CROATIAN NATIONAL BANK

# CNB conducts a strongly expansionary and countercyclical monetary policy

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**Governor Vujčić presented to the Members of Parliament the Semi-annual information of the Croatian National Bank on the financial condition, degree of price stability and monetary policy implementation for the first half of 2015.**

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Dear Mr Speaker and Members of the Parliament, ladies and gentlemen,

In view of the parliamentary debate held last week, I consider it necessary and useful to provide a brief explanation of the circumstances and basis for the monetary policy conducted by the Croatian National Bank with an aim to maintain financial stability and create support for the long-term development and growth of the Croatian economy.

Discussions on the room for monetary policy in Croatia tend to focus on its powers and achievements, including proposals on further actions required with, allegedly, certain positive outcomes for economic activity, employment, exports and well-being. However, these discussions often neglect the circumstances under which central banks carry out policies and adopt decisions, such as the structural characteristics of their economies and financial systems and current economic trends as well as the conditions in the global economy and in the country's environment. Furthermore, risks that unavoidably accompany some measures and moves are very rarely given proper consideration.

With such a complex background, it is a great challenge for central bankers to simply and clearly communicate their actions and the role of monetary policy in general, which is a necessary prerequisite for attaining and preserving central bank's reputation. Reputation is the most important capital of a central bank as it has a crucial impact on the responses of general public and domestic and international market participants to monetary authorities' actions and, in turn, their capacity to meet legal objectives and tasks. The CNB has made an ongoing and consistent effort to explain the character, operation and attainable goals of the monetary

policy. Clear communication became even more important in the crisis period and it is also very important now in the current initial phase of the Croatian economic recovery, burdened as it is with many structural problems and high debt levels of all domestic sectors. That is why I would like to use this opportunity to once again invite you to the CNB to discuss current issues and expand the dialogue on long-term challenges. My colleagues from the CNB management and I will be pleased to welcome you at the CNB and discuss with you all current issues within the scope of central bank operations.

At this point I would like to elaborate on the limitations inherent in the conduct of monetary policy in Croatia and on its several-year strong expansionary stance, boosted additionally in 2016.

As soon as thirty years ago, small and open developing economies had no "systematic monetary economics or macroeconomics theoretical frameworks, with the exception of a few sporadic papers dealing mostly with the effects of devaluation" (Frankel, 2011). The new "macroeconomics of open economies", which has developed since then, attempts to apply international economics findings, while taking into account the characteristics of small and open economies with euro-denominated debts (Cespedes, Chang and Velasco, 2000).[1] Under such conditions, the monetary policy mandate faces numerous challenges, non-existent in large and almost closed economies for which classic macroeconomic models were made. These models have been repeatedly presented as examples to be followed by the monetary policy in Croatia by those who do not understand the difference between large, almost closed economies printing international currencies, such as the US, the euro area or Japan, and small, open, highly euroised economises such as Croatia.

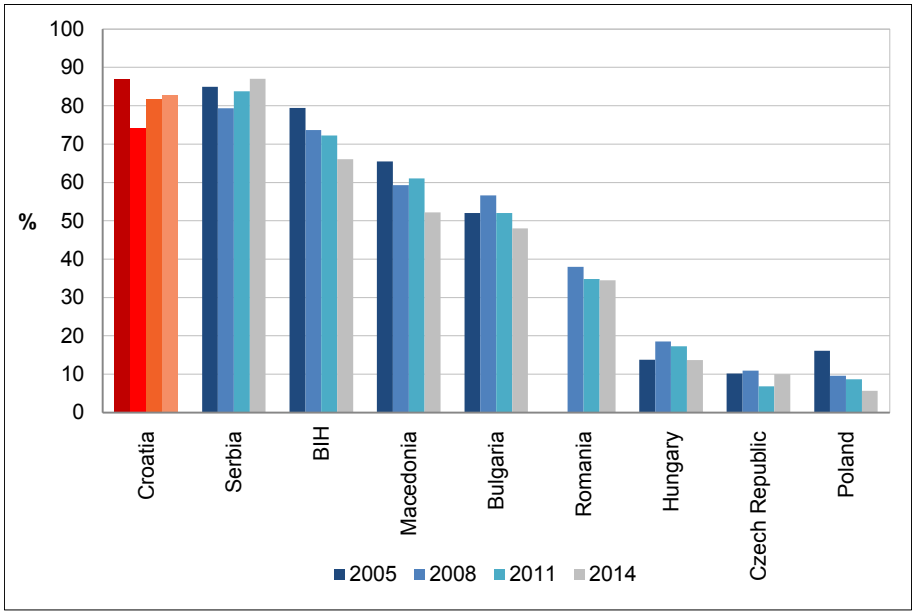
Let us proceed step by step.

Croatia is a small and open economy. The very definition of a small and open economy comprises several elements, including, for example, the share of foreign trade in GDP, the facts that a country is a global price taker, that it has no influence on global trade and capital flows and that it cannot, as a rule, borrow in its own currency. Rather than to a lack of awareness of currency risk, foreign currency borrowing in such economies is due to "imperfections of the markets", where there are no foreign creditors willing to grant loans in the domestic currency (Eichengreen and Hausmann, 1999).

The impossibility of external borrowing in the domestic currency is in small and open economies is often accompanied by domestic euroisation (Figure 1). Foreign currency borrowing by all sectors results in potentially large negative effects of strong exchange rate fluctuations for the country's financial stability and the achievement of the central bank's main objective – maintenance of price stability. This limits the room for monetary policy action through traditional transmission channels as the domestic currency, whose price and quantity is managed by the central bank, has a lower importance in domestic economic and financial developments than domestic currencies in non-euroised countries.

[1] Macroeconomics textbooks accounting for the specifics of such economies are still relatively rare and not widely used in Croatia, where macroeconomics is most often taught from traditional textbooks dealing with large and relatively closed currency areas. The first macroeconomics textbook focused on developing countries is "Development Macroeconomics" by Pierre-Richard Agénor and Peter J. Montiel, issued in 1995 and reissued in four editions until 2015. Also worth mentioning among textbooks of recent date is "Open Economy Macroeconomics in Developing Countries" by Carlos A. Végh.

**Figure 1 Share of foreign currency deposits in total savings and time deposits – by country**

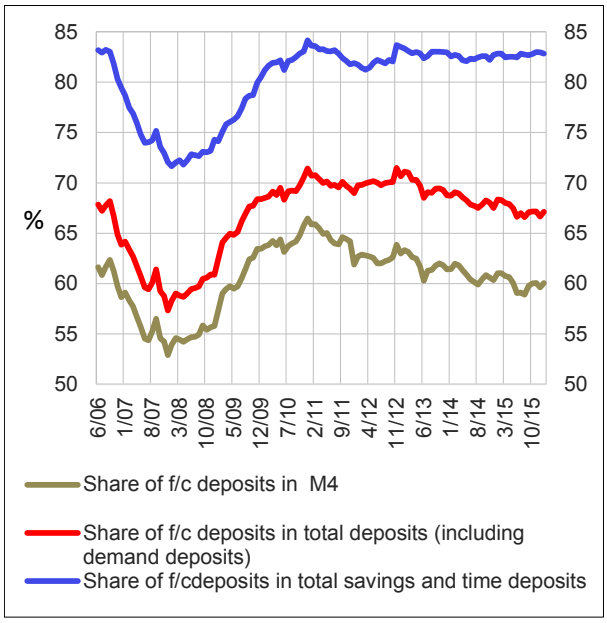



Note: Foreign currency deposits include deposits with a currency clause.
Source: national central banks.

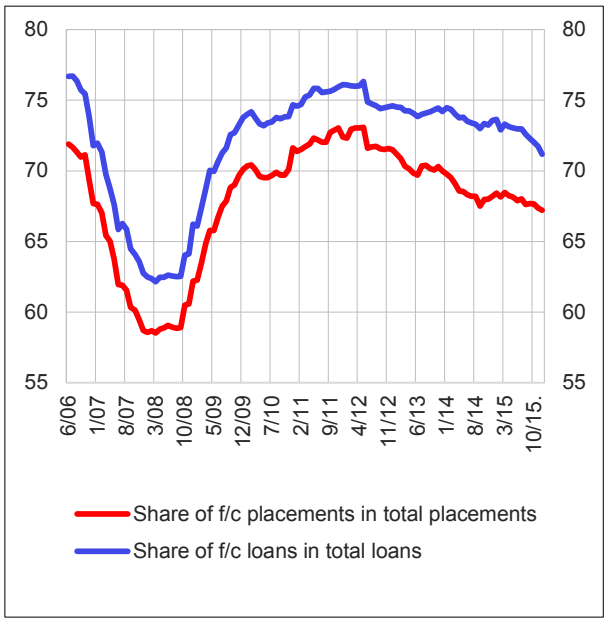
In addition, in a euroised economy, household expectations of changes in goods and services prices depend on exchange rate changes. Finally, a high deposit euroisation leads in turn to a high credit euroisation (Figures 2 and 3), because banks must, in line with professional rules, hedge against currency risk. They are also required to do this under regulatory rules set forth by Regulation 575/2013 of the European Parliament and Council on prudential requirements for credit institutions and investment firms, which are directly applicable in the Republic of Croatia.

**Figure 2 Deposit and placement euroisation in Croatia**

a) Deposit euroisation

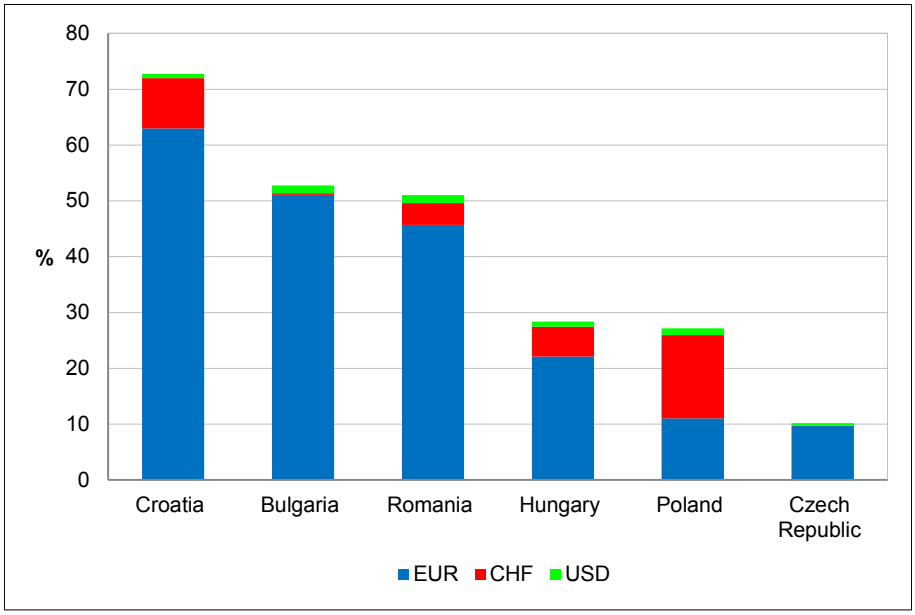



b) Placement euroisation




Source: CNB.

**Figure 3 Share of foreign currency loans in total loans – by country**

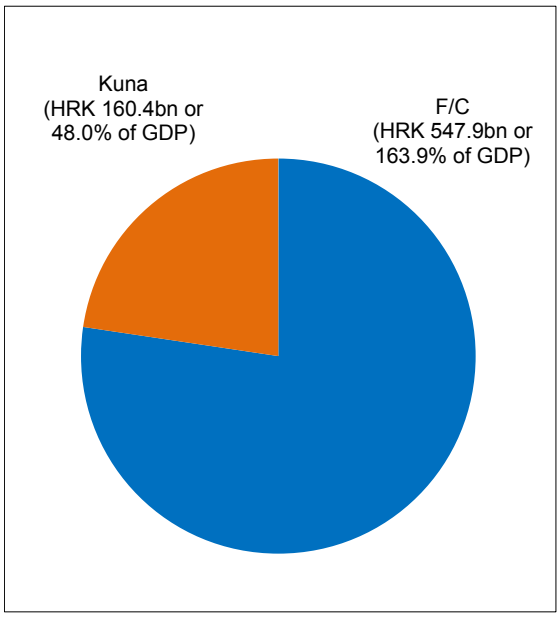



Note: Data refer to the second quarter of 2015. Foreign currency loans include loans with a currency clause.
Source: ECB.

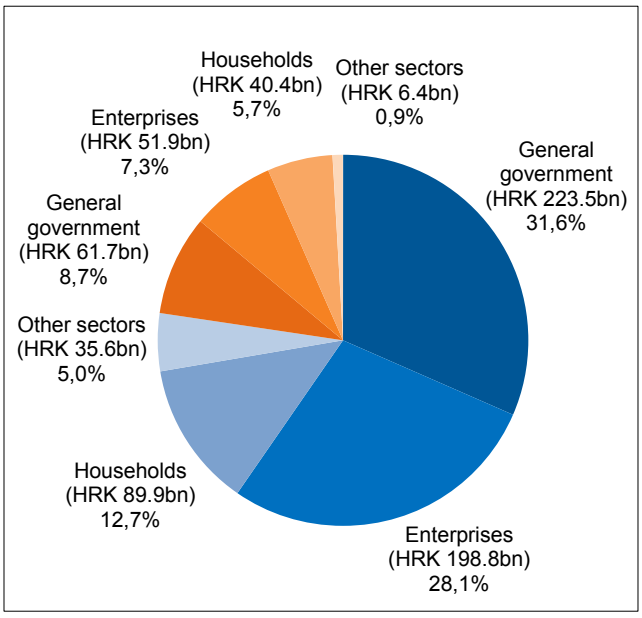
Therefore, under conditions of deposit euroisation, credit euroisation serves to protect the value of assets entrusted to banks for safekeeping by depositors. This should be kept in mind, as the described financial system characteristics are not to be found in large monetary areas, such as the USA, Japan and the euro area, which leads to considerable differences between monetary policy transmission mechanisms. For example, Croatia's external debt would increase from 107% to 118% of GDP if the exchange rate was devalued by 10%, not taking into account inflation. Due to domestic euroisation, foreign currency denominated debt of all sectors – non-financial corporations, households and the government – is even slightly higher, approximating HRK 548bn or 164% of GDP (Figure 4). As external and domestic foreign currency denominated debt accounts for almost four fifths of the total debt, even a very slight exchange rate depreciation significantly increases indebtedness and has a pro-recessionary effect.

**Figure 4 Currency structure of domestic sectors' debt**

Currency structure of total debt




Currency structure of debt by

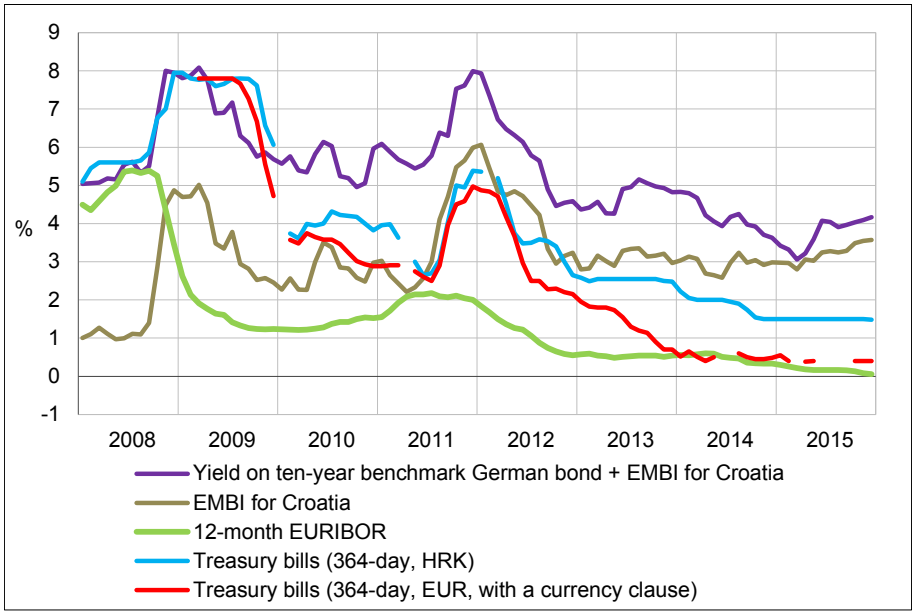



Note: Data refer to the third quarter of 2015. Foreign currency debt includes foreign currency-indexed debt. The figures show debt of all sectors, with the exception of credit institutions.
Sources: CNB, HANFA.

Small and open economies are in a greater degree exposed to supply-side shocks (e.g. shocks of oil or raw material prices, the formation of which they cannot influence) and they are also exposed to the volatility of external demand (as is the case with tourism in Croatia). They are also affected by changes in the direction and volume of capital flows, that are, as a rule, procyclical, which was strongly felt in our country. During economic booms, capital inflows contribute to the overheating of the economy, they may encourage excessive credit growth and boost asset prices. During recessions these inflows recede or a capital reversal occurs, with a sudden stop in inflows usually being an additional recession trigger. In addition, the internal structure of a developing economy is almost by definition characterised by weak and underdeveloped institutions and policies (Frankel, 2011), frequent and sudden economic policy shifts and inflexible domestic macroeconomic instruments. Finally, the fiscal policy is as a rule conducted procyclically, increasing the deficit and public debt during growth periods – to put it simply, taking little heed of potential crisis periods, which results in a lack of fiscal room for conducting the countercyclical (expansionary) fiscal policy in recession periods (Frankel, 2011). Due to institutional weaknesses, foreign creditors are generally willing to tolerate lower debt levels compared with those in developed economies and require higher rates of return, thus increasing the price of borrowing for the government and many other domestic sectors (Figures 5.1 to 5.3). Unfortunately, we are all too well acquainted with all the described characteristics of small and open economies that limit the room for monetary policy actions.

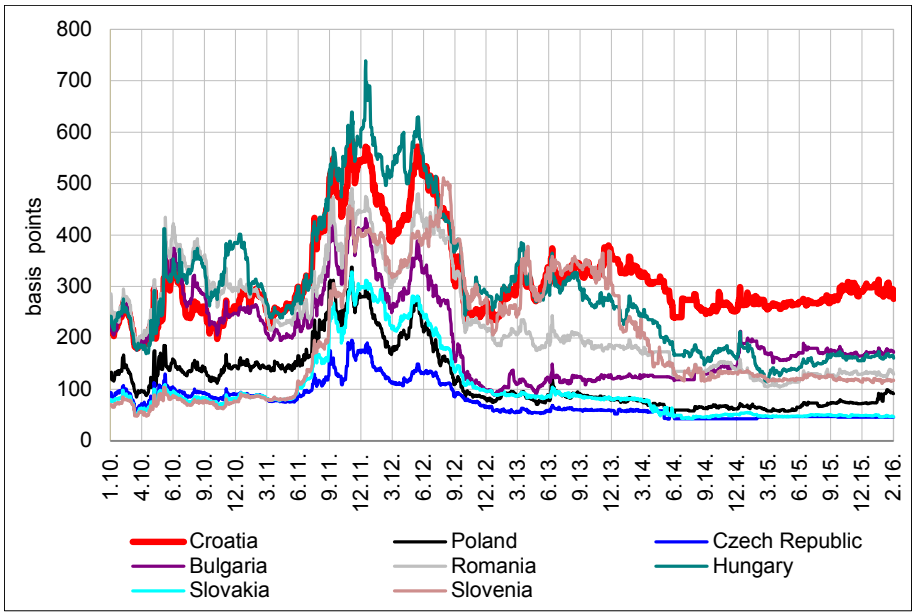
**Figure 5 Financing costs**

**5.1 Government financing costs**



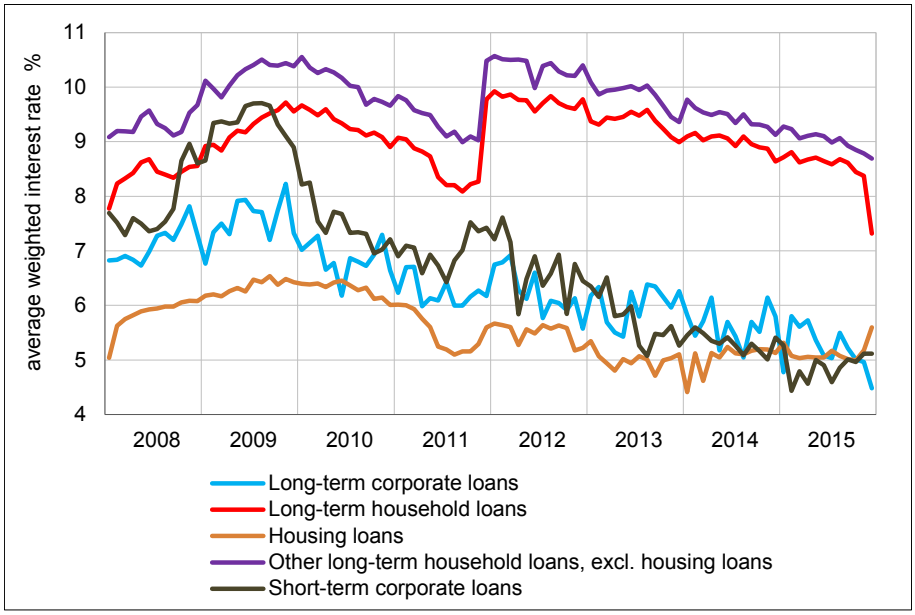

Note: The Emerging Market Bond Index – EMBI – shows the spread between emerging market sovereign bonds, including those of Croatia, and non-risk securities issued by developed countries.
Sources: IMF, Bloomberg and CNB.

**5.2 CDS spreads for five-year government bonds**




Note: Credit default swaps (CDS) spread is a relative annual premium that a CDS buyer pays for protection against credit risk associated with the issuer of an instrument.
Source: Bloomberg.

**5.3 Domestic banks' interest rates**




Source: Bloomberg.

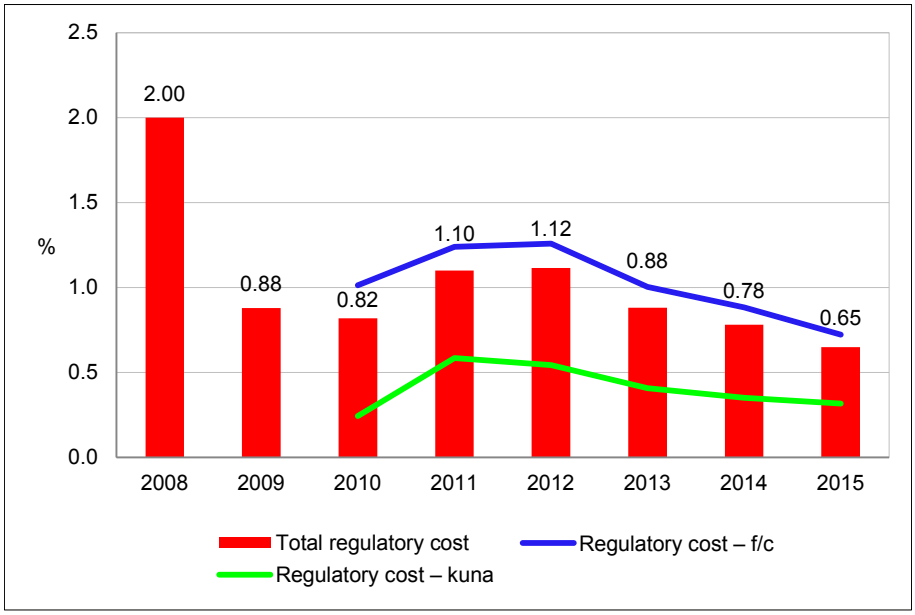
The choice of the exchange rate regime and the consequent implications for the monetary policy therefore feature prominently in discussions on the capacity of small and open economies to successfully withstand the mentioned domestic and external shocks. The textbook approach suggesting that a flexible exchange rate can to some extent alleviate the impact of an external shock on the real sector by nominal exchange rate changes (Cespedes et al., 2000), in contrast with maintaining a stable exchange rate, has recently been considerably relativized. The experience so far supports the thesis that, irrespective of the exchange rate regime, small and open developing countries cannot be insulated from external shocks, except possibly by introducing capital controls, and that only temporarily and with a questionable outcome. However, as Croatia is an EU member state, capital controls are out of reach of the economic policy in case of shocks.

Based on the stated facts about a large number of emerging economies it can be concluded that devaluation in fact leads to a decrease in economic activity (Calvo, 1999). Specifically, the concept of expansionary devaluation is based on the "Keynesian approach to the trade balance" (Frankel, 2011), a paradigm in which an increase in demand for domestic goods, stemming from the growth of either domestic or foreign demand, results in output growth. However, these assumptions are not valid in highly euroised, small and open countries, with the result that such countries often experience "contractionary devaluations". Exactly because of this reason, the CNB has repeatedly emphasised that the monetary policy framework and conduct in Croatia cannot be the same as in large countries or currency areas.

Despite the many activities undertaken by the CNB over the last, almost two decade period, domestic sectors' propensity towards saving in foreign currency has not changed. It should be pointed out that the regulatory burden in the form of additional liquidity and capital buffers has always been higher for foreign currency sources than for kuna sources (Figures 6 and 7). Even today, when the CNB has released substantial liquidity and reduced the

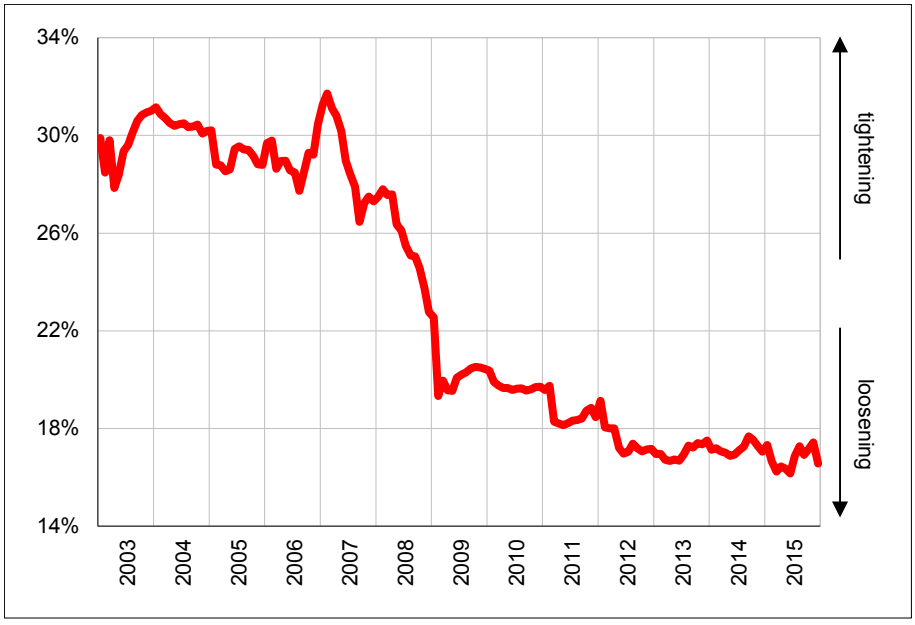
regulatory burden for banks (Figures 6 and 7), the costs of foreign currency transactions for banks are twice as high as kuna transactions costs.

**Figure 6 Marginal regulation cost – an alternative measure of monetary policy stance**




Note: The cost of regulation is estimated as a weighted difference between the lowest required return on placements and the nominal cost of sources of financing for banks, taking into account the amount of bank assets immobilised due to regulatory requirements.
Source. CNB calculations.

**Figure 7 CNB monetary policy indicator**

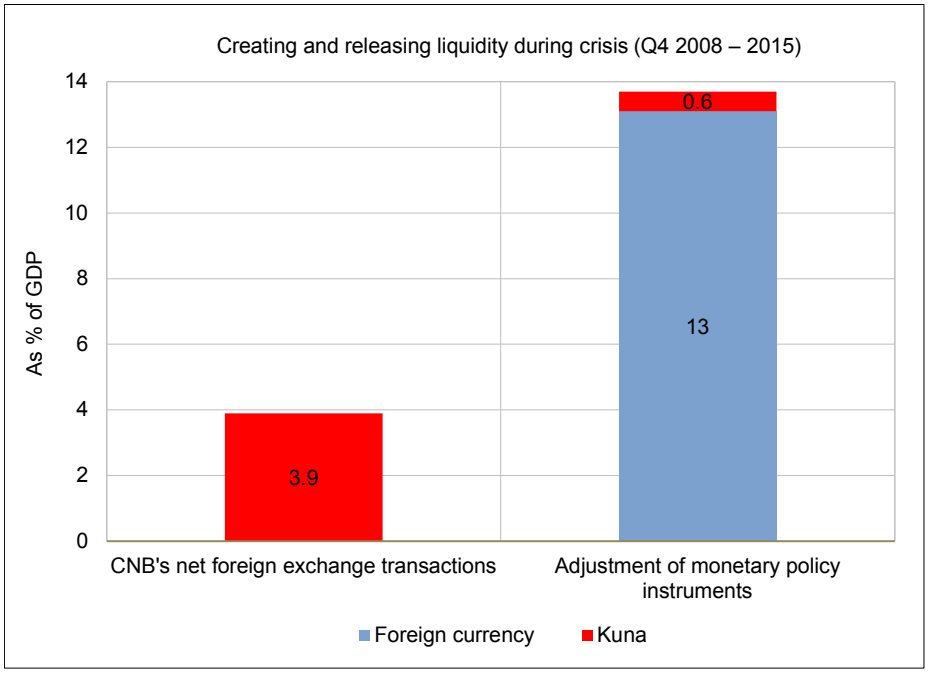



Note: Monetary policy indicator = credit institutions' assets immobilised due to regulatory requirements / credit institutions' liabilities. Credit institutions' assets immobilised due to regulatory requirements (net of excess liquidity) include calculated kuna reserve requirements, foreign exchange reserve requirements, marginal reserve requirements, CNB bills and minimum required foreign exchange claims.
Source: CNB.

However, the pace of the de-euroisation process has always been slow and, looking at a longer time period, de-euroisation has been almost non-existent. There are two major factors slowing down de-euroisation. The main factor is the ongoing generation of distrust in the domestic currency – the general public has over a period of years been threatened with the alleged need to devalue the kuna, with an imminent fall in its value predicted. This has been accompanied by an insufficiently credible economic policy, prone to frequent changes of stance. De-euroisation of deposits (de-dollarisation) is extremely rare. Research conducted by Reinhart et al. (2014) at a sample of 85 countries in the 1980-2001 period found only a few examples of a significant and permanent reduction in dollarisation (by over 20% and to a maximum 20% share of foreign currency in total deposits in the observed period). What all countries that successfully implemented de-dollarisation had in common was that they were not in the group of highly dollarised countries with deeply rooted dollarisation, and that dollarisation was carried out amid restricted capital flows. However, theoretically speaking, de-dollarisation is also a feasible process for highly-euroised economies, although none of them has implemented de-euroisation in practice. Still, this would require an ongoing slight appreciation of the domestic currency, coupled with efficient structural policies aimed at reducing public debt levels and improving competitiveness in the economy. This is because trust in the domestic currency derives from, among other things, trust in the domestic economy and economic policy. Only the policy described here can rebuild trust in economic policy makers and, in turn, in the domestic currency. However, due to a deeply ingrained euroisation, it is more likely that Croatia will introduce the euro rather than convince its citizens to convert, for example, one fourth of their saving deposits into kuna and keep them in kuna.

The fact that there are limitations for monetary policy in Croatia, as described above, does not mean that it is completely incapable of influencing the domestic money market and domestic interest rates. To the extent required to maintain the stability of the exchange rate, the CNB uses its instruments to manage domestic kuna liquidity and influence domestic interest rates. In the crisis period, CNB's activity was very expansionary, as was the activity of all other central banks in Europe, i.e. of the ECB. However, unlike most of them, the CNB had acted very restrictively before the crisis, which preserved the stability of the financial system and enabled a very countercyclical expansionary action once the crisis began. For the eighth consecutive year, the CNB has maintained exceptionally high liquidity of the monetary system. In total, during the crisis, the CNB released liquidity standing at around14% of GDP (Figure 8) by relaxing the existing measures, which referred in particular to the releasing of foreign currency immobilised in banks' balance sheets in the pre-crisis period.

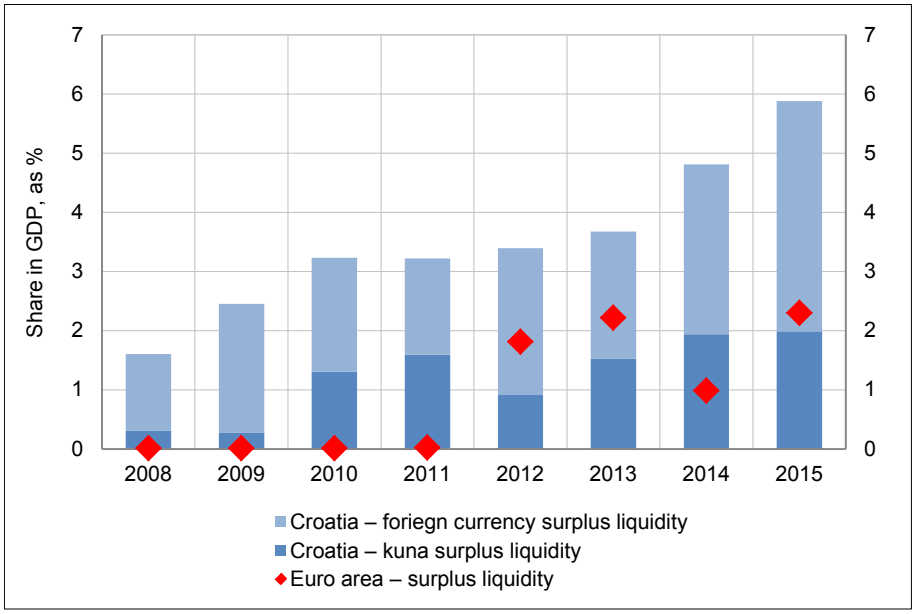
**Figure 8 Expansiveness of CNB's monetary policy at the time of crisis**




Source: CNB.

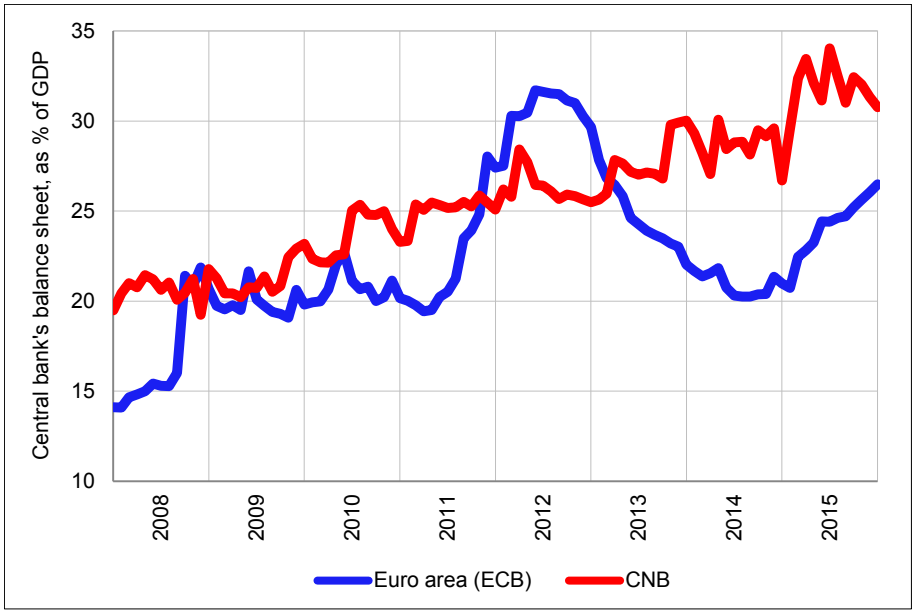
Released foreign currency liquidity was crucial for ensuring exchange rate stability in the conditions of a sharp decline in capital inflows from abroad. The policy of the release of liquidity during the crisis resulted in a strong growth of the CNB's balance sheet, comparable with the increase in the ECB's balance sheet, or even slightly stronger, as well as in the high kuna and foreign currency surplus liquidity, so that in 2015, banks in Croatia had an average kuna and foreign currency surplus liquidity of 5.9% of GDP, which exceeded surplus liquidity in the euro area relative to their GDP (Figure 9 and 10) by approximately two or three times.

**Figure 9 Surplus liquidity (comparison of the RC and the euro area)**




Note: Surplus liquidity in the euro area is excess reserves relative to regulatory reserve requirement. The GDP for the euro area refers to 19 member states, while the data for surplus liquidity refers to the euro area changing composition.
Sources: ECB, Eurostat, CNB and CBS.

**Figure 10 Trends in ECB and CNB's balance sheets from 2008 to 2015 (shares in GDP)**




Sources: CNB, ECB.

High liquidity favours the maintenance of low interest rates in the money market and record low yields on the Ministry of Finance treasury bills. However, the manner of implementation of this expansionary policy was different, which is logical, considering that the channels and instruments of activity were also different. It is worth re-emphasising that certain channels of monetary policy activity may not be used at all because we see that the ECB's quantitative easing policy, to a large extent, acts through the depreciation of the

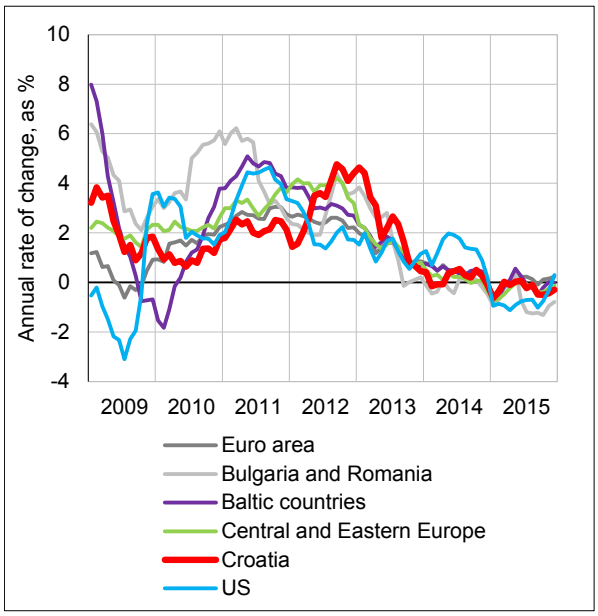
exchange rate, which in our case would not bring positive effects and would give rise to recession.

In 2016, in the conditions of additional improvement of the current account balance and foreign position of banks, we have decided to strengthen the expansionary monetary policy further by introducing structural reverse repo operations. The first auction was successfully held in mid-February, and we are prepared to hold three more such auctions in the rest of the year. The main idea of these operations is to provide banks with kuna liquidity under better than market conditions for a period of four years, and thus enable more favourable and intensified long-term lending to the economy and households in the domestic currency. However, since the sustainability of public debt is a big problem in Croatia, which we often emphasise, it is worth mentioning that these operations will, among other things, also depend on the process of fiscal consolidation. Firmer fiscal consolidation will allow us more space for such and similar monetary policy measures, in particular having in mind that the economic recovery has not yet accelerated significantly and that banks' credit activity has been subdued.

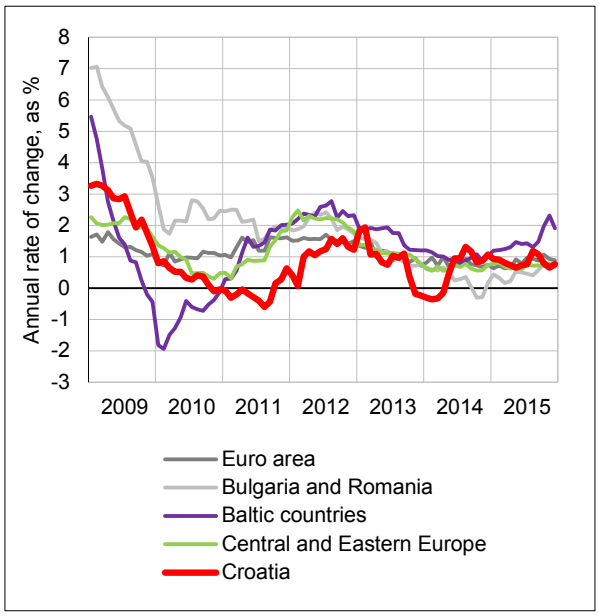
I would also like to say a few words about the achievement of price stability, which is the fundamental goal of the CNB. A low inflation rate is not a phenomenon that exists only in Croatia. The trend of the decrease in the annual inflation rate has been present since the end of 2012 in all European countries, as well as in the US (Figure 11). The average annual rate of change in consumer prices measured by total harmonised index (HICP) decreased between 2013 and 2015 in all of the observed countries, i.e. in the euro area by 1.3 percentage points to 0%, by 2.5 percentage points in Bulgaria and Romania to –0.7%, while in Croatia, the inflation rate in 2015 stood at –0.3% (down by 2.6 percentage points).

**Figure 11 Annual rate of change in consumer prices measured by harmonised index, as %**

a) overall inflation




b) core inflation*




* Core inflation excludes energy, food, alcohol and tobacco components for all countries, excluding the US, where energy and food components are excluded.

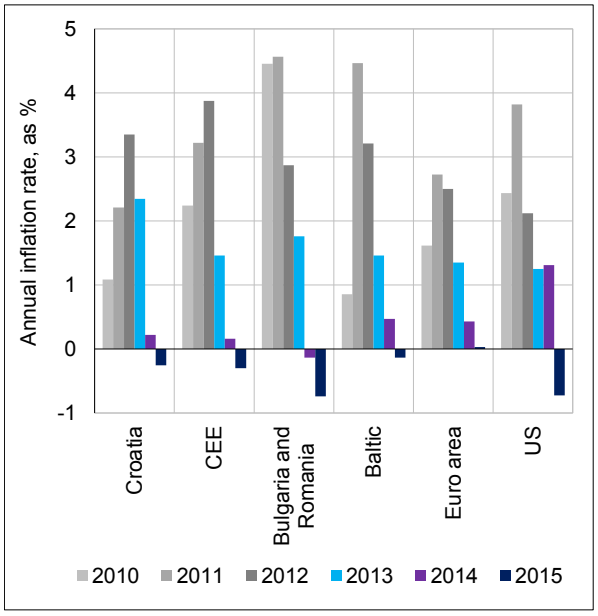
Note: Not weighted average. Central and Eastern Europe includes Poland, Slovakia, Slovenia, Hungary and Czech Republic, and Baltic countries include Estonia, Latvia and Lithuania (without Latvia in the calculation of core inflation because of unavailable data).

Source: Eurostat.

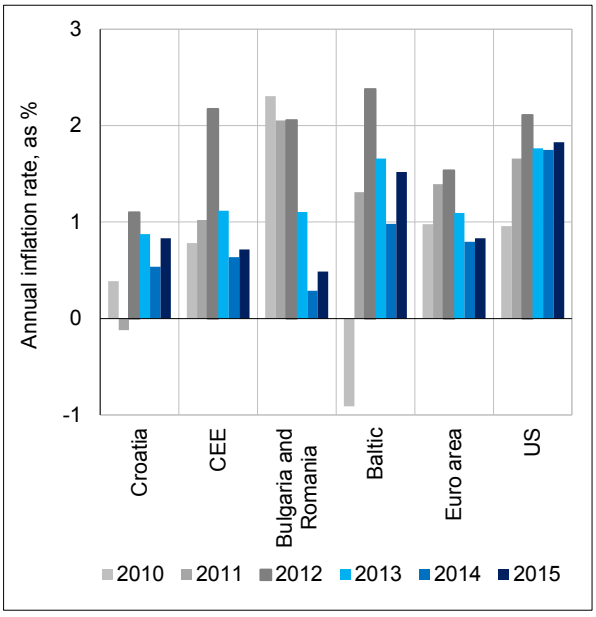
For a better understanding of the effects of individual phenomena on inflation trends, it is useful to exclude the prices that are very volatile, as well as administratively regulated prices from the calculation. For instance, the core inflation rate, which is calculated excluding the prices of energy, food, alcohol and tobacco, was positive in all of the observed countries between 2013 and 2015. The negative rate of overall inflation and the positive rate of core inflation in the majority of countries over a longer period is one of the reasons why the currently negative inflation rates cannot be considered deflation (Figure 12). The lower prices of oil and other raw materials in global markets (let us not forget that Croatia imports them), i.e. the decline in the prices of imported goods, actually represent the so-called 'positive supply shock', which improves the conditions of international trade because more than one unit of imports may be obtained for a unit of Croatian exports (Figure 13).

**Figure 12 Rate of change in consumer prices measured by harmonised index in the observed countries, as %**

a) overall inflation




b) core inflation*

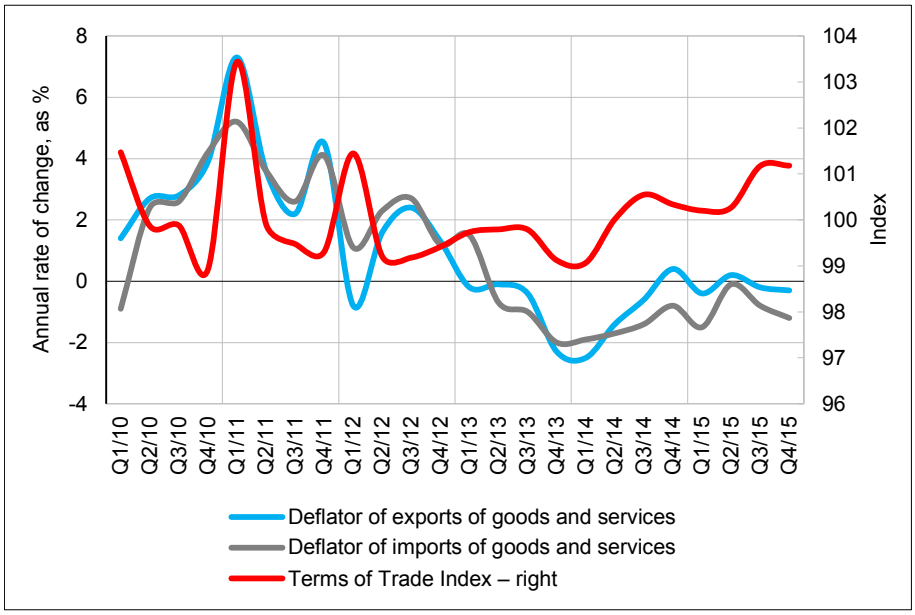



* Core inflation excludes energy, food, alcohol and tobacco components for all countries, excluding the US, where energy and food components are excluded.

Note: Not weighted average. Central and Eastern Europe includes Poland, Slovakia, Slovenia, Hungary and Czech Republic, and Baltic countries include Estonia, Latvia and Lithuania (without Latvia in the calculation of core inflation).

Source: Eurostat.

**Figure 13 Deflators of the exports and imports of goods and services in Croatia**

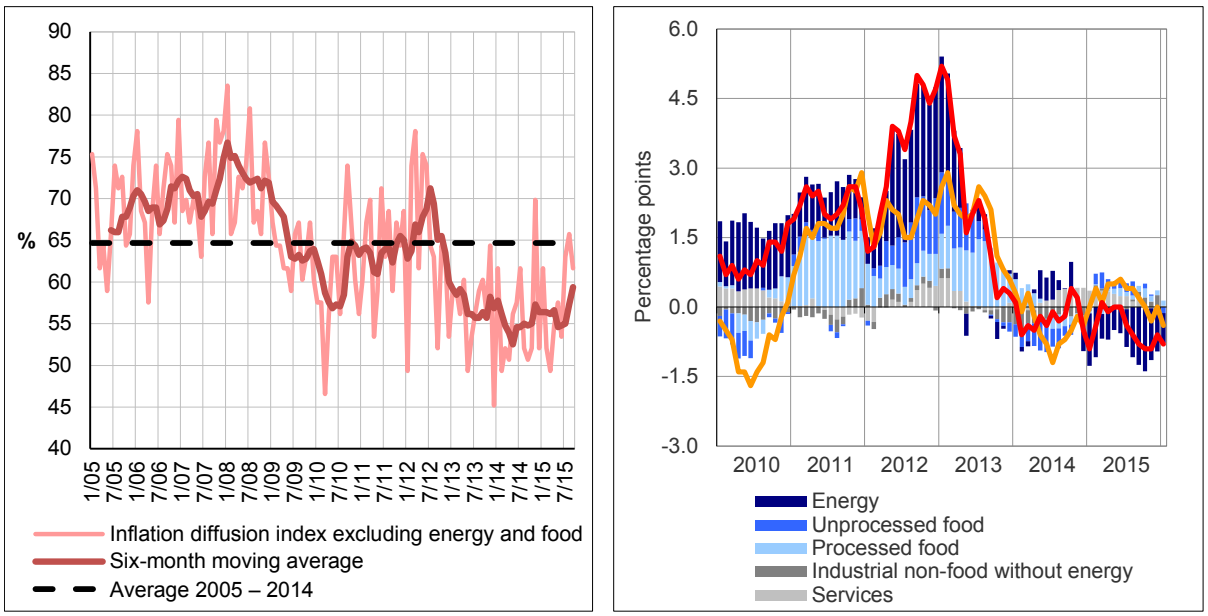



Source: Eurostat.

However, the inflation diffusion index also proves that the negative inflation rate is not diffused to the largest number of products. This index shows the share of the number of products whose prices increased in a given month in the total number of products in the HICP basket. It is very important that this index is actually an indication of whether the rise or fall

in prices is diffused across most of the economic sectors and it helps to assess whether inflationary pressures strengthened or weakened over a given period. Thus in 2015, the share of products in the consumer price index (CPI) excluding energy and food, whose price rose at a monthly level, reached almost 60%. This means that the prices of the majority of products are rising, i.e. in a large part precisely the prices of those products that are produced in Croatia, while the prices of precisely those products we are importing are falling. The entire negative contribution to inflation originates from the prices of unprocessed food products and energy (Figure 14).

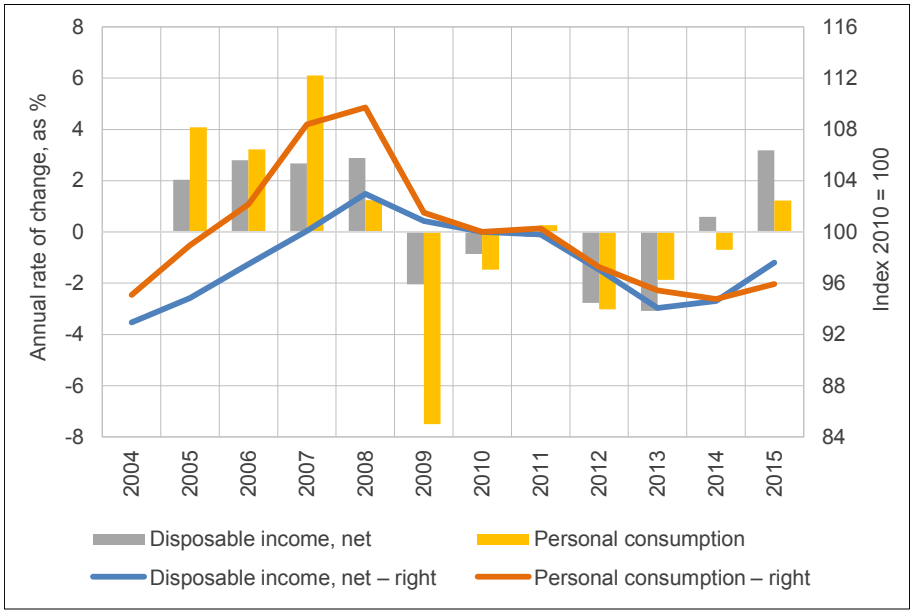
**Figure 14 Inflation diffusion index in Croatia and contribution of components to consumer price inflation**




* Core inflation excludes agricultural product prices and administrative prices.
Sources: Eurostat, CBS and CNB calculations.

To sum up, the fall in the prices of food and energy is a positive shock for the economy as a whole. Due to a sharp decrease in prices in these two segments of goods, personal consumption was not delayed, which would be characteristic of the deflationary spiral, but the improvement of the trade balance because of the fall in the prices of imported goods enabled the personal consumption growth (Figure 15). Since the inflation diffusion index shows that negative inflation rates in Croatia are caused by the concentrated decline in prices in a small group of imported goods, Croatian citizens earn more and pay less because of "deflation", which they should not mind.

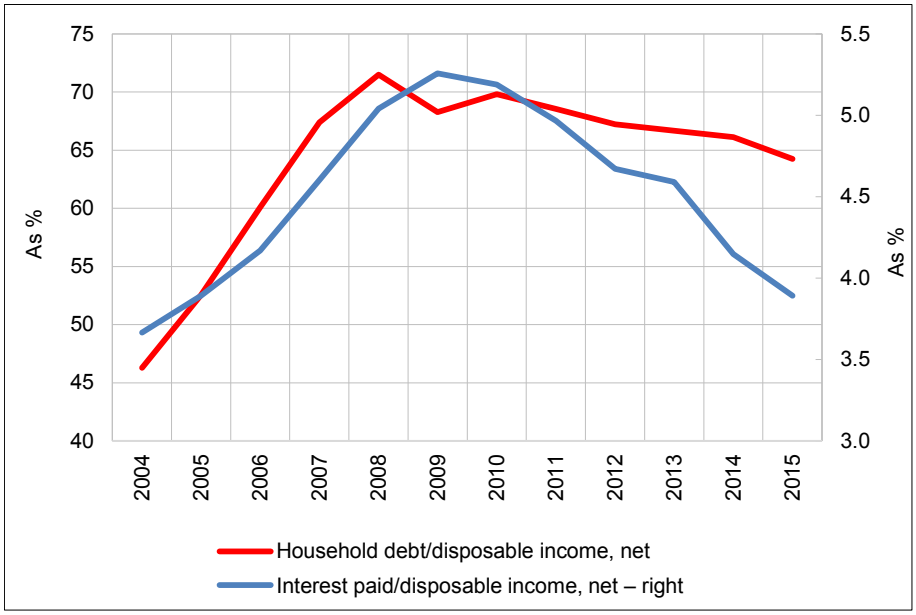
**Figure 15 Personal consumption and disposable income**




Source: CBS.

Another important feature of the deflationary spiral is taken from the debt deflation theory. This theory is founded on the paper of an American economist, Irving Fisher, from 1933. The theory is based on the idea that the long-term contraction of the economy occurs in the periods of the greatest crises caused by the parallel deleveraging of the majority of the sectors in the economy and the decline in prices, when prices decline faster than the rate at which domestic sectors deleverage, so that real debt of domestic sectors increases. In Croatia, however, recent financial developments do not show growth but a decrease in the real debt burden. The share of interest expense in the disposable income of consumers is decreasing constantly, as well as the ratio of loans and income and similar developments are also observed in the financial indicators of enterprises, whose profitability is improving because of cheaper food and energy. Therefore, we cannot talk about the increase in the real debt burden, which would be characteristic for the deflationary spiral, but exactly the contrary, household debt and the share of interest paid in disposable income have decreased noticeably over the past few years, and the growth in real income facilitates debt repayment (Figure 16).

**Figure 16 Household debt and debt burden**

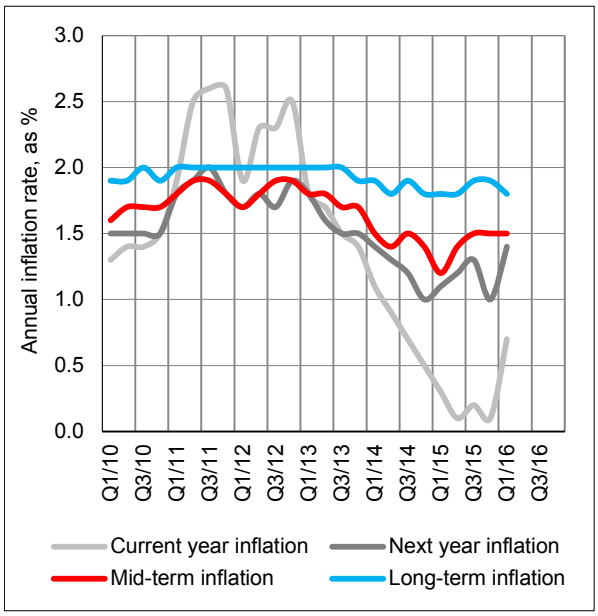



Source: CNB.

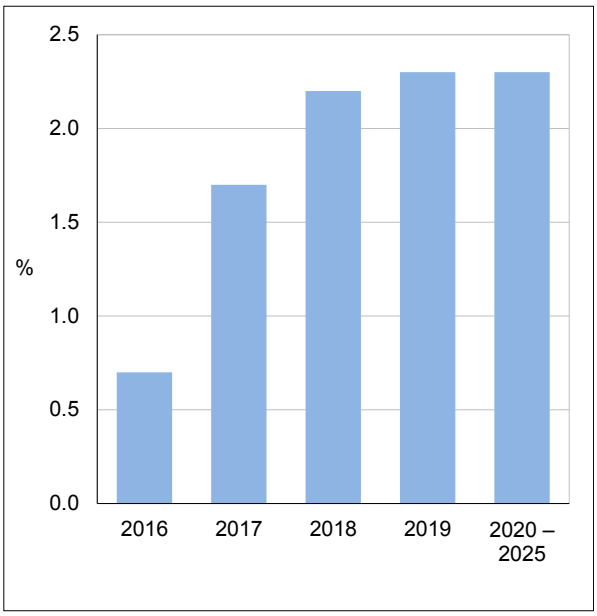
Long-term inflationary expectations also indicate that inflation should return to the long-term trend. The survey by professional forecasters on the expected annual rate shows that deflation is not deeply rooted in the economy, but that it is a temporary phenomenon, which is in line with the decline in volatile food and energy prices as the main causes of negative inflation (Figure 17). Now that the price of oil has increased by 33% over the period of one month, all those concerned about deflation may be relieved. However, I doubt it that they will be equally eager to pay more expensive fuel. Therefore, at the moment, we cannot speak about the presence of the deflationary spiral, but only about the negative inflation rate triggered by the spillover of lower oil and food prices in the global market onto domestic prices in the conditions of relatively low core inflation in the euro area.

**Figure 17 Short-term and long-term expectations of consumer price inflation in Croatia (professional forecasters) average year-on-year rate of change**

a) in the euro area



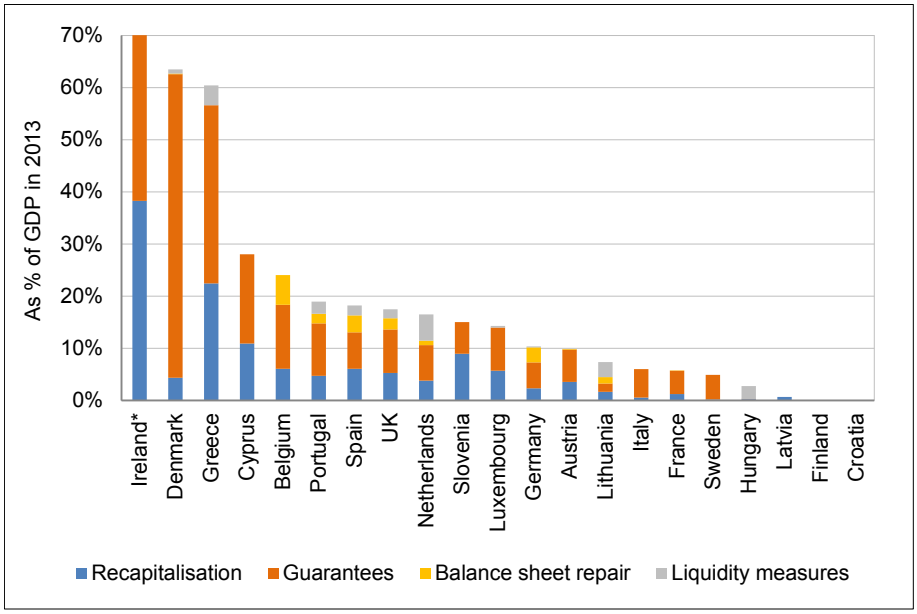

b) in Croatia




Sources: ECB, Eastern Europe Consensus Forecasts, October 2015 and February 2016.

Before conclusion, allow me to emphasise another CNB's key task and point to the fact that it is not being fulfilled on its own, but it is also the result of long-term systematic work – that is the contribution to the maintenance of financial stability, which is one of the key preconditions of sustainable economic growth. Undermined financial stability and banking crises related to it might have extremely high costs, which we have seen best in individual EU member states over the past years (Figure 18). There has been no such cost in Croatia, which, among other things, is the result of a series of macroprudential measures, instruments and activities, which the CNB has carried out with the objective of strengthening the resilience of the financial system. All of this together has helped maintain confidence in the banking system, without which the economy cannot function on its own and savers cannot manage their financial assets with certainty.

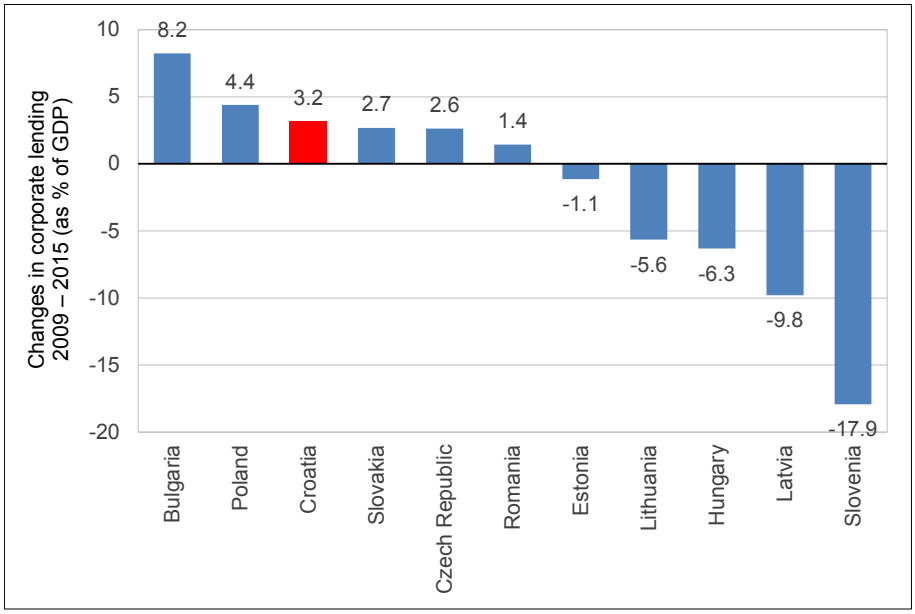
**Figure 18 State aid to the financial sector, 2008 – 2013**




Note: The data for Ireland stand at 214% of GDP.
Source: EC.

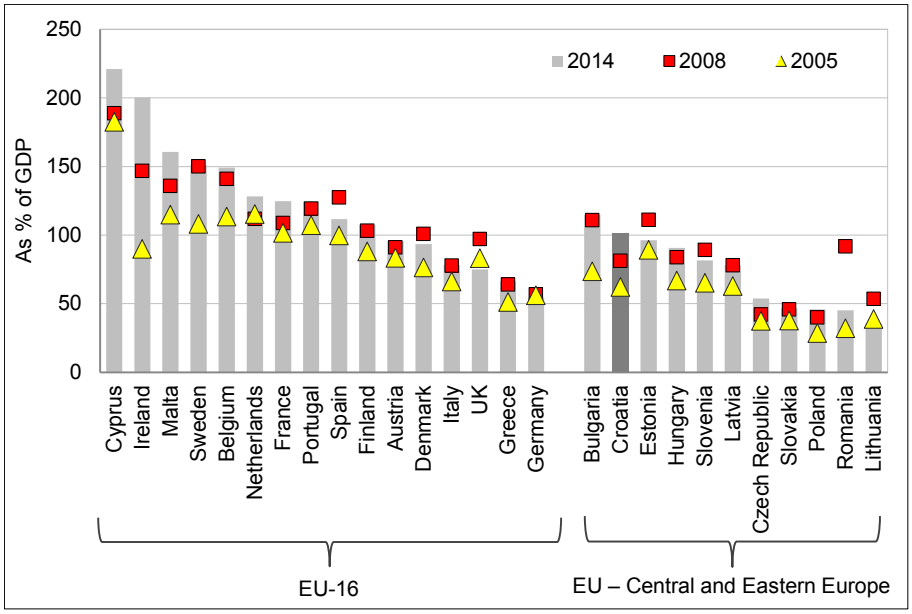
To conclude: the monetary policy of the CNB is currently very expansionary, and it is certainly not a hindrance or an obstacle to the revival of the economy and the acceleration of its recovery. Despite a noticeable decline in GDP, a relatively favourable dynamics of corporate lending was achieved in Croatia, in particular relative to individual peer countries in which deleveraging was very pronounced (Figure 19 and 20). The monetary policy is still oriented to the reduction of funding costs for all sectors of the economy, which are currently at their historical lowest levels. This has also facilitated the financing of new projects and the refinancing of existing debt. Structural repo operations provide an additional driver to lending in domestic currency.

**Figure 19 Lending to non-financial corporations – comparison by country**




Note: The columns show the cumulative change in banks' lending to the non-financial corporations sector as percentage of GDP for 2009 – 2015 (transaction-based).
Sources: CNB, ECB, Eurostat and AMECO.

**Figure 20 Debt of the non-financial corporations sector of EU member countries (as % of GDP)**




Note: Corporate debt is the sum of loan debt and debt on the basis of debt securities from unconsolidated financial accounts.
Sources: Eurostat, CNB.

However, it should also be emphasised that with the new measures, the CNB has not abandoned the consistent pursuit of a policy of maintaining a stable exchange rate for the domestic currency, which is still the main nominal anchor for the fulfilment of our legal mandate to maintain low and stable inflation, as well as financial stability. In this way, the central bank will continue to be the guarantor of the maintenance of macroeconomic stability with regard to safeguarding the value of money and real income of all sectors, which may

only facilitate the implementation of essential reforms in many segments of the Croatian economy, which go beyond the reach of the monetary policy and the statutory tasks of the monetary authority. Therefore, if all participants in the economic policy make good quality decisions that will go in the direction of repairing the structural weaknesses of the Croatian economy, then the monetary policy efforts to facilitate recovery will be more successful.

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