decreased modestly due to lower wages in the public sector and in the sector of industry

Figure 4.5 Average nominal gross wage by NCA activities seasonally adjusted data, contributions to the quarterly rate of change 1.5 1.0 0.5 -0.5-1.02011 2013 2014 2015 Industry Construction Trade Public sector Other Nominal gross wage – right Note: Data on the average nominal gross wage by activity refer to data from the RAD-1 form, and from January 2016 to data from the JOPPD form Sources: CBS and CNB calculations (seasonally adjusted by the CNB)

Figure 4.6 Compensation per employee, productivity and unit labour costs seasonally adjusted data, quarterly rate of change and levels (2010 = 100)% 102 8 4 3 100 2 98 96 94 -1 92 -2 90 -3 88 2010 2011 2012 2014 2015 2016 2013 Compensation per employee Productivity ULC (2010 = 100) - right**◆** ULC

and construction (Figure 4.5). Concurrently, the purchasing power of wages decreased even more due to the current increase in consumer prices. However, the latest available data, for October 2016, again showed an increase in the average wage, which is primarily attributable to the growth of wages in the private sector, while wages in the public sector continued to decline. The growth of real wages remained less pronounced due to an additional acceleration of current consumer prices.

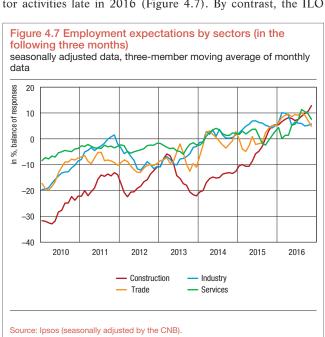
Unit labour costs declined substantially (-1.1%) in the second quarter of 2016 on the back of the decrease in employee compensation while labour productivity stagnated. Lower employee compensation resulted from the stronger growth in the number of employed persons amid a slight increase in total compensation paid (Figure 4.6).

#### Projected developments

Note: Productivity growth carries a negative sign.

Sources: CBS and Eurostat data seasonally adjusted by the CNB

According to the CNB projection, employment is expected to have increased by 1.8% in 2016 as a whole. The latest available data from the business confidence survey suggest the continuation of favourable employment trends in all private sector activities late in 2016 (Figure 4.7). By contrast, the ILO



unemployment rate, according to the CNB estimate, could fall in 2016 by somewhat more than 1 percentage point. With regard to labour costs, the expected growth of the average nominal gross wage in 2016 amounts to 1.8%. It is assumed that the growth in wages will be primarily shaped by developments in the private sector. By contrast, it is assumed that the growth of public sector wages will be fully determined by years of service, their potentially stronger growth being dependent upon the outcome of negotiations between the government and trade unions. Furthermore, unit labour costs are expected to increase in 2016

given that the growth of wages could exceed the growth of labour productivity. The growth of employment is expected to be slightly weaker in 2017 than in 2016, considering the absence of expectations of a marked acceleration of economic growth, while the ILO unemployment rate might amount to less than 14%. Furthermore, the average nominal gross wage is expected to continue growing in 2017 at a pace similar to that from 2016, while net wages could grow more strongly owing to legislative changes to income tax coming into effect in January 2017.

## 5 Inflation

The annual fall in consumer prices slowed down considerably in the second half of 2016, from -1.6% in June to -0.5% in October, due mainly to the decrease in the negative contribution of energy prices, notably refined petroleum products. At the same time, core inflation trended up, moving into positive territory in October for the first time in 2016 and amounting to 0.2% or 1.1 percentage points more than in June. The annual fall of producer prices (excluding energy) slowed down as well, from -1.5% in June to -1.0% in October, indicating the weakening of deflationary pressures.

Indicators of current inflation trends grew substantially from mid-2016, indicating the strengthening of inflationary pressures (Figure 5.2). By contrast, after seven months of steady growth (from December 2015), the inflation diffusion index decreased mildly in the last three months, standing at 58.4% in October. This shows that the prices of a majority of products in the HICP basket are still trending up.

Energy is the CPI component that continued to make the largest negative contribution to the annual inflation rate. However, it decreased noticeably, from -1.2 percentage point in June to -0.6 percentage point in October, mainly due to the prices of refined petroleum products, the negative contribution of which fell to -0.1 percentage point in October. This trend is attributable to the rise in refined petroleum products prices in September and October, reflecting developments in crude oil prices in the world market, and to the base period effect, i.e. a

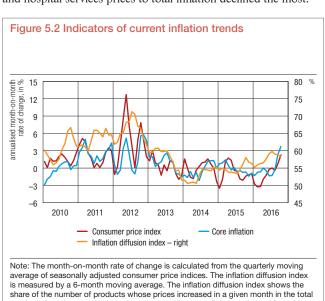
Figure 5.1 Year-on-year inflation rate and contribution of components to consumer price inflation 6.0 5.0 percentage 4.0 3.0 2.0 1.0 0.0 -1.0-2.02012 2013 2014 2015 Energy Unprocessed food Processed food Non-food industrial goods without energy Services Core inflation (%) Consumer price inflation (%) Note: Core inflation does not include agricultural product prices and administrative

Sources: CBS and CNB calculations

pronounced fall in refined petroleum products prices in the July-October period of 2015. Specifically, the average Brent crude oil price rose slightly, to USD 50 in October from USD 48 in June, while it fell by almost a fourth in the same period of 2015.

The inflation also grew due to the prices of processed food, their contribution to total annual inflation increasing from -0.2 percentage points in June to 0.1 percentage point in October. In large part, this was a result of the increase in the prices of milk and dairy products, and the base period effect (the fall in these products' prices in the same period of 2015 due to the suspension of quotas for the production of milk in the EU). The contribution of non-food industrial goods without energy also trended up, from -0.1 percentage point in June to 0.1 percentage point in October, due mostly to the rise in the prices of clothing and footwear, i.e. a higher seasonal increase in these prices in September 2016 than in 2015.

By contrast, a mild pressure on the decrease of the overall annual inflation, observable from mid-2016, stemmed from the prices of unprocessed food and services. This was predominantly a result of the decline in the annual rate of change in the prices of agricultural products, notably vegetables, which was to some extent moderated by the rise in the annual rate of change of meat prices, entering positive territory in October for the first time in almost three years. As for services prices, the contributions of sewage collection services prices (due to the base period effect) and hospital services prices to total inflation declined the most.



share of the number of products whose prices increased in a given month in the total number of products and is based on the monthly rates of change derived from the seasonally adjusted components of the HICP.

Sources: CBS, Eurostat and CNB calculations

Table 5.1 Price indicators

vear-on-vear rate of change

	12/2015	3/2016	6/2016	9/2016	10/2016
Consumer price index and its components					
Total index	-0.6	-1.7	-1.6	-0.9	-0.5
Energy	-5.0	-7.4	-7.3	-4.2	-3.3
Unprocessed food	-0.1	-3.4	0.8	-0.8	-0.8
Processed food	0.5	-0.1	-0.7	0.2	0.3
Non-food industrial goods without energy	1.1	0.9	-0.3	0.6	0.6
Services	0.0	0.1	-0.1	-1.0	-0.4
Other price indicators					
Core inflation	0.0	-0.5	-0.9	-0.1	0.2
Index of industrial producer prices on the domestic market	-4.1	-5.0	-4.8	-3.0	-2.0
Index of industrial producer prices on the domestic market (excl. energy)	-0.5	-1.1	-1.5	-1.3	-1.0
Harmonised index of consumer prices	-0.3	-0.9	-1.2	-0.7	-0.3
Harmonised index of consumer prices at constant tax rates	-0.7	-1.3	-1.2	-0.7	-0.3

Note: Processed food includes alcoholic beverages and tobacco.

Source: CBS

Inflation in the EU accelerated from mid-2016 (Figure 5.3). This almost entirely resulted from the slowdown in the annual fall of energy prices, mainly attributable to the base period effect, i.e. a fall in energy prices in the same period of 2015. Concurrently, the growth of core inflation slowed down moderately (measured by the HICP excluding energy, food, beverages and tobacco), due largely to the deceleration of services prices.

By contrast, the annual fall of consumer prices measured by the HICP slowed down significantly in Croatia, from -1.2% in June to -0.3% in October 2016. As in the EU, this was mostly due to a decline in the negative contribution of energy prices and partly to the rise in the prices of industrial products and processed food. Hence, the inflation differential between the EU and Croatia dropped to -0.8 percentage points in October (from -1.3 percentage points in June) (for more details see Box 1 Causes of the difference between inflation in Croatia and the euro area). Core inflation (excluding energy, food, beverages and tobacco prices) accelerated sharply in Croatia in the last four months, by as much as 0.5 percentage points, reaching 0.1% in October, mainly on the back of the increase in the prices

Figure 5.3 Indicators of price developments in Croatia and

**European Union** 6 change, 5 rate of o 4 3 year 2 year-0 -1 \_2 2010 2016 2013 2014 2015 Croatia - HICP Croatia - HICP excl. energy, food, beverages and tobacco EU - HICP excl. energy, food, beverages and tobacco

Sources: CBS and Eurostat

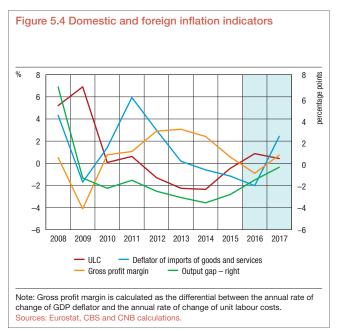
of industrial products.

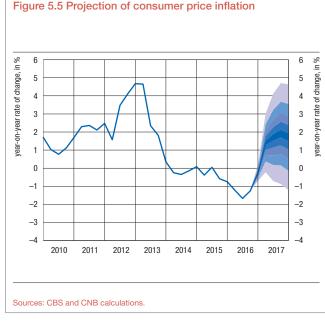
#### Projected developments

In 2016, the average annual consumer price inflation could trend down to -1.2% (from -0.5% in 2015). The contribution of energy prices could reach -0.9 percentage points in 2016, the same as it was in 2015. A sizeable increase in the Brent crude oil price in the word market is expected in December, which combined with the base period effect should result in the slowdown of the annual fall in energy prices, from -3.3% in October to -1.4% in December. Furthermore, it is forecast that the average annual rate of change in food prices could fall to -0.7% in 2016 (from 0.3% in 2015), owing to the spillover of lower prices of food raw materials in the world market onto domestic prices, the Russian embargo on imports and surpluses in the EU market. It is estimated that the average annual rate of change of consumer prices excluding food and energy will amount to 0.1% in 2016 (after standing at 0.7% in 2015), largely reflecting the fall in the prices of communication services and recreational and sporting services. In December 2016, inflation might move into positive territory supported by the expected growth in the prices of refined petroleum products, tobacco (due to the rise in excise duties) and food, and positive effects of the base period.

A pronounced acceleration of inflation, to 1.6%, is forecast for 2017, largely encouraged by the strengthening of imported inflationary pressures and tax reform effects. In addition, the indirect effects of an earlier decrease in raw materials prices on finished goods are expected to fade out. Hence, the year 2017 is expected to be marked by a sizeable increase in the price of Brent crude oil (in kuna) of around 34%, a rise in food raw material prices in the world market and an acceleration of inflation in the euro area, which is also reflected in a noticeable increase of the annual rate of change in the deflator of imports of goods and services (Figure 5.4). Moreover, direct effects of tax changes on the average annual inflation rate in 2017 are

The decrease of the VAT rate applicable to waste disposal works in the opposite direction (towards inflation reduction), while it is estimated that the contribution of the decrease in electricity prices due to the lower VAT rate will be offset by the rise in renewable energy sources tariffs.





estimated at about 0.35 percentage points and include the rise in the VAT rate on sugar and catering services from 13% to 25%, and the rise in excise duties on cigarettes and tobacco and new cars.<sup>2</sup> Inflationary pressures arising from the domestic economic environment might also increase in 2017, having in mind the continued narrowing of output gap. Personal consumption is projected to increase by a sizeable 3.3%, spurred among other things by an expected increase in household disposable income brought about by income tax changes. Accordingly, it is estimated that the year 2017 could be marked by an acceleration of the average annual rate of change in prices of all three components of inflation projection (energy, food and price index excluding food and energy) and that the contribution of energy prices to inflation could be most pronounced.

It is estimated that the risks of lower than projected or higher than projected inflation are balanced. Risks of a higher than projected inflation rate include a possible stronger growth in crude oil prices, unfavourable weather conditions and reduced surpluses in the EU market that might result in a stronger growth of agricultural products prices, a potential impact of administrative decisions and a pronounced weakening of the euro/US exchange rate. Risks of a lower than projected inflation rate refer to a less pronounced spillover of tax reform effects on the growth of consumer prices, lower prices of crude oil and other raw materials in the world markets, a subdued inflation growth in the euro area and lower prices due to administrative decisions (a possible decrease in electricity prices in 2017).

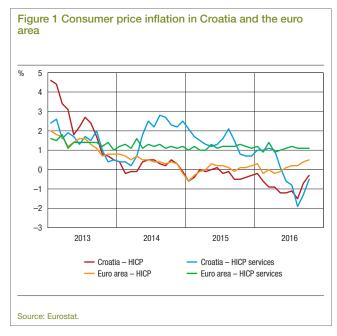
#### Box 1 Causes of the difference between inflation in Croatia and the euro area

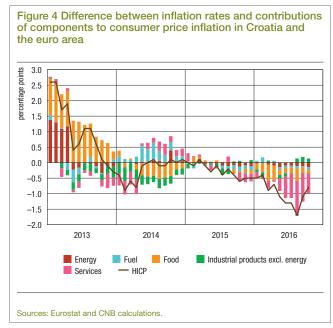
The inflation rate measured by the harmonised index of consumer prices in Croatia was much lower than in the euro area throughout 2016. This was mostly the result of the decline in services prices in Croatia, in particular accommodation services and package holidays. The fall was driven by changes in the methodology for calculating the subcomponents of the services price index, which were particularly prominent early in the tourist season.

Inflation measured by the harmonised index of consumer prices (HICP) in Croatia was below the euro area inflation rate as of the beginning of 2015, with the difference growing wider in 2016. The annual inflation rate went down from -0.3% in December 2015 to -1.5% in August 2016, dropping to a historic low. Inflation was relatively stable in the euro area – it was 0.2% in August 2016, the same as in December 2015 (Figure 1). The difference between inflation in Croatia and the euro area widened to -1.7 percentage points in August 2016, from -0.5 percentage points in December 2015. It should be noted that inflation in Croatia has sometimes in the past been lower than in the euro area, but the difference has never come close to 2 percentage points.

In technical terms, in addition to discrepancies in price movements themselves, this difference in inflation may be attributed to various weights of individual subcategories of the consumer price index. More precisely, if a weight of a more volatile subcategory of consumer prices is larger in Croatia than in the euro area, then the total increase or decrease in prices will be more pronounced in Croatia than in the euro area. The influence of various weights predominated throughout 2015, in particular the larger weight of energy prices (excluding fuels for passenger vehicles) and the lower weight for services prices in Croatia than in the euro area. The impact of different price movements became predominant in late 2015 and continued throughout 2016 (Figure 2). At the same time, the impact of the larger weight of energy prices almost disappeared from the year before, while the effect of the higher weight of services prices continued to lower the annual inflation rate by 0.1 percentage point on average (Figure 3).

The recent widening of the difference in inflation may therefore be attributed to divergent price movements, mostly prices of services after the beginning of the tourist season in Croatia. In particular, the annual rate of change in prices of the services included in the HICP started to fall sharply in Croatia in May, hitting a historic low in August. In that month, the contribution of services prices to overall inflation in Croatia was –0.7 percentage points, or almost a half of the negative annual consumer price inflation rate (Figure 4). In the same period, the contribution of services prices to consumer price inflation in the euro area remained positive at 0.5 percentage points.







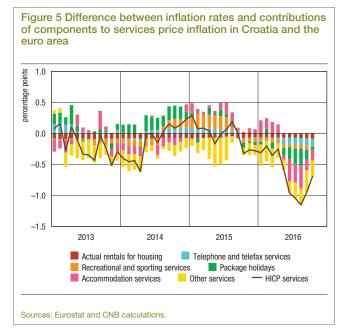
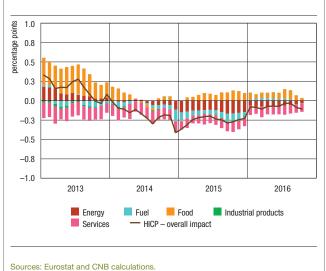


Figure 3 Impact of different weights in Croatia and the euro area



in Croatia (Figure 5). This was primarily the outcome of changes³ in the methodology for calculating the harmonised index of consumer prices, the impact of which began to wear off in September and should disappear by the end of 2016. It should be pointed out that the annual fall in prices of accommodation services between June and August was not evident in the national index

The growing difference in the contribution of services prices in Croatia and the euro area in the first eight months of 2016 was largely due to the decrease in prices of accommodation services and, to a smaller extent, the fall in the prices of package holidays

of consumer prices released by the CBS, while the drop in package holiday prices was much less pronounced.

The methodology for calculating the subcomponents of the services price index was changed in Croatia in early 2016 compared with 2015, which was especially reflected in the decrease of the annual rate of change in prices of accommodation services and package holidays. In view of the highly seasonal character of both these subcategories of services prices, the decrease became especially pronounced at the beginning of the tourist season, so that the contribution of services prices to the difference between inflation in

Croatia and the euro area started to increase noticeably in May 2016.

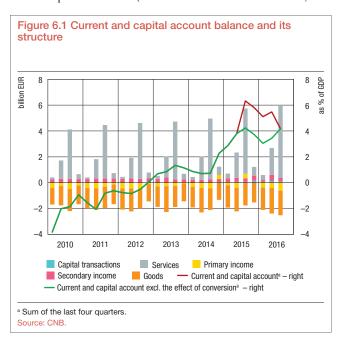
As the impact of methodological changes on the calculation

of the index of consumer services prices wore off, the annual decrease in services prices in Croatia slowed down noticeably after August 2016 and their contribution to the annual rate of overall consumer price inflation shrank to –0.2 percentage points in October. This contributed the most to the reduction of the difference between inflation in Croatia and the euro area, which fell to 0.8 percentage points in October. In that month, the annual

consumer price inflation rate in Croatia grew to -0.3% and to 0.5% in the euro area. Taking into account the recent trends and the expected disappearance of methodological effects, the difference between inflation rates in Croatia and the euro area should decrease even more in the forthcoming period.

## 6 Current and capital account

The trend of improvement in economic transactions with foreign countries came to a halt in 2016. Following the deterioration of the balance in the first half of 2016, the surplus in the current and capital account declined considerably in the third quarter from the same period in 2015 due to the disappearance of the effect of the conversion of loans in Swiss francs on banks' business results (estimated at about 2% of GDP). In addition, the deficit in foreign trade in goods continued to widen, this development being mitigated by an even stronger growth of the surplus in the trade of services during the exceptionally good tourist season. If cumulative values over the past year are observed, the surplus in the current and capital account in the third quarter of 2016 stood at 4.3% of GDP or at a level achieved in the same period in 2015 (the effect of conversion excluded).

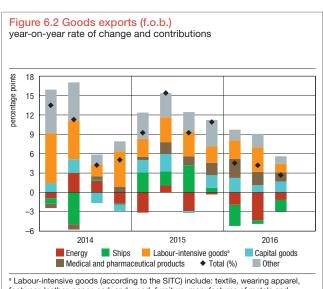


#### Foreign trade and competitiveness

The foreign trade deficit widened in the first nine months of 2016 from the same period in 2015, reflecting the strengthening of personal consumption and investment activities which contributed to stronger growth of goods imports than goods exports. The trade deficit in road vehicles and individual capital goods increased the most. The trade deficit was somewhat higher in the third quarter of 2016 than in the same period in 2015, with the deterioration in the balance of trade in road vehicles, medical and pharmaceutical products, individual capital goods and artificial fertilisers being accompanied by an improvement in the balance of trade in oil and refined petroleum products, electricity, electrical machinery, apparatus and appliances, and sugar, sugar products and honey.

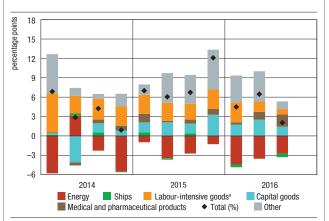
Exports of goods decelerated in the last three quarters, increasing by as little as 2.6% annually in the third quarter of 2016. Exports of ships and exports of oil and refined petroleum products (mostly to Albania and Greece) trended down. These two categories excluded, the growth of the exports of the narrow aggregate was stronger (6.2%), notably the growth of exports of medical and pharmaceutical products to the USA, Italy and the Netherlands, capital equipment (mostly electrical machinery, apparatus and appliances and telecommunication, sound recording and reproduction apparatus), metal industry products to Italy, Slovenia and Austria, and sugar and honey to Macedonia. Overall, in the first nine months of 2016, the annual growth rate of goods exports (3.8%) was considerably lower than that in the same period in 2015 (11.3%).

Total imports of goods grew by 2.0% annually in the third quarter of 2016, trending down more strongly than exports relative to the first half of 2016. The key growth contributor was stronger imports of the narrow aggregate (excluding ships and oil), up by 5.2%, mostly as a result of larger imports of medical and pharmaceutical products from Korea, individual capital goods (notably machinery specialised for particular industries from Germany and general industrial machinery from Germany and Slovenia), road vehicles from Germany and Slovenia, and non-ferrous metals from Italy and Russia. In contrast, there was a decrease in imports of oil and refined petroleum products from Russia, Nigeria, Slovakia and Hungary, and in imports of ships. Hence, total imports of goods also grew more slowly (4.3%) in the first nine months of 2016 than in the same period in 2015 (6.6%).



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





<sup>&</sup>lt;sup>a</sup> Labour-intensive goods (according to the SITC) include; textile, wearing apparel. footwear, leather, paper, cork and wood, furniture, manufactures of metals non-metallic mineral manufactures, prefabricated buildings and manufactured articles

Source: CBS

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

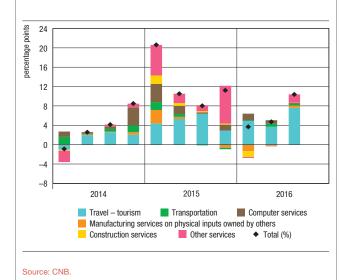
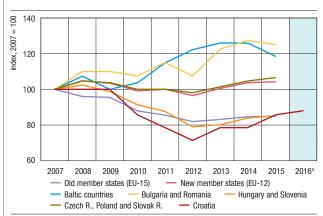


Figure 6.5 World market share of exports of goods and



<sup>&</sup>lt;sup>a</sup> The estimate of Croatia's market share in 2016 is based on the IMF projection of world trade developments in 2016 and the CNB estimate of the growth in Croatian

Note: The Baltic countries include Estonia. Latvia and Lithuania.

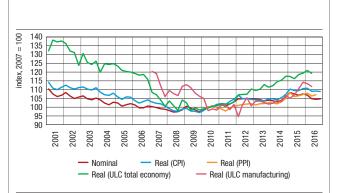
Sources: Eurostat, IMF and CNB

The foreign trade in services continued to be marked by very favourable trends. A 10% increase in the surplus in the third quarter of 2016 was mostly attributable to travel services, notwithstanding the increase in revenues being coupled with a strong growth of expenditures due to larger tourism consumption of residents abroad. Better financial results of the tourist season in Croatia, measured by the increase in revenues from non-resident consumption (up 9.0% annually), were due to the growth of volume indicators, with the number of arrivals and nights stayed by tourists in commercial accommodation facilities growing by 10.8% and 10.3% respectively. The major contributors were tourists from Germany, Austria, Slovenia, Poland and the UK. Concurrently, there was an increase in the surplus in the trade in other services, notably tourism-related services, such as personal, cultural and recreational services, and telecommunication and other services, largely research and development.

The competitiveness of Croatian exports of goods and services in the world market continued to improve. Croatia's market share in the world exports of goods and services has been trending up for the fourth year in a row, partly mitigating significant losses accumulated in the period from 2009 to 2012. Due to the slowdown in the growth of exports, only a slight recovery in the market share (much smaller than the growth of 9% in 2015) might be realised in 2016. The improvement is also confirmed in the latest European Commission Alert Mechanism Report from November 2016 according to which Croatia, due to favourable developments in 2015, stopped exceeding the benchmark for the measurement of the market share imbalance (-6% in the five year period). In addition, the CNB estimates suggest that the change in the market share during the five year period up to 2016 could leave negative territory and confirm that exports no longer represent a sector marked by macroeconomic imbalances in Croatia. However, it should be pointed out that the market share of Croatian exports is still smaller than in the years before the outbreak of the crisis and that there is room for further improvement, particularly if it is taken into account that the export sector is relatively less developed than in comparable

Moreover, the price competitiveness of Croatian exports, measured by the developments in the real effective exchange rates, is also more favourable than a few years ago, although the improvement, which lasted almost continuously from 2010, came to a halt in 2016. The real effective exchange rates of the

Figure 6.6 Nominal and real effective exchange rates of the kuna



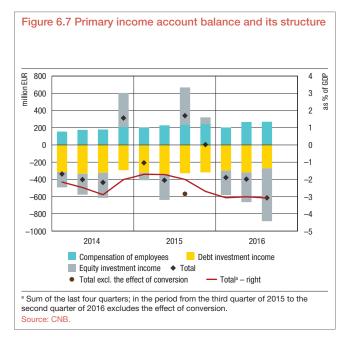
Note: The real effective exchange rate of the kuna deflated by producer prices includes the Croatian index of industrial producer prices on the non-domestic market, which is available from January 2010. The unit labour cost is calculated as the ratio between compensation per employee and labour productivity (defined as GDP per person employed). A fall in the index indicates an effective appreciation of the kuna. In the fourth quarter of 2016, data on the real exchange rate deflated by consumer and producer prices refer to October and data on the nominal exchange rate to October

Source: CNB.

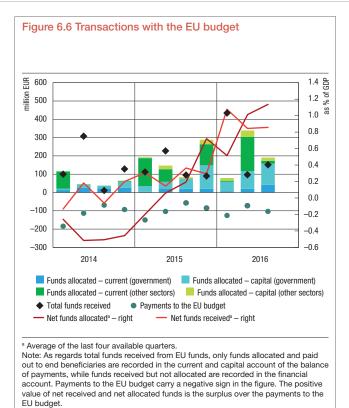
kuna deflated by prices and unit labour costs appreciated mildly in the first half of 2016, remaining almost unchanged in the rest of the year according to indicators available until October. Moreover, sector analysis in manufacturing suggests more favourable dynamics of price competitiveness than a few years ago; it also shows that changes at the sector level may be diverse and greatly deviate from those in the total economy, and that they are not necessarily correlated with export results (for more details see Box 2 Price competitiveness of the manufacturing sector — an approach based on technological intensity level).

#### Incomes and transactions with the EU

A deficit in the primary income account was again recorded in the third quarter of 2016, a significant deterioration from the same quarter in 2015, which was marked by an unusual surplus connected with the effect of the conversion of loans in Swiss francs. The decrease in the balance was for the most part the result of the strong increase in expenditures on the basis of direct investment contributed to by high profits of foreign-owned banks, with a significant improvement being observed in business performance of most other activities, notably those related to tourism (hotels and restaurants, trade, transportation and telecommunication). An additional impetus to the deterioration of the balance came from smaller revenues from equity investments abroad. The growth of revenues from compensations to residents working abroad and the decrease in interest expenditures on foreign financing (excluding FISIM), particularly of banks, had a mildly opposite effect. In the first nine months of 2016, the deficit in the primary income account increased considerably on an annual basis, also as a result of the growth in profits of foreign-owned banks, spurred by the base effect of smaller value adjustments and provisions, one-off revenue from the sale of the shares of Visa Europe Ltd., the increase in operating profit and the sale of claims.



Net revenues in the secondary income account increased slightly on an annual basis in the third quarter. Payments to the EU budget increased as did funds earlier received from EU funds that were allocated to end beneficiaries. The latter were however to a small extent of a current and to a greater extent of a capital nature, because of which there was a rise of the surplus in the capital transactions account. Concurrently, the average annual amount of the surplus of funds utilised from EU funds



over payments to the EU budget continued to grow, reaching 1.1% of GDP in September 2016.

#### Projected developments

Sources: CNB and MoF

The current and capital account balance might deteriorate slightly by the end of the year, due notably to the widening of the goods trade deficit spurred by the strengthening of domestic demand. In 2016 as a whole, the current and capital account surplus might reach 3.8% of GDP, a decrease from 2015 (5.8% of GDP) by only the estimated amount of the effect of the conversion of loans in Swiss francs on banks' performance (about 2% of GDP). The effect of conversion excluded, the surplus might remain almost the same in 2016, while it is expected to trend down in 2017 on the back of further economic recovery and the growth of domestic demand.

The goods trade deficit might increase in 2016 on an annual basis and in 2017, notably the narrow aggregate excluding ships and oil. Contributing to a stronger growth in the goods trade deficit in 2017 will be the higher prices of oil expected coupled with a strengthening of the US dollar, which, together with the growth in domestic demand for imports of oil and refined petroleum products, will have a negative effect on the foreign trade balance. In line with price developments, annual exports and imports of oil might increase by as much as one third, which, paired with larger expected deliveries of ships and unchanged dynamics of trade in other goods, after a slowdown in 2016, might again result in the nominal growth of goods exports and imports.

The estimates are that the growth of exports will continue to be distributed over a large number of sectors, while the factors underpinning it include economic recovery in the main trading partner countries, further utilisation of simplified procedures to access the EU market and improvement in other non-price and price competitiveness factors. The growth dynamics of total goods imports might resemble that of exports, which, paired with the dependency of the domestic economy, including the segment of tourist consumption, on imports, is also based on the

assumption of more intense withdrawals of EU funds and continued improvement of labour market conditions, with stronger domestic demand being supported by changes in the tax regime.

Tourism is the main factor behind the growth in net exports of services in 2016 and 2017. The second year in a row, tourism revenues grew at a considerable rate (about 8%) on the back of geopolitical and price factors that make Croatia an attractive and safe destination, easily accessible by road, and of investments in accommodation capacities and ancillary activities (infrastructure, cultural and entertainment facilities) partly financed by EU funds. Although the continuation of investments in the tourist sector and the economic recovery of the most important outbound markets will continue to stimulate the growth of tourism revenues in 2017 as well, they are expected to grow more slowly than in the previous two years.

The balance in the primary income account might deteriorate substantially in 2016 on an annual basis, not only because of the disappearance of the effect of the conversion of loans in Swiss francs but also because of a considerable rise in the profitability of banks and enterprises in foreign ownership. These developments will be offset by the growth of revenues from compensations to residents working abroad and the decrease in interest expenditures on foreign financing, due largely to the continued decrease in the external debt level. Similar developments might continue in 2017 as well, except in the banking sector, in which profitability could trend down after exceptionally high financial results in 2016, and contribute to the fall in the primary income deficit.

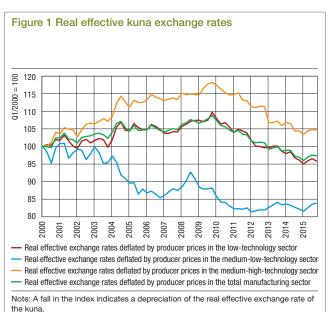
The improvement of the balance is expected in the accounts of secondary income and capital transactions in 2016 and 2017. These developments mainly reflect the assumption that EU funds will be utilised in an increased amount and that positive net effect of transactions with the EU budget might exceed 1.0% of GDP. However, this is still weaker than in comparable countries, particularly Bulgaria and the Baltic countries.

As far as the downside risks to the projected current and capital account balance are concerned those that should be pointed out include relatively slower recovery of the main trading partner countries, due to the UK exit from the EU and other political events in Europe and the world, which among others may contribute to the renewed intensification of the refugee crisis. Additional risks include a lower than expected intensity of withdrawal of funds from the structural and cohesion funds of the EU and more pronounced growth of interest rates and volatility in the world financial market. By contrast, the upside risks to the projection are stronger growth of tourism revenues in conditions of further upgrading of the quality of tourism services which could result in the continuation of more dynamic growth of volume and financial indicators observed in the previous two years. In addition, although the projection includes the assumption that the increased VAT rate in hotels and restaurants should not affect the overall revenues from travel services rendered to non-residents, there is a possibility that higher prices will even contribute to the increase in the nominal amount of tourist consumption.

## Box 2 Price competitiveness of the manufacturing sector – an approach based on technological intensity level

The analysis of real effective exchange rates shows that the dynamics of price competitiveness can vary considerably among sectors. As a case in point, in the last fifteen years, price competitiveness in Croatia improved considerably in the sector characterised by medium-low technological intensity of production, whereas the low-technology sector experienced only a slight recovery. On the other hand, price competitiveness deteriorated moderately in the medium-high-technology sector.

The real effective exchange rate of the kuna deflated by producer prices depreciated slightly in the period between 2000



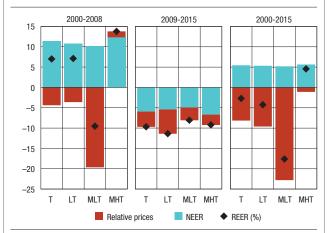
Sources: ECB and CNB calculations

and 2015 in manufacturing sector activities covered by this analysis,<sup>4</sup> indicating a slight improvement in price competitiveness (Figure 1). The improvement was due to the recovery of price competitiveness after 2010, which offset the loss from the previous period.

Price competitiveness dynamics varied at sector level (Figure 2), particularly in the period prior to 2010. In the sector of medium-low technological intensity of production, price competitiveness in Croatia improved in some years even in the period before 2010, whereas it deteriorated in the low and medium-lowtechnology sector. As the price competitiveness improved in all three sectors after 2010, the relatively most favourable trend in the entire 2000-2015 period was recorded in the medium-lowtechnology sector where the real effective exchange rate of the kuna depreciated by around 18% owing to trends in domestic prices that were more favourable than in those of the main trading partners. Such trends were followed by an increase in the share of exports from this sector on the global market, although the increase was more significant only after Croatia's EU accession (Figure 3). A more detailed analysis shows that, within the sector, the real effective exchange rate depreciated the most in the manufacture of basic metal and fabricated metal products, primarily due to trends in domestic prices that were more

4 Real effective exchange rates were not calculated for activities related to the manufacture of tobacco products, coke and refined petroleum products, other transport equipment and the printing and reproduction of recorded media due to the lack of necessary data and the fact that they are not usually the subject of competitiveness analysis. To be more specific, certain activities are usually excluded from analysis as they use raw materials considered homogeneous goods whose prices are determined on the global market and are unaffected by the change in the competitiveness of a country. Furthermore, the inclusion of activities where prices are largely regulated or subsidised may compromise the analysis of competitiveness.

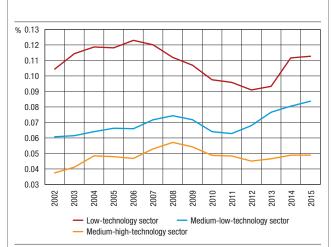
Figure 2 Decomposition of real effective exchange rates of the kuna deflated by producer prices percentage points



Note: Negative value indicates an improvement in price competitiveness (depreciation).

Sources: ECB and CNB calculations.

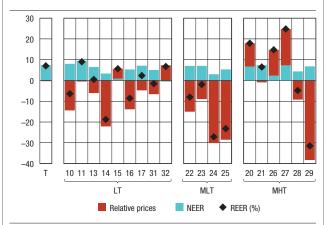
Figure 3 Market share of exports of manufacturing sectors



Note: Sectors do not include activities which are not the subject of this analysis (see footnote 4).

Sources: Eurostat and CNB calculations

Figure 4 Real effective exchange rates of the kuna according to NACE section, 2000-2015 percentage points



Note: Double-digit numerical denotations on the horizontal axis mark activities on the second NACE level (see Table 1). Negative value indicates an improvement in price competitiveness (depreciation).

Sources: ECB and CNB calculations.

favourable than in those of the main trading partners (Figure 4).

In the low-technology sector, the real effective exchange rate of the kuna depreciated by slightly more than 4% in the period from 2000 to 2015, mainly due to more favourable trends in domestic prices in the manufacture of wearing apparel and food products. In contrast, in the medium-high-technology sector, the real effective exchange rate of the kuna appreciated by around 5%, primarily in the manufacture of electrical equipment and chemicals and chemical products. Nevertheless, price competitiveness increased in this sector after 2009, although not enough to offset the losses from the earlier period. In spite of the deterioration of price competitiveness, the market share of this sector grew on the global market, indicating the relevance of non-price competitiveness factors.

Compared on the international level, Croatia stands among countries which saw an improvement of price competitiveness in the manufacturing sector in the period from 2002 to 2015. Among new EU member states, Poland improved its price competitiveness the most, while Romania's and Bulgaria's price competitiveness deteriorated the most in relative terms (Figure 5). At sector level, the improvement of price competitiveness in Poland was relatively most prominent at the low and medium-high-technology level, while the price competitiveness in the medium-low-technology sector relatively improved the most in Croatia. Indicators for selected countries show that price competitiveness was not the key determinant of export dynamics. Countries with the relatively most substantial deterioration of price competitiveness saw a strong increase in the share of exports on the global market.

#### Annex: Notes on methodology

The sector approach in the analysis of real effective exchange rates implies the classification of activities according to technological intensity, where activities of the total manufacturing sector (T) are classified into four sub-categories (Table 1): high-technology (HT), medium-high-technology (MHT), medium-low-technology (MLT) and low-technology (LT) sector.<sup>6</sup>

Accordingly, REER indices were first calculated on the second NACE level in the manufacturing sector, whereby producer prices were used as deflators for nominal effective exchange rates (NEER). Indices were then aggregated into three categories (low, medium-low and medium-high-technology sector) according to the level of technology using weights representing the relevance of a particular activity in the total trade of the manufacturing sector. As the high-technology sector includes only two activities and its share in the total trade of Croatia's manufacturing sector hovers around 10%, the high-technology and the medium-high-technology sector have been joined to form a single category (medium-high-technology sector) in this box. The methodology of REER calculation mostly follows the one used by the Croatian National Bank and other international institutions.

- 5 The analysed period is shortened as the data for market shares have been available since 2002.
- 6 According to Eurostat glossary, the sector approach is a special classification of manufacturing industry activities according to the level of their technological intensity (investment in research and development/value added) using the National Classification of Activities (NACE) on 2-digit and 3-digit levels (see http://ec.europa.eu/eurostat/statistics-explained/index.php/ Glossary:High-tech\_classification\_of\_manufacturing\_industries).
- Real effective exchange rates presented in this box were calculated by using simple overall trade weights (including imports and exports) and, in order to simplify the calculation which, due to the nature of the analysis, includes a large amount of data, they were limited solely to direct bilateral trade. Effective exchange rates are usually calculated by using double-weighted export weights which take into consideration the competition in third markets (see Box 2 of the CNB Bulletin No. 165, 2011).

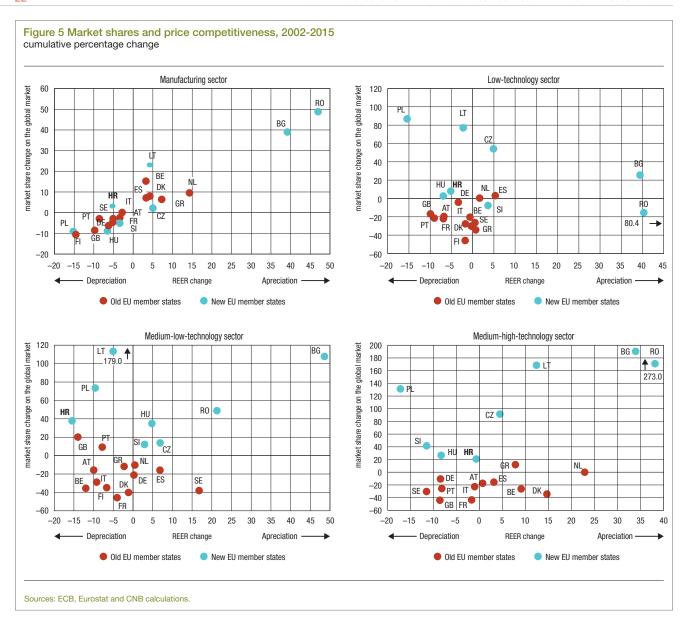


Table 1 List of manufacturing sector activities according to NACE section

Code	Low-technology sector (LT)	Code	Medium-low-technology sector (MLT)	Code	Medium-high-technology sector (MHT)
10	Food products (8.1%)	19	Manufacture of coke and refined petroleum products (7.1%)	20	Chemicals and chemical products (8.4%)
11	Beverages (0.9%)	22	Rubber and plastic products (3.5%)	27	Electrical equipment (6.6%)
12	Manufacture of tobacco products (0.5%) <sup>a</sup>	23	Other non-metallic mineral products (3.1%)	28	Machinery and equipment, n.e.c. (9.2%)
13	Textiles (2.2%)	24	Basic metals (5.9%)	29	Motor vehicles, trailers and semi-trailers (6.5%)
14	Wearing apparel (4.4%)	25	Fabricated metal products, except machinery and equipment (4.7%)	30	Other transport equipment (6.2%) <sup>a</sup>
15	Leather and related products (2.6%)				
16	Manufacture of wood and of products of wood and cork (2.6%)			Code	High-technology sector
17	Paper and paper products (2.6%)			21	Basic pharmaceutical products and pharmaceutical preparations (4.0%)
18	Printing and reproduction of recorded media (0.02%) <sup>a</sup>			26	Computer, electronic and optical products (6.7%)
31	Furniture (2.3%)				
32	Other manufacturing (1.9%)				

<sup>&</sup>lt;sup>a</sup> See footnote 4

Note: Numbers in brackets indicate the relevance of a particular activity in the total trade of Croatia's manufacturing sector in the period from 1995 to 2015. Source: CBS.

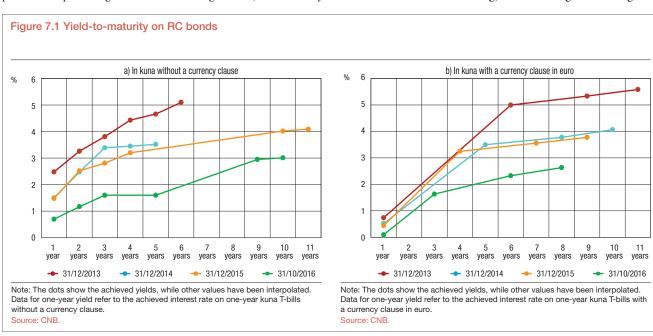
## 7 Private sector financing

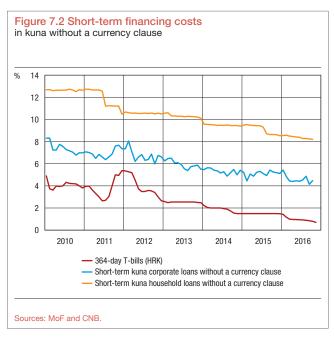
The second half of 2016 saw a further trend of improvement in the financing conditions for domestic sectors (households and enterprises), supported by high liquidity of the domestic and international financial market. The costs of government borrowing, one of the determinants of the costs of borrowing of other domestic sectors, fell additionally in 2016. The interest rate on one-year kuna T-bills halved in 2016, reaching a historical low of 0.70% in November (Figures 7.1a and 7.2), and the interest rate on one-year euro T-bills fell in November to 0.05%, from 0.40% at the end of the previous year (Figure 7.1b). The yield curve for Croatian government bonds shows that long-term interest rates on government bonds fell even more sharply. The yield-to-maturity on the five-year kuna bond without a currency clause at the end of November 2016 was 1.7 percentage points lower than at the end of 2015, while the yield on the six-year kuna bond with a currency clause in euro fell by 1.1 percentage points. The price of government financing abroad, estimated by

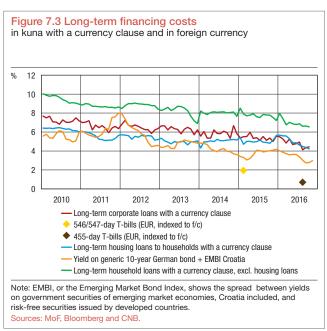
the sum of the EMBI index for Croatia and the yield on the German government bond, also fell to a historical low in September (Figure 7.3).

Immediately after the presidential elections in the USA, there were increased uncertainties in global financial markets, which also affected the growth in yields on the Croatian bonds. In the period from 9-11 November, the yields on euro bonds thus rose from 10 to 45 basis points and the yields on dollar bonds rose from 34 to 54 basis points. The market stabilised in November, with the yields on individual Croatian bonds falling slightly.

The costs of short-term and long-term corporate financing continued to trend downwards in 2016, in line with a several year trend (Figure 7.2 to Figure 7.4). The interest rates on loans above HRK 7.5m, generally used for financing large enterprises, were considerably lower and more volatile than those on smaller-value loans, given that large enterprises have easier access to alternative sources of financing, such as foreign borrowing. The







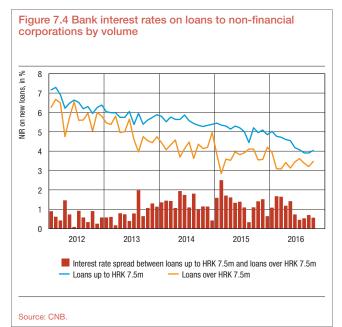
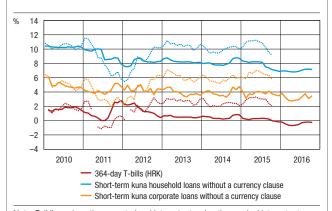


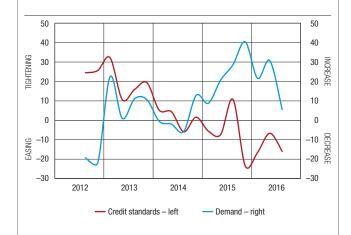
Figure 7.5 Achieved and expected real interest rates



Note: Full lines show the expected real interest rates, i.e. the nominal interest rates deflated by the expected values of the consumer price index under the CNB's official projection, and the accompanying dotted lines show the achieved real interest rates, i.e. the nominal interest rates deflated by the achieved values of the consumer price index.

Sources: CNB, CBS and CNB calculations

Figure 7.6 Credit standards and corporate demand for loans



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

Source: CNB

interest rates on loans below HRK 7.5m may also indicate the problem of the collateral provided by small and medium-sized enterprises being insufficient. In the third quarter of 2016, the spread between interest rates on loans up to HRK 7.5m and loans above that amount decreased from the first half of the year.

The interest rates on short-term household loans in kuna and on long-term loans with a currency clause in the period from July to October were also more favourable than in the first six months of 2016 (Figures 7.2 and 7.3). Interest rates on housing loans with a currency clause fell the most, partly as a result of the completion of the process of conversion of loans indexed to the Swiss franc into loans indexed to the euro. From December 2015 to April 2016, the process caused a temporary jump in interest rates on new housing loans transactions with a currency clause in euro (which also comprised converted loans). In addition to high liquidity, the fall in domestic interest rates was also driven by lower costs of sources of funds for the Croatian banking system, with EURIBOR and the national reference rate (NRR8) continuing to trend downwards and reaching the lowest levels ever. Real interest rates have steadily been falling more slowly than nominal interest rates since 2012 (Figure 7.5).

Credit standards for enterprises continued to ease in the third quarter and the demand for loans continued to rise, though at a slower pace than in the first half of the year (Figure 7.6). According to banks' responses to the bank lending survey, the easing of credit standards for enterprises was supported by more favourable conditions on the banking market (bank liquidity, banks' access to financing on the market and competition among banks), as well as by positive expectations regarding general economic developments. The improvement in economic conditions had a positive effect on demand for loans, while the need for financing gross fixed capital formation made the biggest positive contribution to loan demand of enterprises.

In 2016, the household sector on average witnessed the most favourable developments in credit standards and the demand for loans since the introduction of the bank lending survey (Figure 7.7). In the third quarter, as in the first half of the year, the easing of credit standards was mainly driven by competition among banks and reduced costs of funding sources but was also due to positive expectations regarding economic developments. Increased household consumption, improved real estate market outlook and rising consumer confidence were the main factors fuelling household demand for loans.

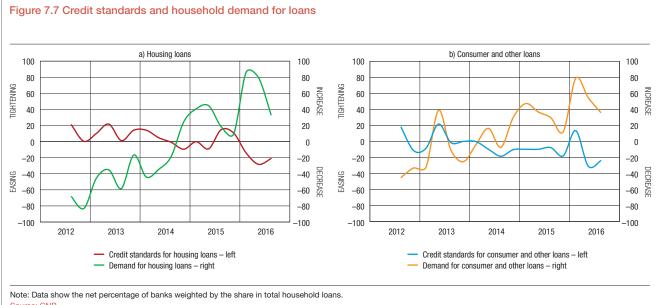
The total debt of non-financial corporations, after growing in the first half of the year, fell in the third quarter of 2016. However, on an annual level, it grew slightly at the end of September (0.3%, transaction-based), spurred by increased lending to private enterprises by domestic credit institutions (Figure 7.8).

By contrast, public and private enterprises continued to deleverage abroad for the third consecutive quarter and public enterprises reduced their foreign borrowing considerably.

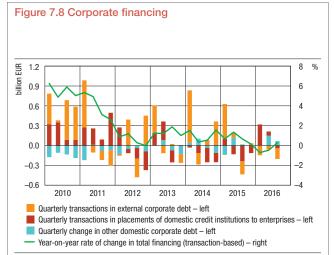
Corporate domestic placements of credit institutions rose by HRK 3.0bn or 3.2% (transaction-based) in the first ten months of the year, despite their small fall in the third quarter (Figure 7.9). The annual growth in placements to non-financial

<sup>8</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 143/2015).

<sup>9</sup> The total debt of non-financial corporations included the debt of private and public enterprises (excluding public enterprises included in the general government sector).

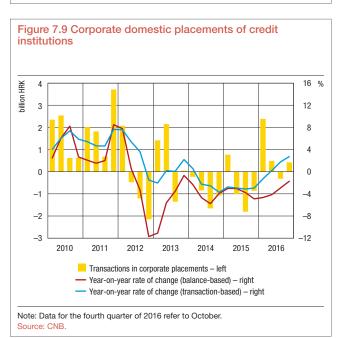


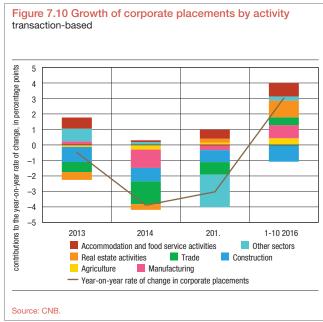
Source: CNB

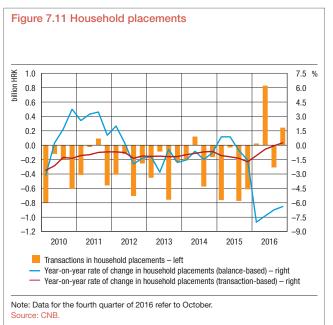


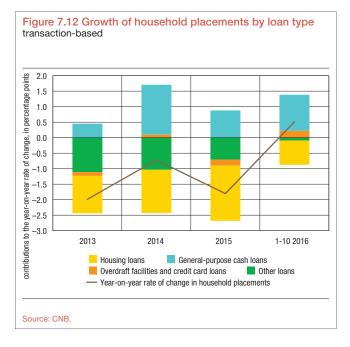
Notes: Other domestic financing includes borrowing from domestic leasing companies and the CBRD. Foreign financing includes borrowing from foreign banks and foreign affiliated enterprises and excludes the effect of debt-to-equity transactions. Rate of change was calculated based on transactions (except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

Sources: HANFA, CNB and CNB calculations.









corporations (transaction-based) trended upwards and stood at 2.7% at the end of October. By contrast, the nominal rate of change in corporate placements continued to be negative, but this was exclusively the result of the sale of non-performing placements which intensified in 2016 and stood at HRK 3.6bn in the first nine months.

As regards lending to enterprises by activities (Figure 7.10), accommodation and food service activities made the most sustained positive contribution to the growth in domestic placements in the past several years. In 2016, their contribution gained additional momentum. Next to the tourist sector, real estate activities made the biggest positive contribution to placements growth in the first ten months, followed by manufacturing. The construction sector deleveraged faster in the same period than in 2015.

More favourable financing terms and further recovery in

economic activity, coupled with positive developments in the labour market, contributed to an improvement in household lending. For the first time since 2009, October recorded a positive annual rate of growth in household placements of 0.3% (Figure 7.11), with general-purpose cash loans rising considerably (Figure 7.12) and kuna lending growing faster (for more details see Box 3 Kuna lending). By contrast, the 6.4% decrease in the nominal value of placements in that period was mostly the result of the process of the conversion and partial write-off of loans indexed to the Swiss franc, in which banks wrote off a total of HRK 6.0bn in loans from end-November 2015 to end-October 2016.

#### Projected developments

It is estimated that total domestic placements will rise slightly in 2016 (1.4%, transaction-based) as a result of further growth in corporate lending and a small recovery in household lending. Placement growth is expected to accelerate gradually to 2.6% in 2017, with the risks being balanced. The main upside risks to total placements projection are fast growth in loan demand and further improvement in financing conditions. The recovery in household placements might receive a boost from the announced government housing loans subsidy programme to be introduced in the second half of 2017. By contrast, the main downside risks are the high level of debt of the corporate sector and increased volatility in the international financial markets as a result of the many political risks that might ultimately result in unfavourable financing conditions. The projected domestic placement growth might be diminished by any significant orientation of enterprises to foreign sources of financing. In 2017, the banks are expected to continue cleaning up their balance sheets of non-performing placements, thus possibly paving the way for faster credit growth over a medium term. In addition to the further trend of sale of placements, one-time write-offs of non-performing placements are also expected to take place, boosted by changes in profit tax introduced by the government. Both developments are expected to result in a nominal fall in placements in 2017.

#### Box 3 Kuna lending

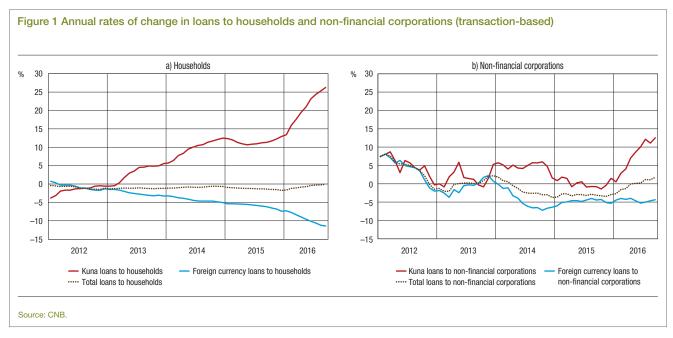
After being on the rise since 2013, lending in the domestic currency picked up strongly in 2016. The total increase in kuna loans largely reflects increased kuna lending to households and, to a lesser extent, non-financial corporations. The upturn in kuna lending was driven by the interaction of several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

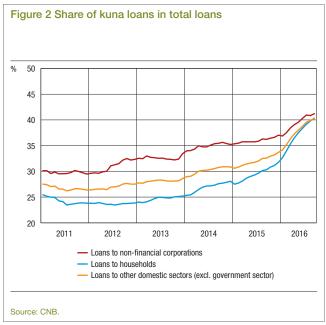
Total kuna loans to domestic sectors (not including the government) grew by HRK 25.9bn (37.5%) on a cumulative basis from early 2013 to September 2016, while foreign currency loans dropped by HRK 29.9bn (–17.3%). The largest contribution to the increase in kuna lending came from the household sector – its kuna loans grew by a total of HRK 18.7bn, while foreign currency loans decreased by HRK 22.7bn. As regards non-financial corporations, kuna loans to that sector went up by HRK 6.9bn, while foreign currency loans went down by HRK 8.8bn from 2013 to September 2016.

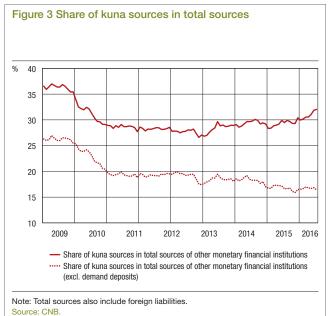
In terms of annual growth rates, the increase in kuna loans

to households reached two-digit annual growth rates as early as mid-2014, coming to a high 26.2% in September 2016, while kuna loans to non-financial corporations grew by 12.5% (Figures 1a and 1b). The trend of household deleveraging, present from 2009, lost much momentum, while corporate sector loans recorded positive annual growth in mid-2016, for the first time since early 2014.

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







and the write-off and sale of the existing credit portfolio, mostly linked to a foreign currency.

The share of kuna loans in total loans went up from 27.5% at end-2012 to 40.3% at end-September 2016 (Figure 2). Broken down by sector, the share of kuna loans in total household loans grew from 23.9% at end-2012 to 40.3% at the end of September 2016, while kuna loans to the corporate sector went up from 32.3% to 41.2%.

The growth in the share of kuna loans in total bank loans (credit de-euroisation) should be correlated with the growth in the share of kuna sources in total bank sources (deposit de-euroisation). It is noticeable that the share of kuna sources in total sources of bank financing increased in the last four years. After decreasing sharply following the onset of the crisis, this share has been increasing almost constantly from early 2013 and currently stands at 31.9% (Figure 3). The main source of this increase was the rise in demand deposits (kuna funds in current and giro accounts). By contrast, the currency structure of savings and time deposits remained unchanged, which means that most of these deposits are still denominated in the euro. The

growth in demand deposits actually reflects client preference for holding more liquid financial assets in the environment of falling deposit interest rates. At the same time, the banks have steadily decreased their external funding sources (mostly foreign exchange).

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

payouts, following last year's losses associated with the cost of

the expected conversion of loans in Swiss francs. At the same

time, new foreign direct equity investments in Croatia were

modest and mostly took place in the wholesale trade, the real es-

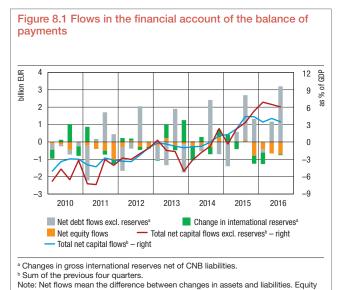
tate sector and the hotel sector. The amount of new investment in the first three quarters of 2016 was much smaller than in the

## 8 Foreign capital flows

Despite growth in domestic economic activity and improvement in financing conditions, capital outflow from Croatia continued into 2016. The financial account of the balance of payments, changes in reserves and liabilities of the CNB<sup>10</sup> excluded, thus saw a decline in net foreign liabilities of EUR 2.5bn in the third quarter of 2016 as a result of a considerable improvement in the debt position of the domestic sectors, while equity liabilities rose only slightly. As a result, the net international investment position improved further.

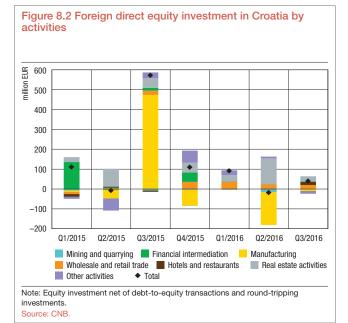
third quarter of 2016 was mostly driven by quite large reinvested earnings on the liabilities side, particularly in financial intermediation activity. The good performance of domestic banks in the current year was accompanied by much smaller dividend

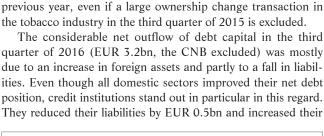
The net inflow of equity investment of EUR 0.7bn in the

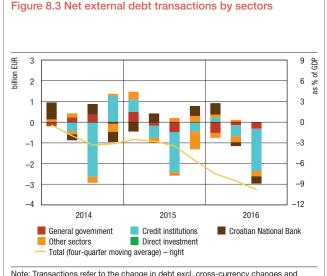


portfolio equity investment. Positive value means net capital outflow abroad.

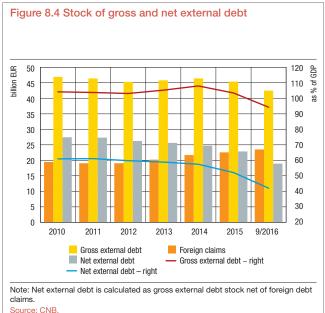
flows comprise changes in foreign direct equity investments, reinvested earnings and



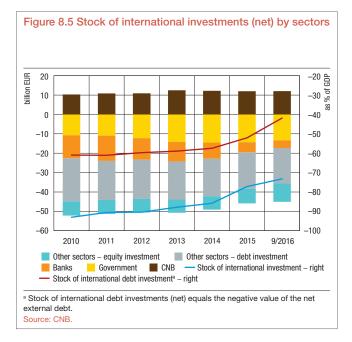




Note: Transactions refer to the change in debt excl. cross-currency changes and other adjustments. Net external debt is calculated as gross external debt stock net of foreign debt claims



<sup>10</sup> The investment of a share of international reserves in repo agreements resulted in an increase in gross international reserves and an increase in the external debt of the CNB in the same amount.



foreign assets even more (EUR 1.5bn). Further decline in total net debt liabilities was also spurred by deleveraging of the government and other domestic sectors in relation to unaffiliated creditors

As a result of domestic sectors' deleveraging and an increase in foreign assets, the relative indicators of external debt improved considerably in 2016. At the end of September, the stock of gross external debt stood at EUR 42.4bn, or 94.2% of GDP, a decrease of 9.2 percentage points from the end of the previous year, due to the fall in debt and the nominal increase in GDP. Credit institutions and the government deleveraged the most. The fall in total debt was also due to cross-currency changes and other adjustments. Since credit institutions witnessed at the same time a considerable increase in foreign assets, the fall in net external debt in 2016 was even more pronounced. At the end of September, the net external debt fell to EUR 18.9bn or 42.0% of GDP, a decrease of 10.0 percentage points from the end of the previous year.

Unlike the decline in external debt, the stock of net equity liabilities of the domestic sector rose in the first three quarters of 2016. The main contributing factors were rising reinvested earnings of credit institutions and even more, other sectors, partly due to the unfavourable effects of value adjustments.

Given that the effect of deleveraging was greater than that of the increase in the value of equity investments, the total net international investment position improved, having fallen from –77.2% of GDP at the end of 2015 to –73.2% of GDP at the end of September 2016. As observed by domestic sectors, the net international investment position deteriorated in the first three quarters of 2016 only in the corporate sector (and other financial institutions) because the impact of growth in equity liabilities was much more unfavourable than the impact of deleveraging, while the net international investment position of the government and credit institutions improved.

#### Projected developments

In line with a pronounced fall in the first three quarters, in 2016 as a whole, debt liabilities of domestic sectors are expected to fall significantly from the previous year. Deleveraging by credit institutions deleveraging, although of a smaller intensity than in the previous year, is the main contributing factor. Government and corporate deleveraging also plays a smaller role. Credit institutions might prompt further debt reduction in 2017 but the trend of deleveraging in them is expected to slow down. By contrast, foreign liabilities of the government and other domestic sectors might gradually grow.

As regards foreign direct investments, after falling sharply in 2015, net capital inflows from foreign direct investments might be much bigger in the current year, mainly as a result of the waning effects of the conversion of loans in Swiss francs but also of the larger profits of banks and enterprises in foreign ownership. The net inflow from foreign direct investment in 2017 might be somewhat smaller, i.e. approximately similar to the levels achieved in the years since the outbreak of the crisis for despite the expected growth in direct equity investment in Croatia, reinvested earnings might fall following the extremely high values recorded in 2016 and investments abroad are also expected to rise.

In the conditions of further deleveraging, accompanied by growth in nominal GDP, a considerable improvement is expected in the relative indicators of gross and net external debt and international investment position.

The risks associated with the projection of foreign capital flows include the unfavourable impact of the slow and inefficient implementation of structural reforms on investors' confidence and financing conditions, which might prompt faster deleveraging and reduce the already low equity inflows.

## 9 Monetary policy

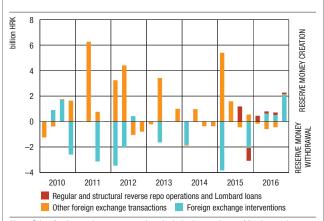
The CNB continued pursuing an expansionary monetary policy during the second half of 2016 while maintaining the stability of the kuna exchange rate against the euro. As of 2016, the central bank is also supporting high kuna liquidity by means of structural repo operations, placing to banks funds with a four-year maturity. The CNB placed to banks HRK 47.5m at an interest rate of 1.4% at the fourth structural repo auction held in November. Hence, total amount of long-term kuna liquidity created through these operations reached HRK 993.4m, supporting the trend of the decrease in domestic interest rates and the increase in bank kuna lending which accelerated in 2016 (for more details see Box 3 Kuna lending). The CNB also continued to conduct regular weekly reverse repo operations, the average amount of which in October and November stood at HRK

335.0m, almost three times higher than in the first nine months of 2016.

The average weighted overnight interbank interest rate edged down in the first two months of the fourth quarter, amounting to 0.41% relative to 0.46% in the third quarter. The surplus of liquidity in bank accounts with the central bank remained at a very high level, although it fell slightly in October and November from the third quarter (HRK 5.2bn vs HRK 5.5bn), due mostly to the outflow of some liquidity to the government kuna deposit account with the CNB.

Foreign exchange transactions of the CNB also contributed to the rise in kuna liquidity, notably the purchase of foreign exchange from banks due to the appreciation pressures on the domestic currency exchange rate. After two interventions in May





Note: Other foreign exchange transactions include the purchase of foreign exchange from and the sale of foreign exchange to the MoF and the EC and foreign currency swaps with banks, where the positive values refer to the purchase of foreign exchange by the CNB. Data for the fourth quarter of 2016 are up to 16 December.

Source: CNB.

Figure 9.2 Bank liquidity and overnight interbank interest

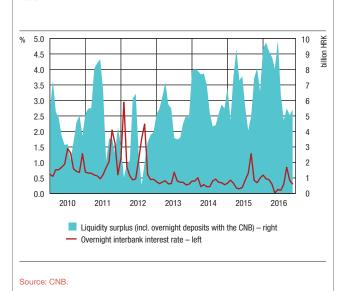
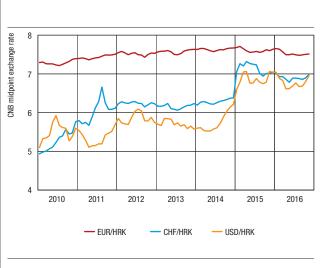


Figure 9.3 Nominal exchange rates of the kuna against selected currencies



Source: CNB

and September, the CNB also intervened in mid-December purchasing EUR 278m from banks. Observed from the beginning of the year, the CNB purchased from banks and the MoF a total of EUR 430.5m and EUR 124.4m respectively. At the same time, it sold to the EC a total of EUR 277.8m, which resulted in the net purchase of EUR 277.1m and the creation of HRK 2.1bn in all foreign exchange transactions in 2016, up to 16 December.

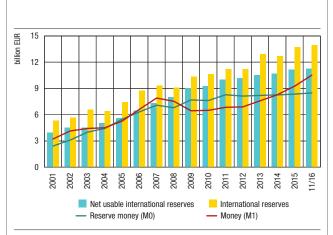
The kuna/euro exchange rate remained in October and November at levels slightly higher than the third-quarter average. However, the kuna continued to strengthen mildly on an annual level. Accordingly, the average exchange rate of the kuna against the euro during the first eleven months of 2016 stood at EUR/HRK 7.53, or down by 1.0% from the same period in 2015. The exchange rate of the kuna against the US dollar started to trend up in the fourth quarter, reflecting the strengthening of the dollar/euro exchange rate in global financial markets due to current expectations of a faster increase in interest rates in the US. The Swiss franc also strengthened against the kuna from the third quarter.

Gross international reserves increased by EUR 0.9bn in October and November, mainly on the back of the higher volume of negotiated repo transactions. At the end of November, gross international reserves stood at EUR 14.0bn, up by EUR 0.3bn (1.9%) from the end of 2015. By contrast, net usable reserves did not change significantly from September, amounting to EUR 11.3bn at the end of November, which is an increase of EUR 0.1bn (1.0%) from the end of 2015. Gross and net international reserves remained at higher levels than money (M1) and reserve money (M0).

The marked annual growth of total liquid assets (M4) continued in 2016 as a result of the strong growth in net foreign assets of the monetary system and a slight decrease in net domestic assets (Figure 9.5). These trends are attributable to the record tourist season, better absorption of EU funds and a mild recovery of domestic lending. However, net foreign assets of the monetary system improved mostly due to the continuation of the several-year-long process of credit institution deleveraging abroad, including the decrease in their external debt and the increase in their foreign assets. As a result, foreign assets of credit institutions exceeded their foreign liabilities at the end of October 2016 by almost HRK 20bn.

The strong upward trend in real monetary aggregates continued in 2016, with no major changes observed in the early fourth

Figure 9.4 International reserves of the CNB and monetary aggregates



Note: Net usable international reserves are defined as international reserves net of the CNB foreign liabilities, reserve requirements in f/c, government foreign currency deposits and off-balance sheet liabilities (swaps). The most recent data available for M1 refers to October 2016.

Source: CNE

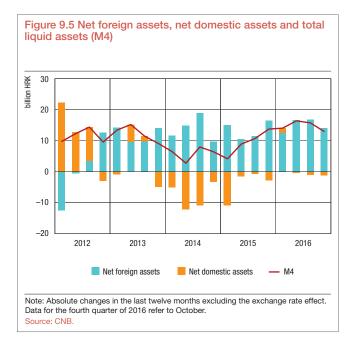


Figure 9.6 Real monetary aggregates index of developments in seasonally adjusted values, deflated by the consumer price index 100 140 2008 130 , January index. 110 100 90 80 2010 2011 2012 2013 2014 2015 2016 Money (M1) - Reserve money (M0) Total liquid assets (M4) Note: Data for the fourth guarter of 2016 refer to October. Source: CNB

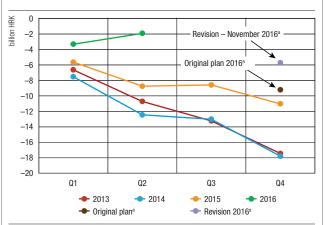
quarter of 2016. The growth in money (M1) was particularly pronounced because of the continued decrease in interest rates on savings and time deposits and the recovery of economic activity. On the other hand, the real value of reserve money (M0) edged down in October, particularly given the seasonal decrease in currency in circulation outside credit institutions.

In the conditions of subdued inflation and still slow recovery of lending, monetary policy will keep its expansionary character and work towards the maintenance of the stable kuna/euro exchange rate, which implies support to high monetary system liquidity through structural and regular repo operations and the

#### 10 Public finance

Fiscal data show that strong fiscal adjustment was carried out in the first half of 2016. The general government deficit (ESA 2010) decreased to HRK 1.9bn or 0.6% of GDP, which is HRK 6.8bn or 2.0% of GDP down from the same period in 2015. Such developments were the result of a sizeable growth in revenues and restrictions on growth on the expenditure side of the budget. The Ministry of Finance data on a cash basis suggest the continuation of favourable developments in public finances





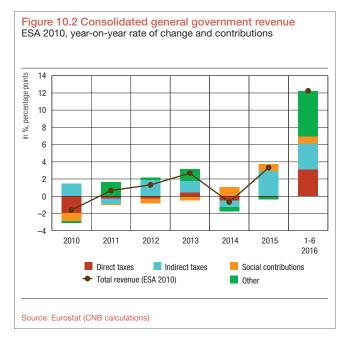
<sup>&</sup>lt;sup>a</sup> The original plan and the revision of the general government balance for 2016 are shown in line with the national methodology. The available data indicate that they do not differ significantly from the projection based on ESA 2010 methodology. Sources: Eurostat and MoF (CNB calculations)

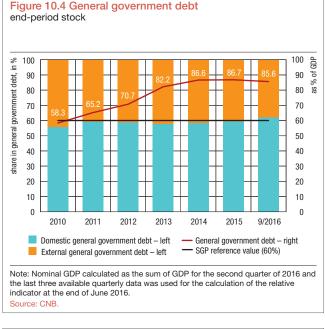
implementation of foreign exchange interventions when needed.

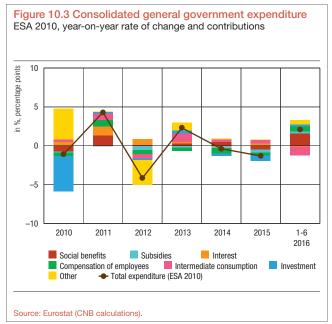
in the third quarter as well. Due to better than expected outturn in the first nine months, Amendments to the State Budget and Financial Plans of Extrabudgetary Users were adopted in November 2016, showing that the general government budget according to the national methodology might amount to 1.7% of GDP in 2016, or much below the 2.7% of GDP from the original budget. The downward revision of the deficit target is mainly the result of much more favourable developments in revenues than earlier expected.

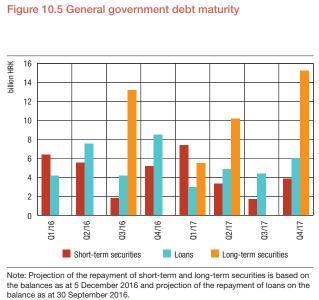
Total revenues grew by 12.2% on an annual basis in the first half of 2016, with positive changes recorded in all major items on the revenue side of the general government budget (ESA 2010). Favourable developments reflect growing economic activity and continued recovery in the labour market as well as some additional factors such as variable dynamics in payments of individual revenues in 2016 and 2015. The most significant contributor to total revenue growth was tax revenues, particularly those from direct taxes. Particularly evident was a growth in revenues from profit tax as a result of a considerable growth in entrepreneurs' profit in 2015 and the introduction of more restrictive terms for the use of tax reliefs based on reinvested earnings.11 Indirect taxes also made a large contribution to total revenue growth in the first half of the year, as a result of a recovery in personal consumption, an improvement in off-season tourism performance and greater revenues from excises on refined

<sup>11</sup> Faster growth in the first half of the year can also be attributed to the fact that the last day of April fell on a weekend, so end-of-year calculation cash payments were partly transferred to May. To record revenues from profit tax according to ESA 2010 methodology, the four month lag rule is applied to data on a cash basis.









petroleum products and tobacco products. <sup>12</sup> Revenues from social contributions also rose, reflecting favourable developments in the labour market. Positive developments were also seen in other revenues, particularly capital revenues, in part attributable to greater use of EU funds.

The expenditure side of the consolidated general government budget (ESA 2010) saw an increase of 2.1% in the first half of 2016 from the same period of the previous year. The increase was particularly evident in the second quarter following the beginning of the regular execution of the state budget and financial plans of extrabudgetary users. Expenditures for social benefits made the biggest contribution to expenditure growth, which is associated with an increase in expenditures in the health sector, a small growth in expenditures for pensions due to an increase in the number of pensioners and pension indexation, and an increase in expenditures for social welfare. According to CPIA and CBS data, the rise in employee compensations was due to a simultaneous rise in the number of employees and an increase

in the average gross wage of civil servants and government employees. Capital expenditures also rose sharply, as a result of improved withdrawal of EU funds. By contrast, expenditures for interest fell from the first half of 2015, due to the favourable influence of the fall in government borrowing costs.

The available data for July and August (on a cash basis, GFS 2001) suggest a somewhat higher year-on-year increase in expenditures than in revenues. With regard to expenditures, an increase was observed in expenditures for interest payments and subsidies, while smaller withdrawals were registered with respect to the use of goods and services. Developments in tax revenues remained favourable, notably as regards VAT revenues. The cumulative central government deficit in the first eight months of 2016 remained at a level noticeably lower than that in 2015.

The consolidated general government debt stood at HRK 289.1bn at the end of September, an amount almost equal to that at the end of 2015. The stagnation of the general government debt may be associated with a relatively small general government deficit. The appreciation of the kuna/euro exchange rate resulted in a nominal decrease of the debt, while pre-financing of budgetary financial needs in the last quarter increased the

<sup>12</sup> In the first quarter of 2015 lower excises applied to these groups of products.

debt by about the same amount. In July, the Ministry of Finance issued on the domestic market HRK 6bn worth of 5-year bonds (the second tranche of the 2015 issue) and EUR 1.5bn worth of 455-day T-bills in August, thus refinancing due liabilities and

raising part of the funds required to finance the deficit late in 2016. Both issues were marked by considerably lower yields, reflecting high kuna liquidity on the domestic financial market and a narrower risk premium.

## 11 Deviations from the previous projection

The estimate of international economic developments for 2016, with minor exceptions, does not deviate significantly from the July projection, but expectations for 2017 are now exposed to greater risks. The US economic growth decelerated sharply in 2016, due to relatively weak results in the first half of the year. The expectations for the coming year are exposed to positive risks arising from a possible shift in the economic policy of the new administration. Euro area growth was revised slightly upwards in 2016 despite the heightened uncertainty following the UK vote to leave the EU, because the fallout from Brexit is expected to have a delayed effect. The oil price is expected to rise and euro area inflation could also exceed the projections in the following year. Expectations concerning major Croatian foreign trade partners have mainly remained unchanged, with the exception of those related to Italy. Given the increasing likelihood of a sharp tightening of US monetary policy, global financing conditions could start worsening sooner than expected.

Croatia's real GDP could rise by 2.8% in 2016 and exceed the 2.3% growth rate projected in July 2016. The change was brought about by improved results in the second and third quarters of 2016, particularly as regards government consumption and gross fixed capital formation, and as regards exports of services in the third quarter. Government consumption growth was also revised considerably. As regards foreign demand, the growth of exports of goods and services was revised upwards; although the second quarter's performance was lower than projected,

Table 11.1 Basis assumptions, deviations from the previous projection

			2016
	Previous projection (7/2016)	Current projection	Deviation
GDP (real rate of change, in %)			
Rest of the world	3.2	3.1	-0.1
Euro area	1.5	1.7	0.2
USA	2.4	1.6	-0.8
Developing countries and emerging market countries	4.1	4.2	0.1
Central and Eastern Europe	3.5	3.3	-0.2
Main trading partners of the Republic of Croatia	1.8	1.8	0.0
Prices			
Euro area HICP <sup>a</sup>	0.2	0.2	0.0
Oil prices (USD/barrel) <sup>b</sup>	44.6	44.0	-0.6
Key interest rates			
EURIBOR 3M (end of year)°	-0.28	-0.33	-0.05
ECB main refinancing rate <sup>c</sup>	0.00	0.00	0.00
US federal funds target rate <sup>c</sup>	0.85	0.75	-0.10

<sup>&</sup>lt;sup>a</sup> ECB, September 2016. <sup>b</sup> Bloomberg, Brent crude oil futures. <sup>c</sup> Bloomberg. Source: IMF (WEO, October 2016).

exports of services increased sharply in the third quarter, which resulted in a small increase in the expected growth of exports and their contribution to annual GDP growth. Given the stronger than projected growth of domestic demand and total exports and the almost stagnant growth of goods and services imports, the current projection of the negative contribution of net exports to total economic growth was revised downwards from -0.3 percentage points to -0.1 percentage point.

Real GDP growth for 2017 was also revised upwards (from the previously projected 2.5% to 3.0%). Of domestic demand components, personal consumption growth was revised the most (from 2.5% to 3.3%) due to its potentially higher growth stemming from the anticipated favourable effect of the tax reform on net household disposable income. In addition, government consumption growth in the first three quarters of 2016 and data from the Economic and Fiscal Policy Guidelines 2017-2019 suggest that this aggregate demand component could grow slightly faster than expected, so that its contribution to GDP growth was revised upwards by an average of 0.1 percentage point. Investment activity could accelerate at a faster than projected pace, with the result that gross fixed capital formation could increase by 6.8% (compared with the previously projected 6.1%). This projection, like the previous one, shows that total exports will continue to grow, so that exports of goods and services could remain the biggest contributor to economic growth. Accordingly, the stronger domestic demand and continued growth of total exports are expected to result in a stronger than expected growth of goods and services imports. Net foreign demand is therefore projected to contribute -0.7 percentage points (previously -0.5 percentage points) to economic growth.

The average annual inflation rate for 2016 is estimated at -1.2%, which is 0.2 percentage points lower than projected in July 2016. This primarily resulted from a decrease in the annual rate of change in energy prices, caused by a sharper than expected decline in crude oil prices in the world market. Inflation is expected to stand at 1.6% in 2017, which is an increase of 0.4 percentage points over the previous projection. This is primarily due to a stronger than expected growth of prices excluding food and energy caused by the direct effects of tax changes and to a potential increase in these prices on the back of an anticipated boost to household disposable income coming from income tax changes. The average annual rate of change in energy prices is also expected to accelerate on account of the stronger growth of crude oil prices after the agreement between OPEC and Russia on production cuts. The average annual rate of change in food prices remained unaltered.

The current and capital account surplus, estimated at 3.8% of GDP, could be slightly higher in 2016 than projected in July (3.6% of GDP). The surplus in foreign trade in services could be higher due to a sharper increase in income from tourism. On the other hand, the estimate of the primary income account deficit was revised upwards relative to the July projection to take account of the excellent performance of banks in 2016. The current and capital account surplus in 2017 remained at the

Table 11.2 Domestic indicators, deviations from the previous projection

		2016			2017	
	Previous projection (7/2016)	Current projection	Deviation	Previous projection (7/2016)	Current projection	Deviation
National accounts (real rate of change, in %)						
GDP						
Personal consumption	2.9	3.1	0.2	2.5	3.3	0.8
Government consumption	0.4	1.4	1.0	0.5	1.0	0.5
Gross fixed capital formation	2.9	4.1	1.2	6.1	6.8	0.7
Exports of goods and services	5.7	6.1	0.4	5.5	5.5	0.0
Imports of goods and services	6.6	6.5	-0.1	6.7	7.4	0.7
Labour market						
Number of employed persons (average rate of change, in %)	1.5	1.8	0.3	1.3	1.5	0.2
Prices						
Consumer price index (rate of change, in %)	-0.9	-1.2	-0.2	1.2	1.6	0.4
External sector						
Current account balance (as % of GDP)	2.7	2.8	0.1	1.9	2.0	0.1
Current and capital account balance (as % of GDP)	3.6	3.8	0.2	3.1	3.1	0.0
Gross external debt (as % of GDP)	96.9	93.8	-3.2	91.3	87.5	-3.8
Monetary developments (rate of change, in %)						
Total liquid assets – M4	3.4	4.8	1.4	3.7	4.1	0.4
Total liquid assets – M4 <sup>a</sup>	3.4	5.2	1.8	3.7	4.0	0.3
Credit institution placements	-2.5	-4.0	-1.5	1.2	-1.3	-2.6
Credit institution placements <sup>b</sup>	0.8	1.4	0.7	1.5	2.6	1.1

<sup>&</sup>lt;sup>a</sup> Exchange rate effects excluded. <sup>b</sup> Rates of change are calculated on the basis of data on transactions. Source: CNB.

previously projected level.

Relative gross external debt indicators could fall below the July projection by more than 3 percentage points of GDP in the current and following year. This is primarily due to a steeper than anticipated decrease in external debt brought about by the absence of government borrowing in the foreign financial market in this year and to a small extent to a sharper increase in nominal GDP.

The projection for credit institutions' placements to the private sector exceeds previous expectations. Excluding the write-offs and sales of placements as well as exchange rate changes, placements could grow by 1.4% in 2016, compared with the previously projected 0.8%. The placement growth was this year accelerated by an increase in corporate lending, coupled with a mild recovery in household lending, that is, the end of the several-year deleveraging trend in this sector. On the other hand, the 4.0% nominal decrease in placements in 2016, primarily due to the write-offs of placements to households related to

the conversion of loans in Swiss francs and to write-offs related to the sale of non-performing placements, was revised upwards from the previous projection (–2.5%) due to a sharp increase in the sales of non-performing bank placements. The recovery in lending, which is expected to continue in 2017, was also revised upwards from the previously projected 1.5% to 2.6% (transaction-based), while the continued write-off and sales of placements will lead to a nominal decrease in placements (1.3%), which had not been anticipated.

The projected growth of total liquid assets (M4) in 2016 trended up considerably from the previous projection (5.2% relative to 3.4%, excluding the exchange rate effect). The acceleration of the estimated growth in the broadest monetary aggregate (M4) resulted from a stronger growth of money and deposits on the back of economic recovery, inflows from an improved absorption of EU funds and a very successful tourist season. In line with the anticipated continued economic upturn, the increase in total liquid assets in 2017 could be higher than expected (4.0% relative to 3.7%, excluding the exchange rate effect).

## 12 Annex A: Macroeconomic projections of other institutions

Table A.1 Macroeconomic projections of other institutions change in %

		GDP		sehold mption		s fixed capital mation	goo	oorts of ds and ervices	goo	oorts of ds and ervices		dustrial duction	Cor	nsumer prices
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Croatian National Bank (December 2016)	2.8	3.0	3.1	3.3	4.1	6.8	6.1	5.5	6.5	7.4	-	-	-1.2	1.6
Ministry of Finance <sup>a</sup> (December 2016)	2.7	3.2	2.8	3.6	4.9	6.8	5.7	4.6	6.1	6.2	-	-	-1.1	1.0
European Commission (November 2016)	2.6	2.5	2.7	2.5	4.8	6.1	6.0	3.5	6.6	4.6	-	-	-0.9	0.8
Eastern Europe Consensus Forecasts (November 2016)	2.4	2.3	2.8	2.3	4.7	4.1	-	-	-	-	4.0	3.5	-1.1	1.0
European Bank for Reconstruction and Development (November 2016)	2.3	2.0	-	-	-	-	-	-	-	-	-	-	-	-
Addiko Bank Economic Research (October 2016)	2.7	2.2	2.7	2.4	5.4	5.0	5.6	2.9	2.9	4.4	3.8	3.6	0.7	1.6
Raiffeisen Research (October 2016)	2.3	2.5	-	-	-	-	6.5	5.4	4.9	4.8	4.8	4.2	-1.2	1.3
International Monetary Fund (October 2016)	1.9	2.1	-	-	-	-	-	-	-	-	-	-	-1.0	0.8
The Institute of Economics, Zagreb (September 2016)	2.6	2.7	2.6	2.4	-	-	-	-	-	-	-	-	-	-
World Bank (June 2016)	1.9	2.0	_	_	_	_	_	_	_	_	_	_	_	_

<sup>&</sup>lt;sup>a</sup> Explanation of the state budget for 2017 and projections for 2018 and 2019.

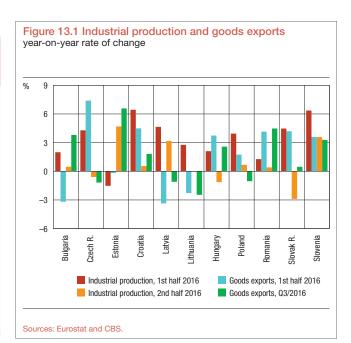
Sources: Publications of the respective institutions

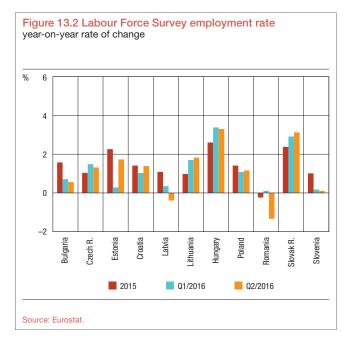
## 13 Annex B: Comparison of Croatia and selected countries

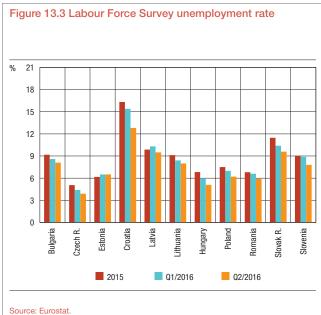
Table 13.1 Gross domestic product

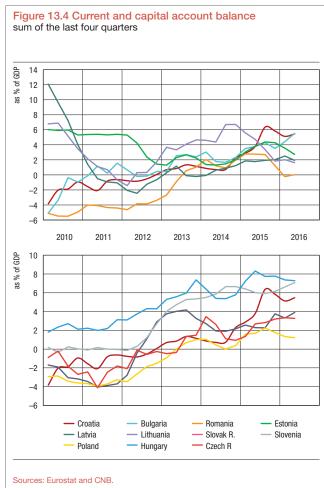
		on-year e, origin		Quarter-on-quarter rate of change, seasonally adjusted data						
	2013	2014	2015	Q4/15	Q1/16	Q2/16	Q3/16			
Bulgaria	0.9	1.3	3.6	0.9	0.8	0.9	0.7			
Czech R.	-0.5	2.7	4.5	0.3	0.4	0.9	0.2			
Estonia	1.4	2.8	1.4	1.1	-0.5	0.5	0.0			
Croatia	-1.1	-0.5	1.6	-0.3	0.6	0.7	1.7			
Latvia	2.9	2.1	2.7	-0.4	-0.1	0.6	0.2			
Lithuania	3.5	3.5	1.8	0.6	0.6	0.4	0.1			
Hungary	2.1	4.0	3.1	0.9	-0.6	1.1	0.3			
Poland	1.4	3.3	3.9	1.3	-0.1	8.0	0.2			
Romania	3.5	3.1	3.7	0.9	1.5	1.5	0.6			
Slovak R.	1.5	2.6	3.8	0.0	0.0	0.0	0.0			
Slovenia	-1.1	3.1	2.3	0.7	0.6	0.7	1.0			
Average <sup>a</sup>	1.3	2.6	3.0	0.6	0.5	0.4	0.4			

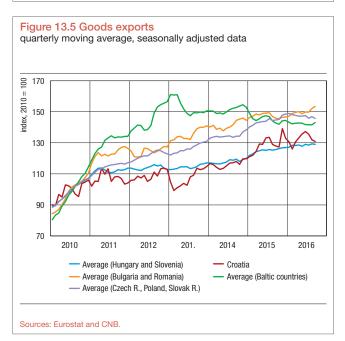
a Simple average.
Sources: Eurostat, EC, CBS and CNB.

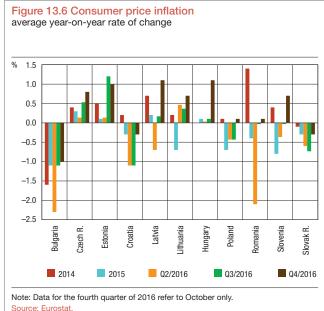


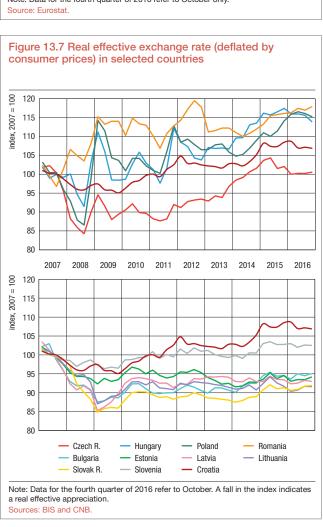


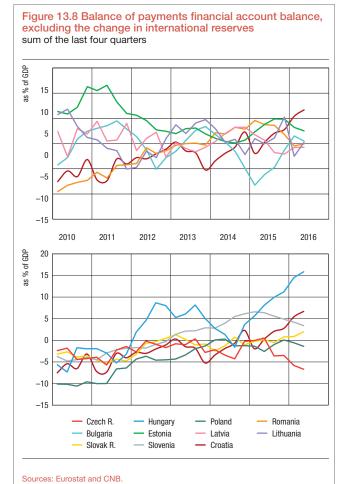


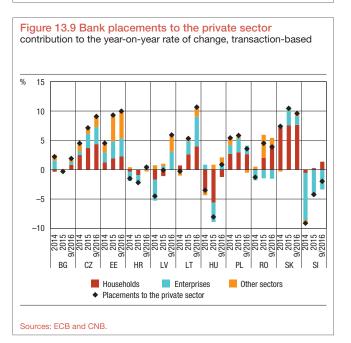


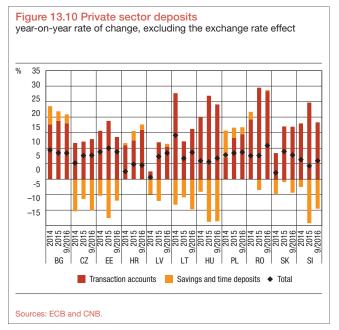


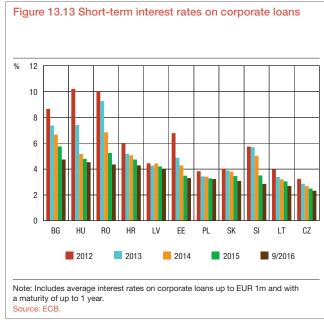


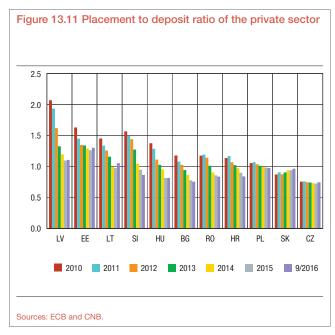














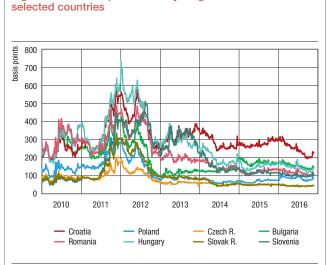
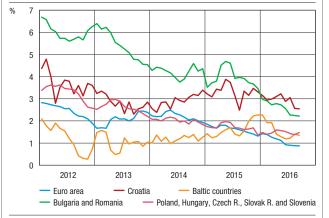


Figure 13.12 CDS spreads for 5-year government bonds of

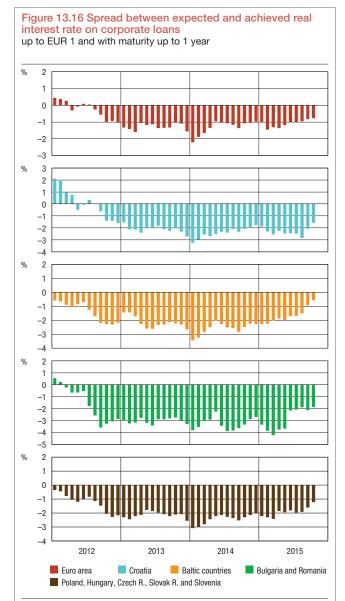
Figure 13.15 Expected real interest rate on corporate loans up to EUR 1m and with maturity up to 1 year



Note: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts. Country group averages are not weighted.

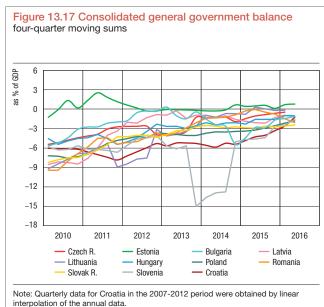
Sources: ECB and Consensus Forecasts.

Note: Credit default swaps (CDS) spread is an annual premium that a CDS buyer pays for protection against credit risk associated with an issuer of an instrument. Source: S&P Capital IQ.

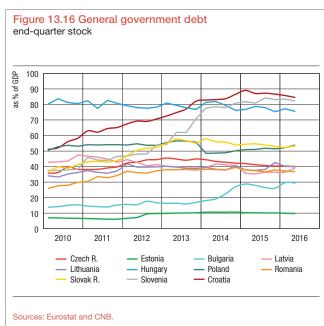


Note: The expected real interest rate equals the nominal interest rate deflated by inflation projected for the next year from the Consensus Forecasts and the achieved real interest rate equals the nominal interest rate deflated by inflation achieved. Country group averages are not weighted.

Sources: ECB and Consensus Forecasts.



Sources: Eurostat and CNB.



## Abbreviations and symbols

Abbrevia	ations
BIS	Bank for International Settlements
bn	- billion
b.p.	<ul><li>basis points</li></ul>
	<ul><li>balance of payments</li></ul>
	<ul> <li>cost, insurance and freight</li> </ul>
CBRD	- Croatian Bank for Reconstruction and Development
CBS	<ul> <li>Central Bureau of Statistics</li> </ul>
CCI	<ul> <li>consumer confidence index</li> </ul>
CDCC	<ul> <li>Central Depository and Clearing Company Inc.</li> </ul>
CDS	- credit default swap
CEE	- Central and Eastern European
	- Central European Free Trade Agreement
CEI CES	- consumer expectations index
CES	<ul><li>Croatian Employment Service</li><li>Croatian Motorways</li></ul>
CIHI	Croatian Institute for Health Insurance
CLVPS	- Croatian Large Value Payment System
CNB	- Croatian National Bank
CPF	- Croatian Privatisation Fund
CPI	<ul> <li>consumer price index</li> </ul>
CPIA	- Croatian Pension Insurance Administration
CR	- Croatian Roads
CSI	<ul> <li>consumer sentiment index</li> </ul>
DAB	<ul> <li>State Agency for Deposit Insurance and Bank</li> </ul>
	Resolution
dep.	- deposit
DVP	– delivery versus payment
EC	– European Commission
ECB	- European Central Bank
EFTA EMU	<ul><li>European Free Trade Association</li><li>Economic and Monetary Union</li></ul>
ESI	economic and Monetary Official     economic sentiment index
EU	- European Union
excl.	- excluding
f/c	- foreign currency
FDI	- foreign direct investment
Fed	– Federal Reserve System
FINA	- Financial Agency
FISIM	- financial intermediation services indirectly measured
f.o.b.	– free on board
GDP	– gross domestic product
GVA	– gross value added
	- Croatian Financial Services Supervisory Agency
HICP	- harmonised index of consumer prices
ILO IMF	<ul><li>International Labour Organization</li><li>International Monetary Fund</li></ul>
incl.	- including
IPO	- initial public offering
m	- million
MIGs	- main industrial groupings
MM	– monthly maturity
MoF	- Ministry of Finance
NCA	<ul> <li>National Classification of Activities</li> </ul>
NCB	<ul> <li>national central bank</li> </ul>
NCS	<ul> <li>National Clearing System</li> </ul>
n.e.c.	<ul> <li>not elsewhere classified</li> </ul>
OECD	<ul> <li>Organisation for Economic Co-Operation and</li> </ul>
00	Development
OG	- Official Gazette
R	- Republic
o/w PPI	- of which
RTGS	<ul><li>producer price index</li><li>Real-Time Gross Settlement</li></ul>
Q	- quarterly
~	dominity

RR - reserve requirement SDR - special drawing rights SITC - Standard International Trade Classification - Stability and Growth Pact SGP ULC - unit labour cost VAT - value added tax WTO - World Trade Organization - Zagreb Money Market ZMM ZSE - Zagreb Stock Exchange

#### Three-letter currency codes

- Swiss franc

- Austrian schilling

ATS

CHF

CNY - Yuan Renminbi DEM - German mark EUR - euro - French franc FRF **GBP** - pound sterling HRK Croatian kuna ITL Italian lira JPY - Japanese yen USD – US dollar

#### Two-letter country codes

- Bulgaria CZ- Czech R. – Estonia EE HR - Croatia HU - Hungary Latvia LV LT – Lithuania - Poland PL RO - Romania - Slovak R. SK SI - Slovenia

#### Symbols

Ø

- no entry - data not available - value is less than 0.5 of the unit of measure being 0

used

- average

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

- corrected data

- incomplete or insufficiently verified data ()